

CHAPTER

23

COMMUNICATIONS



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23-EFFECTIVE PAGES			23-FAULT CODE INDEX (cont)			23-MAINT MSG INDEX (cont)		
1 thru 10	SEP 05/2017		128	May 05/2015		121	Sep 05/2016	
23-HOW TO USE THE FIM			129	May 05/2016		122	Sep 05/2016	
1	Jan 05/2013		130	May 05/2016		123	Sep 05/2016	
2	Jan 05/2013		131	May 05/2016		124	Sep 05/2016	
3	Jan 05/2017		132	May 05/2016		125	Sep 05/2016	
4	Jan 05/2013		133	May 05/2016		126	Sep 05/2016	
5	Jan 05/2013		134	May 05/2016		127	Sep 05/2016	
6	Jan 05/2013		135	May 05/2016		128	Sep 05/2016	
23-FAULT CODE INDEX			136	May 05/2016		129	Sep 05/2016	
101	Jan 05/2013		137	May 05/2016		130	Sep 05/2016	
102	May 05/2015		138	May 05/2016		131	Sep 05/2016	
103	May 05/2015		139	May 05/2016		132	Sep 05/2016	
104	May 05/2015		140	May 05/2016		133	Sep 05/2016	
105	May 05/2015		141	May 05/2016		134	Jan 05/2017	
106	May 05/2015		142	BLANK		135	Jan 05/2017	
107	May 05/2015		23-MAINT MSG INDEX			136	Jan 05/2017	
108	May 05/2015		101	Jan 05/2013		137	Jan 05/2017	
109	May 05/2015		102	May 05/2013		138	Jan 05/2017	
110	May 05/2015		103	May 05/2013		139	Jan 05/2017	
111	May 05/2015		104	May 05/2013		140	BLANK	
112	May 05/2015		105	May 05/2013		23-11 TASKS		
113	May 05/2015		106	May 05/2013		201	Sep 05/2015	
114	May 05/2015		107	May 05/2013		202	Sep 05/2016	
115	May 05/2015		108	May 05/2013		203	Sep 05/2016	
116	May 05/2015		109	May 05/2013		204	Sep 05/2016	
117	May 05/2015		110	Sep 05/2016		205	Sep 05/2016	
118	May 05/2015		111	Sep 05/2016		206	Sep 05/2016	
119	May 05/2015		112	Sep 05/2016		207	Sep 05/2016	
120	May 05/2015		113	Sep 05/2016		208	Sep 05/2016	
121	May 05/2015		114	Sep 05/2016		209	Sep 05/2016	
122	May 05/2015		115	Sep 05/2016		210	Sep 05/2016	
123	May 05/2015		116	Sep 05/2016		211	Sep 05/2016	
124	May 05/2015		117	Sep 05/2016		212	Sep 05/2016	
125	May 05/2015		118	Sep 05/2016		213	Sep 05/2016	
126	May 05/2015		119	Sep 05/2016		214	Sep 05/2016	
127	May 05/2015		120	Sep 05/2016				

A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

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23-11 TASKS (cont)			23-11 TASKS (cont)			23-12 TASKS (cont)		
215	Sep 05/2016		251	Sep 05/2016		226	Sep 05/2016	
216	Sep 05/2016		252	Sep 05/2016		227	Sep 05/2016	
217	Sep 05/2016		253	Sep 05/2016		228	Sep 05/2016	
218	Sep 05/2016		254	Sep 05/2016		229	Sep 05/2016	
219	Sep 05/2016		255	Sep 05/2016		230	Sep 05/2016	
220	Sep 05/2016		256	Sep 05/2016		231	Sep 05/2016	
221	Sep 05/2016		257	Sep 05/2016		232	Sep 05/2016	
222	Sep 05/2016		258	Sep 05/2016		233	Sep 05/2016	
223	Sep 05/2016		259	Sep 05/2016		234	Sep 05/2016	
224	Sep 05/2016		260	BLANK		235	Sep 05/2016	
225	Sep 05/2016		23-12 TASKS			236	Sep 05/2016	
226	Sep 05/2016		201	Jan 05/2013		237	Sep 05/2016	
227	Sep 05/2016		202	Sep 05/2013		238	Sep 05/2016	
228	Sep 05/2016		203	Sep 05/2013		239	Sep 05/2016	
229	Sep 05/2016		204	Sep 05/2013		240	Sep 05/2016	
230	Sep 05/2016		205	Jan 05/2013		241	Sep 05/2016	
231	Sep 05/2016		206	Jan 05/2013		242	Sep 05/2016	
232	Sep 05/2016		207	Sep 05/2016		243	Sep 05/2016	
233	Sep 05/2016		208	Sep 05/2016		244	Sep 05/2016	
234	Sep 05/2016		209	Sep 05/2016		245	Sep 05/2016	
235	Sep 05/2016		210	Sep 05/2016		246	Sep 05/2016	
236	Sep 05/2016		211	May 05/2013		247	Sep 05/2016	
237	Sep 05/2016		212	May 05/2013		248	Sep 05/2016	
238	Sep 05/2016		213	Sep 05/2013		249	Sep 05/2016	
239	Sep 05/2016		214	Sep 05/2013		250	Sep 05/2016	
240	Sep 05/2016		215	Sep 05/2013		251	Sep 05/2016	
241	Sep 05/2016		216	Sep 05/2013		252	Sep 05/2016	
242	Sep 05/2016		217	May 05/2013		253	Sep 05/2016	
243	Sep 05/2016		218	Sep 05/2016		254	Sep 05/2016	
244	Sep 05/2016		219	Sep 05/2016		255	Sep 05/2016	
245	Sep 05/2016		220	Sep 05/2016		256	Sep 05/2016	
246	Sep 05/2016		221	Sep 05/2016		257	Sep 05/2016	
247	Sep 05/2016		222	Sep 05/2016		258	Sep 05/2016	
248	Sep 05/2016		223	Sep 05/2016		259	Sep 05/2016	
249	Sep 05/2016		224	Sep 05/2016		260	Sep 05/2016	
250	Sep 05/2016		225	Sep 05/2016		261	Sep 05/2016	

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262	Sep 05/2016		217	May 05/2017		O 253	Sep 05/2017	
263	Sep 05/2016		218	May 05/2017		O 254	Sep 05/2017	
264	Sep 05/2016		219	May 05/2017		O 255	Sep 05/2017	
265	Sep 05/2016		220	May 05/2017		O 256	Sep 05/2017	
266	Sep 05/2016		221	May 05/2017		O 257	Sep 05/2017	
267	Sep 05/2016		222	May 05/2017		O 258	Sep 05/2017	
268	Sep 05/2016		223	May 05/2017		O 259	Sep 05/2017	
269	Sep 05/2016		224	May 05/2017		O 260	Sep 05/2017	
270	Sep 05/2016		225	May 05/2017		O 261	Sep 05/2017	
271	Sep 05/2016		226	May 05/2017		O 262	Sep 05/2017	
272	Sep 05/2016		227	May 05/2017		O 263	Sep 05/2017	
273	Sep 05/2016		228	May 05/2017		O 264	Sep 05/2017	
274	Sep 05/2016		229	May 05/2017		O 265	Sep 05/2017	
275	Sep 05/2016		R 230	Sep 05/2017		266	BLANK	
276	Sep 05/2016		O 231	Sep 05/2017		23-21 TASKS		
277	Sep 05/2016		O 232	Sep 05/2017		201	Jan 05/2013	
278	Sep 05/2016		O 233	Sep 05/2017		202	Jan 05/2013	
279	Sep 05/2016		O 234	Sep 05/2017		203	Jan 05/2013	
280	BLANK		O 235	Sep 05/2017		204	Jan 05/2013	
23-15 TASKS			O 236	Sep 05/2017		205	Jan 05/2013	
201	May 05/2013		O 237	Sep 05/2017		206	Sep 05/2013	
202	May 05/2013		O 238	Sep 05/2017		207	Sep 05/2016	
203	May 05/2013		O 239	Sep 05/2017		208	Sep 05/2016	
204	Sep 05/2016		O 240	Sep 05/2017		209	Sep 05/2016	
205	Sep 05/2016		O 241	Sep 05/2017		210	Sep 05/2016	
206	Sep 05/2016		O 242	Sep 05/2017		211	Sep 05/2016	
207	May 05/2013		O 243	Sep 05/2017		212	BLANK	
208	May 05/2013		O 244	Sep 05/2017		23-24 TASKS		
209	Sep 05/2016		O 245	Sep 05/2017		201	Jan 05/2014	
210	Sep 05/2016		O 246	Sep 05/2017		202	Sep 05/2016	
211	Sep 05/2016		O 247	Sep 05/2017		203	Sep 05/2016	
212	Sep 05/2016		O 248	Sep 05/2017		204	Sep 05/2016	
213	Sep 05/2016		O 249	Sep 05/2017		205	Sep 05/2016	
214	Sep 05/2016		O 250	Sep 05/2017		206	Sep 05/2016	
215	Sep 05/2016		O 251	Sep 05/2017				
216	Sep 05/2016		O 252	Sep 05/2017				

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23-27 TASKS			23-27 TASKS (cont)			23-27 TASKS (cont)		
201	Jan 05/2013		237	Jan 05/2014		273	Sep 05/2016	
202	Jan 05/2013		238	Jan 05/2014		274	Sep 05/2016	
203	Jan 05/2014		239	Jan 05/2014		R 275	Sep 05/2017	
204	May 05/2017		240	Jan 05/2014		R 276	Sep 05/2017	
205	May 05/2017		241	Jan 05/2014		O 277	Sep 05/2017	
206	May 05/2017		242	Jan 05/2014		O 278	Sep 05/2017	
207	May 05/2017		243	Jan 05/2014		A 279	Sep 05/2017	
208	May 05/2017		244	Jan 05/2014		A 280	BLANK	
209	May 05/2017		245	Jan 05/2014		23-39 TASKS		
210	May 05/2017		246	Jan 05/2014		201	Jan 05/2015	
211	May 05/2017		247	Jan 05/2014		202	May 05/2017	
212	May 05/2017		248	Jan 05/2014		203	May 05/2017	
213	May 05/2017		249	Jan 05/2014		204	May 05/2017	
214	May 05/2017		250	Jan 05/2014		205	Jan 05/2015	
215	May 05/2017		251	Jan 05/2014		206	Sep 05/2016	
216	May 05/2017		252	Jan 05/2014		207	Sep 05/2016	
217	May 05/2017		253	Jan 05/2014		208	Sep 05/2016	
218	May 05/2017		254	Jan 05/2014		209	Sep 05/2016	
219	May 05/2017		255	Jan 05/2014		210	Sep 05/2016	
220	Jan 05/2014		256	Jan 05/2014		211	Sep 05/2016	
221	Jan 05/2014		257	Jan 05/2014		212	Sep 05/2016	
222	Jan 05/2014		258	Jan 05/2017		213	Sep 05/2016	
223	Jan 05/2014		259	Jan 05/2017		214	Sep 05/2016	
224	Jan 05/2014		260	Sep 05/2016		215	Sep 05/2016	
225	Jan 05/2014		261	Sep 05/2016		216	Sep 05/2016	
226	Jan 05/2014		262	Sep 05/2016		217	Sep 05/2016	
227	Jan 05/2014		R 263	Sep 05/2017		218	Sep 05/2016	
228	Jan 05/2014		264	Sep 05/2016		219	Sep 05/2016	
229	Jan 05/2014		265	Sep 05/2016		220	Sep 05/2016	
230	Jan 05/2014		266	Sep 05/2016		221	Sep 05/2016	
231	Jan 05/2014		267	Jan 05/2017		222	Sep 05/2016	
232	Jan 05/2014		268	Jan 05/2017		223	Sep 05/2016	
233	Jan 05/2014		269	Sep 05/2016		224	Sep 05/2016	
234	Jan 05/2014		270	Sep 05/2016		225	Sep 05/2016	
235	Jan 05/2014		271	Sep 05/2016		226	Sep 05/2016	
236	Jan 05/2014		272	Sep 05/2016		227	Sep 05/2016	

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228	Sep 05/2016		O 264	Sep 05/2017		O 298.2	Sep 05/2017	
229	Sep 05/2016		O 265	Sep 05/2017		O 298.3	Sep 05/2017	
230	Sep 05/2016		O 266	Sep 05/2017		O 298.4	Sep 05/2017	
231	Sep 05/2016		R 267	Sep 05/2017		O 298.5	Sep 05/2017	
232	Sep 05/2016		O 268	Sep 05/2017		O 298.6	Sep 05/2017	
233	Sep 05/2016		O 269	Sep 05/2017		O 298.7	Sep 05/2017	
234	May 05/2017		R 270	Sep 05/2017		O 298.8	Sep 05/2017	
235	May 05/2017		R 271	Sep 05/2017		O 298.9	Sep 05/2017	
236	Sep 05/2016		R 272	Sep 05/2017		O 298.10	Sep 05/2017	
237	Sep 05/2016		O 273	Sep 05/2017		O 298.11	Sep 05/2017	
238	May 05/2017		O 274	Sep 05/2017		O 298.12	Sep 05/2017	
239	May 05/2017		O 275	Sep 05/2017		O 298.13	Sep 05/2017	
240	May 05/2017		O 276	Sep 05/2017		O 298.14	Sep 05/2017	
241	May 05/2017		O 277	Sep 05/2017		O 298.15	Sep 05/2017	
242	May 05/2017		O 278	Sep 05/2017		O 298.16	Sep 05/2017	
243	May 05/2017		O 279	Sep 05/2017		O 298.17	Sep 05/2017	
244	Sep 05/2016		O 280	Sep 05/2017		O 298.18	Sep 05/2017	
245	Sep 05/2016		O 281	Sep 05/2017		O 298.19	Sep 05/2017	
246	Sep 05/2016		O 282	Sep 05/2017		O 298.20	Sep 05/2017	
247	Sep 05/2016		O 283	Sep 05/2017		O 298.21	Sep 05/2017	
248	Sep 05/2016		O 284	Sep 05/2017		O 298.22	Sep 05/2017	
249	Sep 05/2016		R 285	Sep 05/2017		O 298.23	Sep 05/2017	
250	Sep 05/2016		R 286	Sep 05/2017		O 298.24	Sep 05/2017	
251	Sep 05/2016		O 287	Sep 05/2017		O 298.25	Sep 05/2017	
252	Sep 05/2016		R 288	Sep 05/2017		O 298.26	Sep 05/2017	
253	Sep 05/2016		O 289	Sep 05/2017		O 298.27	Sep 05/2017	
254	Sep 05/2016		O 290	Sep 05/2017		O 298.28	Sep 05/2017	
255	Sep 05/2016		O 291	Sep 05/2017		O 298.29	Sep 05/2017	
256	Sep 05/2016		O 292	Sep 05/2017		O 298.30	Sep 05/2017	
257	Sep 05/2016		O 293	Sep 05/2017		O 298.31	Sep 05/2017	
258	Sep 05/2016		O 294	Sep 05/2017		O 298.32	Sep 05/2017	
259	Sep 05/2016		O 295	Sep 05/2017		O 298.33	Sep 05/2017	
260	Sep 05/2016		O 296	Sep 05/2017		R 298.34	Sep 05/2017	
261	Sep 05/2016		O 297	Sep 05/2017		R 298.35	Sep 05/2017	
R 262	Sep 05/2017		O 298	Sep 05/2017		R 298.36	Sep 05/2017	
O 263	Sep 05/2017		O 298.1	Sep 05/2017		O 298.37	Sep 05/2017	

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R 298.38	Sep 05/2017		O 298.74	Sep 05/2017		210	Sep 05/2016	
R 298.39	Sep 05/2017		O 298.75	Sep 05/2017		211	Sep 05/2016	
R 298.40	Sep 05/2017		O 298.76	Sep 05/2017		212	Sep 05/2016	
O 298.41	Sep 05/2017		O 298.77	Sep 05/2017		213	Sep 05/2016	
O 298.42	Sep 05/2017		298.78	BLANK		214	Sep 05/2016	
O 298.43	Sep 05/2017		23-41 TASKS			215	Sep 05/2016	
O 298.44	Sep 05/2017		201	Jan 05/2013		216	Sep 05/2016	
O 298.45	Sep 05/2017		202	Jan 05/2013		217	Sep 05/2016	
O 298.46	Sep 05/2017		203	Jan 05/2013		218	Sep 05/2016	
O 298.47	Sep 05/2017		204	BLANK		219	Sep 05/2016	
O 298.48	Sep 05/2017		23-42 TASKS			220	BLANK	
O 298.49	Sep 05/2017		201	Jan 05/2013		23-71 TASKS		
O 298.50	Sep 05/2017		202	Jan 05/2013		201	Jan 05/2013	
O 298.51	Sep 05/2017		203	Jan 05/2013		202	Sep 05/2016	
O 298.52	Sep 05/2017		204	Jan 05/2013		203	Sep 05/2016	
O 298.53	Sep 05/2017		205	Jan 05/2013		R 204	Sep 05/2017	
O 298.54	Sep 05/2017		206	Jan 05/2013		O 205	Sep 05/2017	
O 298.55	Sep 05/2017		207	Sep 05/2016		O 206	Sep 05/2017	
O 298.56	Sep 05/2017		208	BLANK		O 207	Sep 05/2017	
O 298.57	Sep 05/2017		23-43 TASKS			O 208	Sep 05/2017	
O 298.58	Sep 05/2017		201	May 05/2016		O 209	Sep 05/2017	
O 298.59	Sep 05/2017		202	Jan 05/2013		O 210	Sep 05/2017	
O 298.60	Sep 05/2017		203	Jan 05/2013		O 211	Sep 05/2017	
O 298.61	Sep 05/2017		204	Jan 05/2013		O 212	Sep 05/2017	
O 298.62	Sep 05/2017		205	Jan 05/2013		O 213	Sep 05/2017	
O 298.63	Sep 05/2017		206	BLANK		O 214	Sep 05/2017	
O 298.64	Sep 05/2017		23-51 TASKS			O 215	Sep 05/2017	
O 298.65	Sep 05/2017		201	Sep 05/2015		O 216	Sep 05/2017	
O 298.66	Sep 05/2017		202	Sep 05/2015		O 217	Sep 05/2017	
O 298.67	Sep 05/2017		203	Sep 05/2015		O 218	Sep 05/2017	
O 298.68	Sep 05/2017		204	Sep 05/2015		O 219	Sep 05/2017	
O 298.69	Sep 05/2017		205	Sep 05/2016		O 220	Sep 05/2017	
O 298.70	Sep 05/2017		206	Sep 05/2016		O 221	Sep 05/2017	
O 298.71	Sep 05/2017		207	Sep 05/2016		O 222	Sep 05/2017	
O 298.72	Sep 05/2017		208	Sep 05/2016		O 223	Sep 05/2017	
O 298.73	Sep 05/2017		209	Sep 05/2016		O 224	Sep 05/2017	

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O 225	Sep 05/2017		218	Jan 05/2017		254	Sep 05/2016	
O 226	Sep 05/2017		219	Sep 05/2016		255	Sep 05/2016	
O 227	Sep 05/2017		220	Sep 05/2016		256	Sep 05/2016	
O 228	Sep 05/2017		221	Sep 05/2016		257	Sep 05/2016	
O 229	Sep 05/2017		222	Sep 05/2016		258	Sep 05/2016	
O 230	Sep 05/2017		223	Sep 05/2016		259	Sep 05/2016	
23-75 TASKS			224	Sep 05/2016		260	Sep 05/2016	
201	May 05/2015		225	Sep 05/2016		261	Sep 05/2016	
202	Sep 05/2016		226	Sep 05/2016		262	Sep 05/2016	
203	Sep 05/2016		227	Sep 05/2016		263	Sep 05/2016	
204	Sep 05/2016		228	Sep 05/2016		264	Sep 05/2016	
205	Sep 05/2016		229	Sep 05/2016		265	Sep 05/2016	
206	Sep 05/2016		230	Sep 05/2016		266	Sep 05/2016	
207	Sep 05/2016		231	Sep 05/2016		267	Sep 05/2016	
208	Sep 05/2016		232	Sep 05/2016		268	Sep 05/2016	
23-82 TASKS			233	Sep 05/2016		269	Sep 05/2016	
201	Sep 05/2014		234	Sep 05/2016		270	Sep 05/2016	
202	BLANK		235	Sep 05/2016		271	Sep 05/2016	
23-91 TASKS			236	Sep 05/2016		272	Sep 05/2016	
201	Jan 05/2013		237	Sep 05/2016		273	Sep 05/2016	
202	Jan 05/2013		238	Sep 05/2016		274	Sep 05/2016	
203	Jan 05/2013		239	Sep 05/2016		23-93 TASKS		
204	Sep 05/2016		240	Sep 05/2016		201	May 05/2016	
205	Sep 05/2016		241	Sep 05/2016		202	May 05/2016	
206	Sep 05/2016		242	Sep 05/2016		203	May 05/2016	
207	Sep 05/2016		243	Sep 05/2016		204	May 05/2016	
208	Sep 05/2016		244	Sep 05/2016		205	May 05/2016	
209	Sep 05/2016		245	Sep 05/2016		206	May 05/2016	
210	Sep 05/2016		246	Sep 05/2016		207	May 05/2016	
211	Sep 05/2016		247	Sep 05/2016		208	May 05/2016	
212	Sep 05/2016		248	Sep 05/2016		209	May 05/2016	
213	Sep 05/2016		249	Sep 05/2016		210	May 05/2016	
214	Sep 05/2016		250	Sep 05/2016		211	May 05/2016	
215	Jan 05/2017		251	Sep 05/2016		212	May 05/2016	
216	Jan 05/2017		252	Sep 05/2016		213	May 05/2016	
217	Sep 05/2016		253	Sep 05/2016		214	May 05/2016	

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215	May 05/2016		251	May 05/2017		287	May 05/2017	
216	May 05/2016		252	May 05/2017		288	May 05/2017	
217	May 05/2016		253	May 05/2017		289	May 05/2017	
218	May 05/2016		254	May 05/2017		290	May 05/2017	
219	Sep 05/2016		255	May 05/2017		291	May 05/2017	
220	Sep 05/2016		256	May 05/2017		292	May 05/2017	
221	Sep 05/2016		257	May 05/2017		293	May 05/2017	
222	Sep 05/2016		258	May 05/2017		294	May 05/2017	
223	Sep 05/2016		259	May 05/2017		295	May 05/2017	
224	Sep 05/2016		260	May 05/2017		296	May 05/2017	
225	Sep 05/2016		261	May 05/2017		297	May 05/2017	
226	Sep 05/2016		262	May 05/2017		298	May 05/2017	
227	Sep 05/2016		263	May 05/2017		298.1	May 05/2017	
228	Sep 05/2016		264	May 05/2017		298.2	May 05/2017	
229	Sep 05/2016		265	May 05/2017		298.3	May 05/2017	
230	Sep 05/2016		266	May 05/2017		298.4	May 05/2017	
231	Sep 05/2016		267	May 05/2017		298.5	May 05/2017	
232	Sep 05/2016		268	May 05/2017		298.6	May 05/2017	
233	Sep 05/2016		269	May 05/2017		298.7	May 05/2017	
234	Sep 05/2016		270	May 05/2017		298.8	May 05/2017	
235	Sep 05/2016		271	May 05/2017		298.9	May 05/2017	
236	Sep 05/2016		272	May 05/2017		298.10	May 05/2017	
237	Sep 05/2016		273	May 05/2017		298.11	May 05/2017	
238	Sep 05/2016		274	May 05/2017		298.12	May 05/2017	
239	Sep 05/2016		275	May 05/2017		298.13	May 05/2017	
240	May 05/2017		276	May 05/2017		298.14	May 05/2017	
241	May 05/2017		277	May 05/2017		298.15	May 05/2017	
242	May 05/2017		278	May 05/2017		298.16	May 05/2017	
243	May 05/2017		279	May 05/2017		298.17	May 05/2017	
244	May 05/2017		280	May 05/2017		298.18	May 05/2017	
245	May 05/2017		281	May 05/2017		298.19	May 05/2017	
246	May 05/2017		282	May 05/2017		298.20	May 05/2017	
247	May 05/2017		283	May 05/2017		298.21	May 05/2017	
248	May 05/2017		284	May 05/2017		298.22	May 05/2017	
249	May 05/2017		285	May 05/2017		298.23	May 05/2017	
250	May 05/2017		286	May 05/2017		298.24	May 05/2017	

A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

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Subject/Page	Date	COC	Subject/Page	Date	COC	Subject/Page	Date	COC
23-93 TASKS (cont)			23-93 TASKS (cont)			23-93 TASKS (cont)		
298.25	May 05/2017		298.61	May 05/2017		298.97	May 05/2017	
298.26	May 05/2017		298.62	May 05/2017		298.98	May 05/2017	
298.27	May 05/2017		298.63	May 05/2017		298.99	May 05/2017	
298.28	May 05/2017		298.64	May 05/2017		298.100	May 05/2017	
298.29	May 05/2017		298.65	May 05/2017		298.101	May 05/2017	
298.30	May 05/2017		298.66	May 05/2017		298.102	May 05/2017	
298.31	May 05/2017		298.67	May 05/2017		298.103	May 05/2017	
298.32	May 05/2017		298.68	May 05/2017		298.104	May 05/2017	
298.33	May 05/2017		298.69	May 05/2017		298.105	May 05/2017	
298.34	May 05/2017		298.70	May 05/2017		298.106	May 05/2017	
298.35	May 05/2017		298.71	May 05/2017		298.107	May 05/2017	
298.36	May 05/2017		298.72	May 05/2017		298.108	May 05/2017	
298.37	May 05/2017		298.73	May 05/2017		298.109	May 05/2017	
298.38	May 05/2017		298.74	May 05/2017		298.110	May 05/2017	
298.39	May 05/2017		298.75	May 05/2017		298.111	May 05/2017	
298.40	May 05/2017		298.76	May 05/2017		298.112	May 05/2017	
298.41	May 05/2017		298.77	May 05/2017		298.113	May 05/2017	
298.42	May 05/2017		298.78	May 05/2017		298.114	May 05/2017	
298.43	May 05/2017		298.79	May 05/2017		298.115	May 05/2017	
298.44	May 05/2017		298.80	May 05/2017		298.116	May 05/2017	
298.45	May 05/2017		298.81	May 05/2017		298.117	May 05/2017	
298.46	May 05/2017		298.82	May 05/2017		298.118	May 05/2017	
298.47	May 05/2017		298.83	May 05/2017		298.119	May 05/2017	
298.48	May 05/2017		298.84	May 05/2017		298.120	May 05/2017	
298.49	May 05/2017		298.85	May 05/2017		298.121	May 05/2017	
298.50	May 05/2017		298.86	May 05/2017		298.122	May 05/2017	
298.51	May 05/2017		298.87	May 05/2017		298.123	May 05/2017	
298.52	May 05/2017		298.88	May 05/2017		298.124	May 05/2017	
298.53	May 05/2017		298.89	May 05/2017		298.125	May 05/2017	
298.54	May 05/2017		298.90	May 05/2017		298.126	May 05/2017	
298.55	May 05/2017		298.91	May 05/2017		298.127	May 05/2017	
298.56	May 05/2017		298.92	May 05/2017		298.128	May 05/2017	
298.57	May 05/2017		298.93	May 05/2017		298.129	May 05/2017	
298.58	May 05/2017		298.94	May 05/2017		298.130	May 05/2017	
298.59	May 05/2017		298.95	May 05/2017				
298.60	May 05/2017		298.96	May 05/2017				

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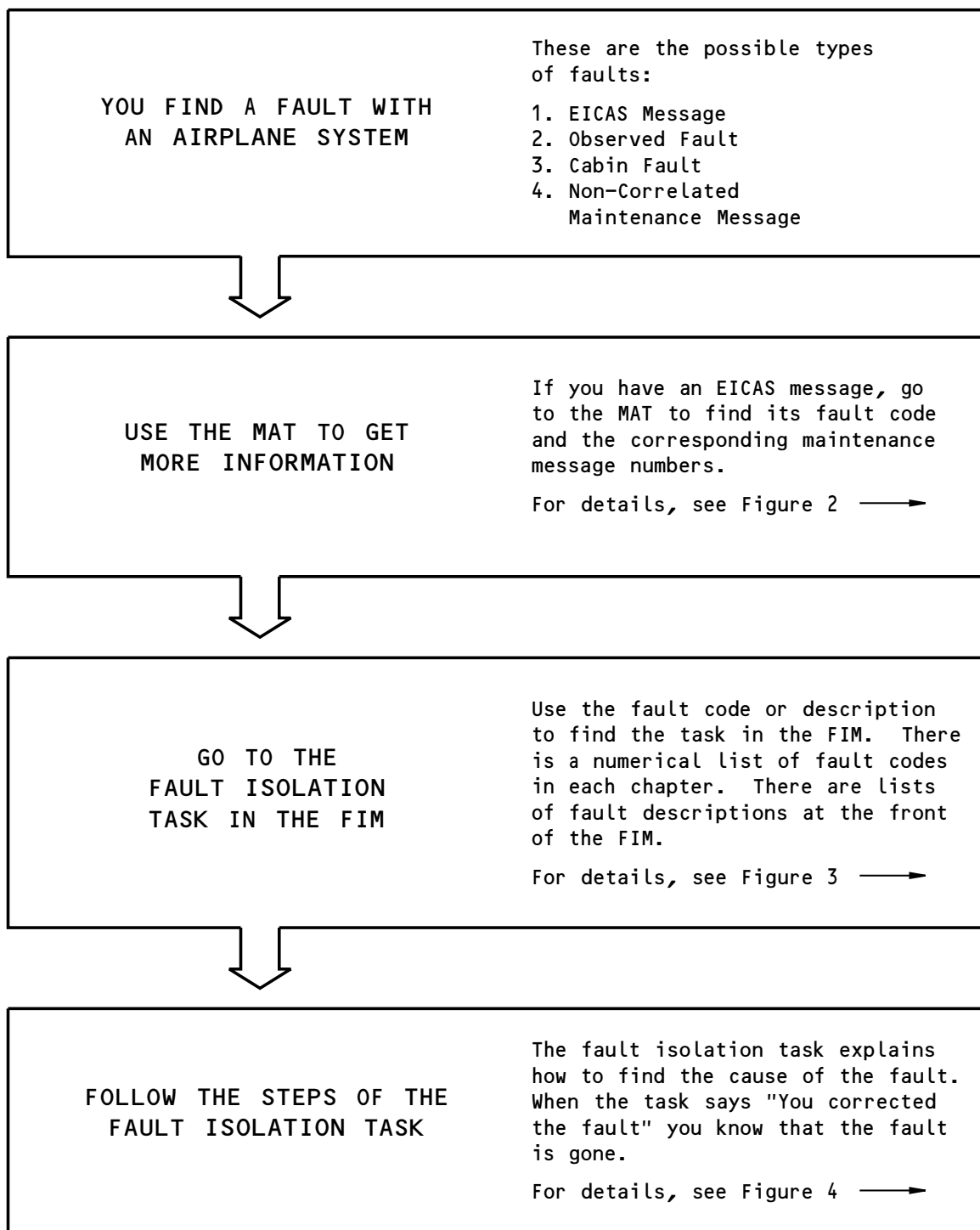
Subject/Page	Date	COC	Subject/Page	Date	COC	Subject/Page	Date	COC
23-98 TASKS								
201	Sep 05/2013							
202	BLANK							

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E84424 S0000132469_V1

Basic Fault Isolation Process
Figure 1

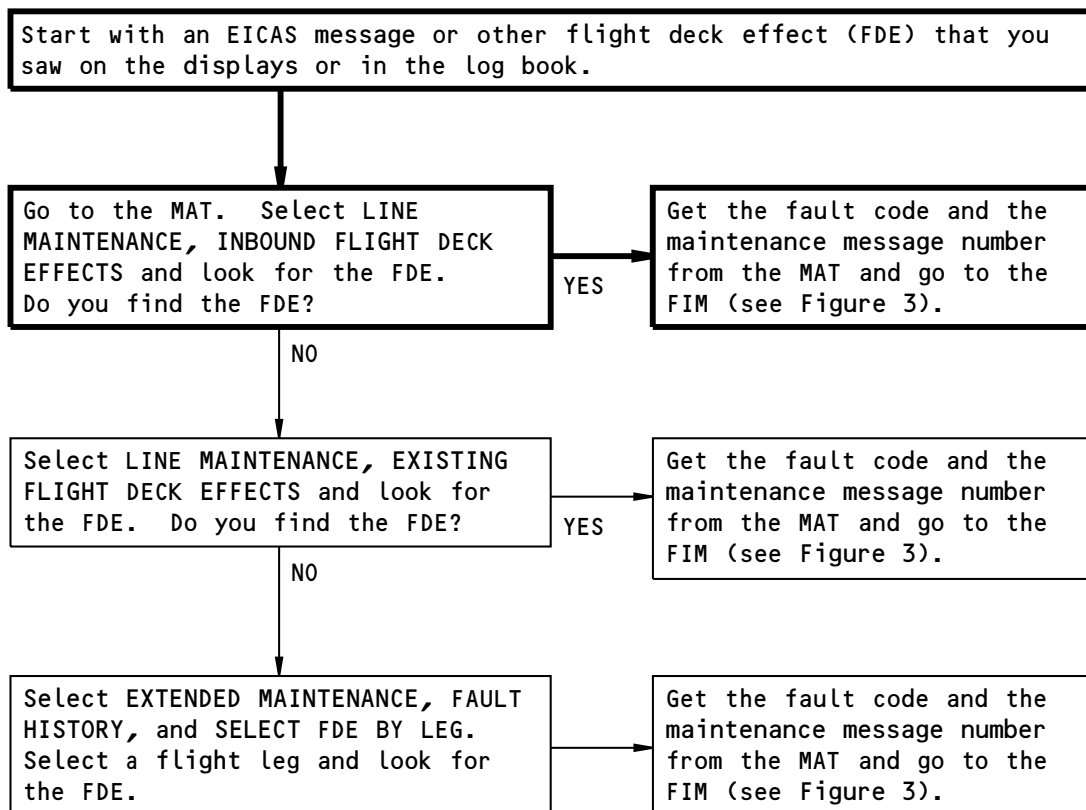
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NOTE: The bold lines show the most common path.

E84425 S0000132475_V1

Getting Fault Information from the MAT
Figure 2

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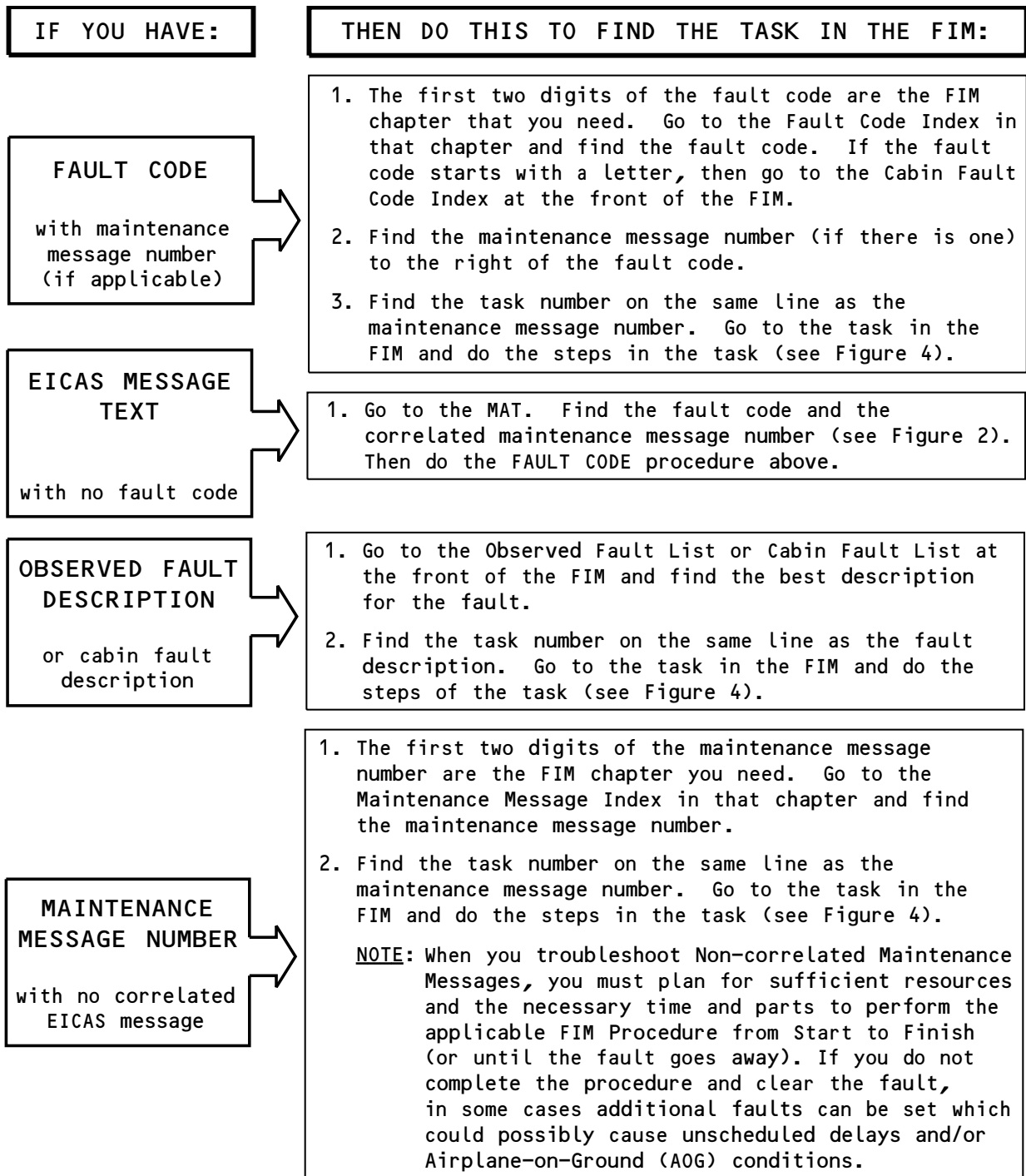
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E84427 S0000132476_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

INITIAL EVALUATION PARAGRAPH

- The Initial Evaluation paragraph at the start of the task helps you determine whether you can detect the fault right now.
- If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
- If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which components to replace. Then monitor the airplane to see if the fault happens again on subsequent flights.

FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. "The If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "You corrected the fault." Complete the step and exit the procedure.
- The Recommended Maintenance Action that shows on the MAT for the maintenance message gives a list of possible causes in order by probability of failure. In the FIM procedure, the possible causes can be in a different order from the MAT.

WIRING CHECKS

When a step says "Do a wiring check", do these three types of electrical checks for the specified contacts (pins):

- continuity from contact to contact
- shorts between the contacts
- shorts from each contact to ground

E84428 S0000132477_V3

Doing the Fault Isolation Task
Figure 4

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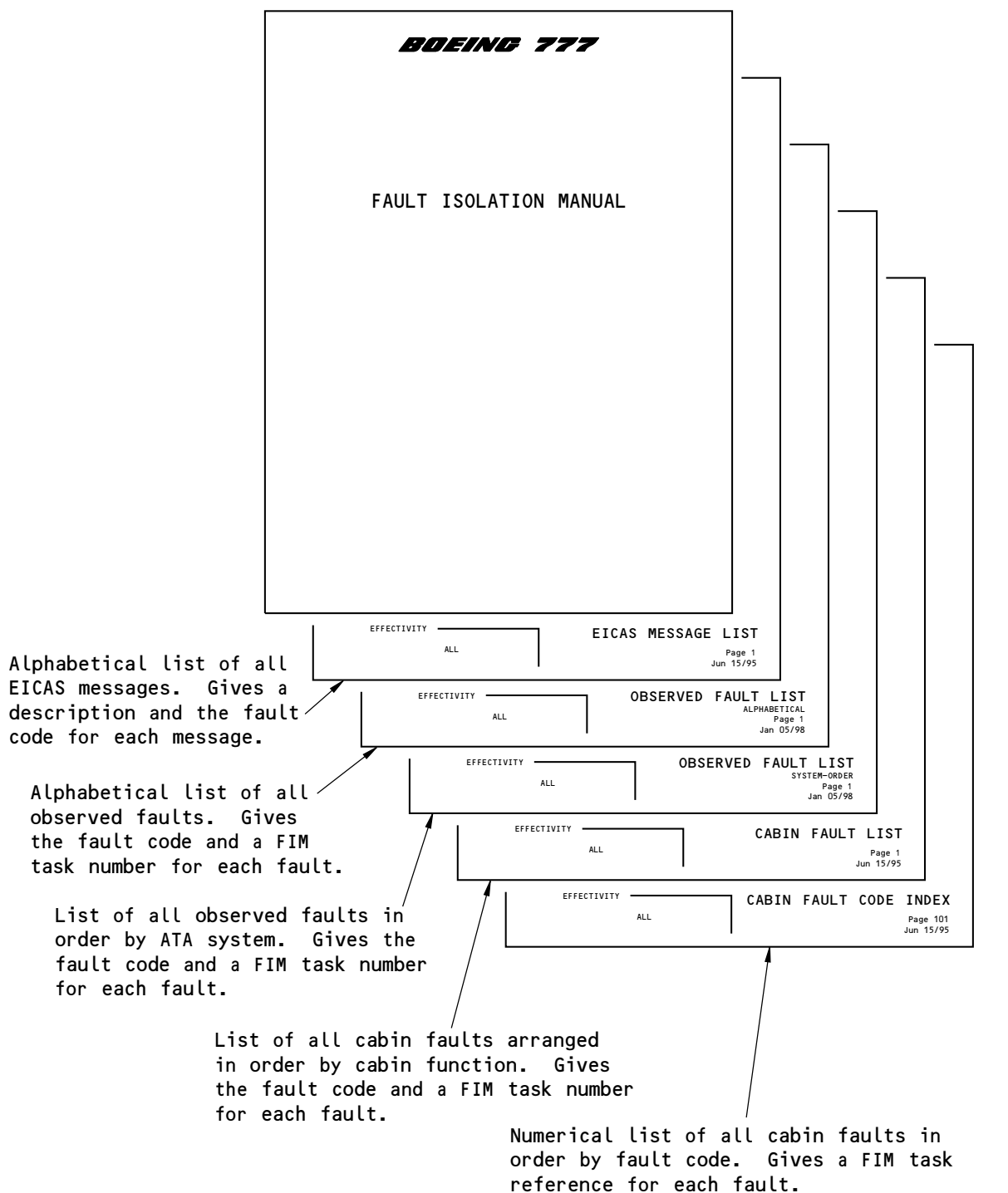
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F39750 S0000132478_V1

Subjects at Front of FIM
Figure 5

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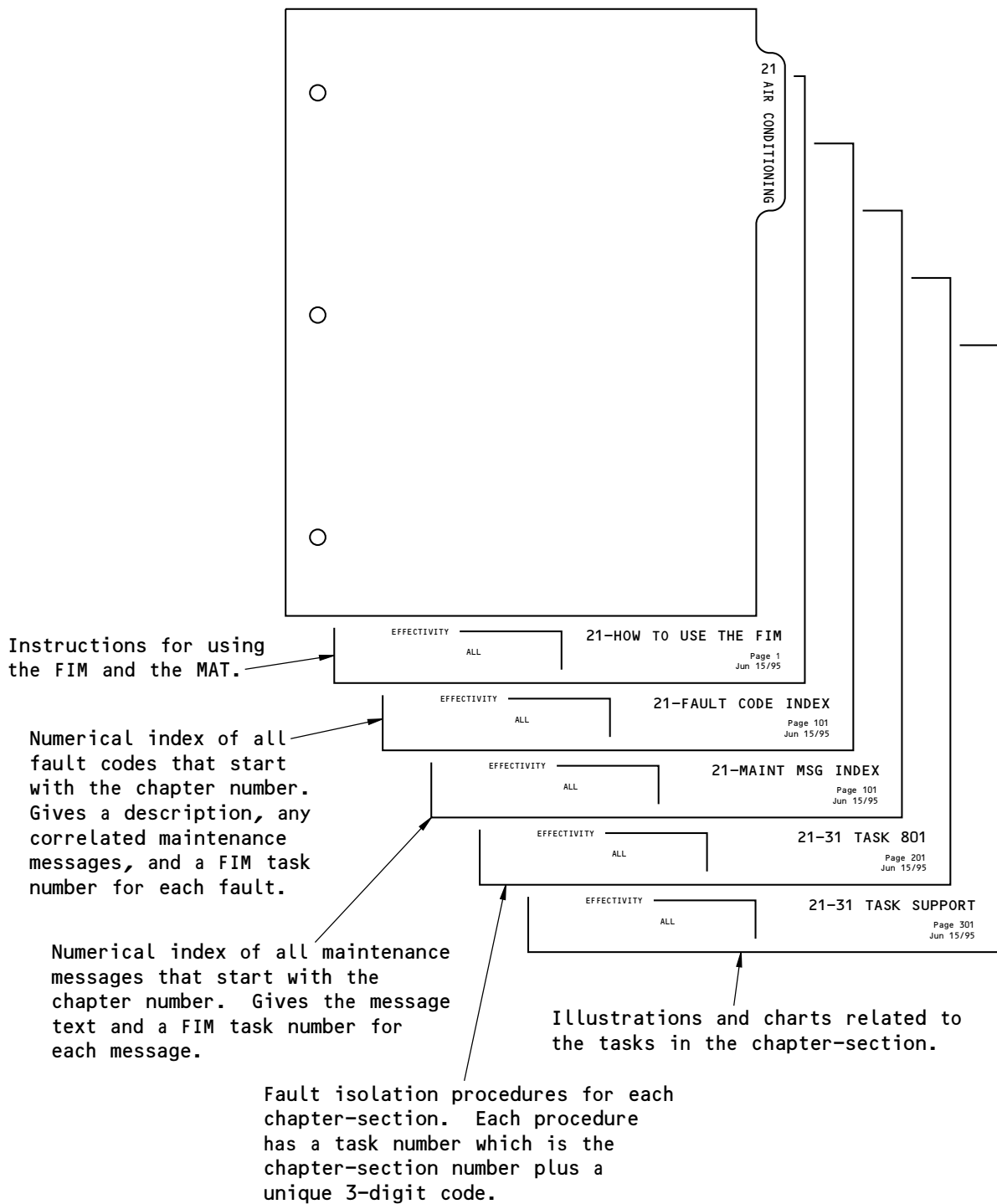
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F39837 S0000132479_V1

Subjects in Each FIM Chapter
Figure 6

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 001 00	SATCOM MESSAGE (EICAS COMM MED)		23-15 TASK 853
231 002 00	SATCOM MESSAGE (EICAS COMM LOW)		23-15 TASK 853
231 003 00	SATCOM (EICAS ADVISORY)	23-60021 23-60041 23-60191 23-60201 23-60291 23-60451 23-60461 23-60511 23-61071 23-61101 23-61121 23-61321 23-61481 23-61491 23-61501 23-61503 23-61631 23-61883 23-68801 23-68893 23-69905 23-69907 23-71021 23-71022 23-71040 23-71051 23-71052 24-11782 24-11786 24-12126 24-13801 24-13817 31-50007	23-15 TASK 801 23-15 TASK 803 23-15 TASK 920 23-15 TASK 921 23-15 TASK 852 23-15 TASK 824 23-15 TASK 825 23-15 TASK 842 23-15 TASK 908 23-15 TASK 909 23-15 TASK 910 23-15 TASK 911 23-15 TASK 912 23-15 TASK 954 23-15 TASK 956 23-15 TASK 958 23-15 TASK 962 23-15 TASK 988 23-15 TASK 843 23-15 TASK 833 23-15 TASK 835 23-15 TASK 844 23-27 TASK 816 23-27 TASK 817 23-27 TASK 803 23-27 TASK 804 23-27 TASK 805 24-51 TASK 838 24-51 TASK 833 24-51 TASK 841 24-61 TASK 805 24-33 TASK 818 31-44 TASK 821

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 003 00	SATCOM (EICAS ADVISORY)	(continued)	
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52107	31-44 TASK 853
		31-52108	31-44 TASK 854
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 003 00	SATCOM (EICAS ADVISORY)	(continued)	
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54201	31-41 TASK 916
		31-54202	31-41 TASK 917
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56107	31-44 TASK 853
		31-56108	31-44 TASK 854
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58107	31-44 TASK 853
		31-58108	31-44 TASK 854
		31-58232	31-41 TASK 922
		31-58281	31-41 TASK 921
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-58581	31-43 TASK 855
		31-58582	31-43 TASK 855
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-68899	31-43 TASK 883
		31-68900	31-43 TASK 884

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 003 00	SATCOM (EICAS ADVISORY)	(continued)	
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814
231 004 00	SATCOM VOICE (EICAS ADVISORY)	23-60021	23-15 TASK 801
		23-60041	23-15 TASK 803
		23-60191	23-15 TASK 920
		23-60201	23-15 TASK 921
		23-60291	23-15 TASK 852
		23-60451	23-15 TASK 824
		23-60461	23-15 TASK 825
		23-60511	23-15 TASK 842
		23-61071	23-15 TASK 908
		23-61101	23-15 TASK 909
		23-61121	23-15 TASK 910
		23-61321	23-15 TASK 911
		23-61481	23-15 TASK 912
		23-61491	23-15 TASK 954
		23-61501	23-15 TASK 956
		23-61503	23-15 TASK 958
		23-61631	23-15 TASK 962

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 004 00	SATCOM VOICE (EICAS ADVISORY)	(continued)	
		23-61883	23-15 TASK 988
		23-68801	23-15 TASK 843
		23-68893	23-15 TASK 833
		23-69905	23-15 TASK 835
		23-69907	23-15 TASK 844
		23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805
		24-11782	24-51 TASK 838
		24-11786	24-51 TASK 833
		24-12126	24-51 TASK 841
		24-13801	24-61 TASK 805
		24-13817	24-33 TASK 818
		31-50007	31-44 TASK 821
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 004 00	SATCOM VOICE (EICAS ADVISORY)	(continued)	
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52107	31-44 TASK 853
		31-52108	31-44 TASK 854
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54201	31-41 TASK 916
		31-54202	31-41 TASK 917
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56107	31-44 TASK 853
		31-56108	31-44 TASK 854
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58107	31-44 TASK 853
		31-58108	31-44 TASK 854
		31-58232	31-41 TASK 922
		31-58281	31-41 TASK 921
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-58581	31-43 TASK 855

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 004 00	SATCOM VOICE (EICAS ADVISORY)	(continued)	
		31-58582	31-43 TASK 855
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-68899	31-43 TASK 883
		31-68900	31-43 TASK 884
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814
231 005 00	SATVOICE LOST (EICAS ADVISORY)		23-15 TASK 904

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231 006 00	SATVOICE AVAIL (EICAS COMM LOW)		23-15 TASK 905
231 007 00	SATCOM HI GAIN (EICAS STATUS)	23-60021	23-15 TASK 801
		23-60041	23-15 TASK 803
		23-60191	23-15 TASK 920
		23-60201	23-15 TASK 921
		23-60291	23-15 TASK 852
		23-60451	23-15 TASK 824
		23-60461	23-15 TASK 825
		23-60511	23-15 TASK 842
		23-61071	23-15 TASK 908
		23-61101	23-15 TASK 909
		23-61121	23-15 TASK 910
		23-61321	23-15 TASK 911
		23-61481	23-15 TASK 912
		23-61501	23-15 TASK 956
		23-61503	23-15 TASK 958
		23-61631	23-15 TASK 962
		23-61883	23-15 TASK 988
		23-68801	23-15 TASK 843
		23-68893	23-15 TASK 833
		23-69905	23-15 TASK 835
		23-69907	23-15 TASK 844
		23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805
		24-11782	24-51 TASK 838
		24-11786	24-51 TASK 833
		24-12126	24-51 TASK 841
		24-13801	24-61 TASK 805
		24-13817	24-33 TASK 818
		31-50007	31-44 TASK 821
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
231 007 00	SATCOM HI GAIN (EICAS STATUS)	(continued)	
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52107	31-44 TASK 853
		31-52108	31-44 TASK 854
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54201	31-41 TASK 916

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231 007 00	SATCOM HI GAIN (EICAS STATUS)	(continued)	
		31-54202	31-41 TASK 917
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56107	31-44 TASK 853
		31-56108	31-44 TASK 854
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58107	31-44 TASK 853
		31-58108	31-44 TASK 854
		31-58232	31-41 TASK 922
		31-58281	31-41 TASK 921
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-58581	31-43 TASK 855
		31-58582	31-43 TASK 855
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-68899	31-43 TASK 883
		31-68900	31-43 TASK 884
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894

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231 007 00	SATCOM HI GAIN (EICAS STATUS)	(continued)	
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814
231 008 00	SATCOM SYSTEM (EICAS STATUS)	23-60021	23-15 TASK 801
		23-60041	23-15 TASK 803
		23-60161	23-15 TASK 840
		23-60191	23-15 TASK 920
		23-60201	23-15 TASK 921
		23-60291	23-15 TASK 852
		23-60451	23-15 TASK 824
		23-60461	23-15 TASK 825
		23-60511	23-15 TASK 842
		23-60541	23-15 TASK 830
		23-60551	23-15 TASK 830
		23-60561	23-15 TASK 830
		23-60571	23-15 TASK 918
		23-60581	23-15 TASK 918
		23-60591	23-15 TASK 918
		23-61071	23-15 TASK 908
		23-61101	23-15 TASK 909
		23-61121	23-15 TASK 910
		23-61321	23-15 TASK 911
		23-61481	23-15 TASK 912

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231 008 00	SATCOM SYSTEM (EICAS STATUS)	(continued)	
		23-61491	23-15 TASK 954
		23-61501	23-15 TASK 956
		23-61503	23-15 TASK 958
		23-61631	23-15 TASK 962
		23-61883	23-15 TASK 988
		23-68801	23-15 TASK 843
		23-68893	23-15 TASK 833
		24-11782	24-51 TASK 838
		24-11786	24-51 TASK 833
		24-12126	24-51 TASK 841
		24-13817	24-33 TASK 818
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869

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231 008 00	SATCOM SYSTEM (EICAS STATUS)	(continued)	
		31-54201	31-41 TASK 916
		31-54202	31-41 TASK 917
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58232	31-41 TASK 922
		31-58281	31-41 TASK 921
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814
231 611 41	VHF radio: does not transfer on radio tuning panel - left.		23-12 TASK 876

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231 611 42	VHF radio: does not transfer on radio tuning panel - right.		23-12 TASK 877
231 611 43	VHF radio: does not transfer on radio tuning panel - center.		23-12 TASK 878
231 612 41	HF radio: does not transfer on radio tuning panel - left.		23-12 TASK 879
231 612 42	HF radio: does not transfer on radio tuning panel - right.		23-12 TASK 880
231 616 41	Radio tuning panel: shows dashes in the frequency window - left.		23-12 TASK 866
231 616 42	Radio tuning panel: shows dashes in the frequency window - right.		23-12 TASK 866
231 616 43	Radio tuning panel: shows dashes in the frequency window - center.		23-12 TASK 866
231 617 41	Radio tuning panel: Shows PANEL FAIL in the frequency window - left.		23-12 TASK 867
231 617 42	Radio tuning panel: Shows PANEL FAIL in the frequency window - right.		23-12 TASK 867
231 617 43	Radio tuning panel: Shows PANEL FAIL in the frequency window - center.		23-12 TASK 867
231 621 41	HF radio: Transmission problem - left.		23-11 TASK 834
231 621 42	HF radio: Transmission problem - right.		23-11 TASK 810
231 622 41	HF radio: reception problem - left.		23-11 TASK 809
231 622 42	HF radio: reception problem - right.		23-11 TASK 810
231 623 41	HF radio: tuning problem - left.		23-11 TASK 834
231 623 42	HF radio: tuning problem - right.		23-11 TASK 834
231 631 41	VHF radio: Transmission problem - left.		23-12 TASK 881
231 631 42	VHF radio: Transmission problem - right.		23-12 TASK 882
231 631 43	VHF radio: Transmission problem - center.		23-12 TASK 883
231 632 41	VHF radio: reception problem - left.		23-12 TASK 881
231 632 42	VHF radio: reception problem - right.		23-12 TASK 882
231 632 43	VHF radio: reception problem - center.		23-12 TASK 883
231 811 41	HF radio: fan in transceiver does not come on during system test - left transceiver.		23-11 TASK 835
232 001 00	SELCAL (EICAS COMM MED)		23-21 TASK 810
232 011 00	DATALINK SYS (EICAS ADVISORY)	23-51001	23-11 TASK 811
		23-51002	23-11 TASK 812
		23-51893	23-11 TASK 820
		23-51894	23-11 TASK 821

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		23-51895	23-11 TASK 822
		23-51896	23-11 TASK 823
		23-52001	23-12 TASK 801
		23-52002	23-12 TASK 802
		23-52003	23-12 TASK 803
		23-52801	23-12 TASK 868
		23-52802	23-12 TASK 869
		23-52803	23-12 TASK 870
		23-52891	23-12 TASK 823
		23-52892	23-12 TASK 824
		23-52893	23-12 TASK 825
		23-53002	23-12 TASK 827
		23-53003	23-12 TASK 828
		23-53892	23-12 TASK 833
		23-53893	23-12 TASK 834
		23-60021	23-15 TASK 801
		23-60041	23-15 TASK 803
		23-60191	23-15 TASK 920
		23-60201	23-15 TASK 921
		23-60291	23-15 TASK 852
		23-60451	23-15 TASK 824
		23-60461	23-15 TASK 825
		23-60511	23-15 TASK 842
		23-61071	23-15 TASK 908
		23-61101	23-15 TASK 909
		23-61121	23-15 TASK 910
		23-61321	23-15 TASK 911
		23-61481	23-15 TASK 912
		23-61491	23-15 TASK 954
		23-61501	23-15 TASK 956
		23-61503	23-15 TASK 958
		23-61631	23-15 TASK 962
		23-61883	23-15 TASK 988
		23-68801	23-15 TASK 843
		23-68893	23-15 TASK 833

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		23-69905	23-15 TASK 835
		23-69907	23-15 TASK 844
		23-69915	23-15 TASK 838
		23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805
		23-71071	23-27 TASK 806
		23-71072	23-27 TASK 807
		23-71073	23-27 TASK 885
		23-71074	23-27 TASK 885
		23-71081	23-27 TASK 808
		23-71082	23-27 TASK 809
		23-71093	23-27 TASK 810
		23-71094	23-27 TASK 811
		23-71714	23-12 TASK 884
		23-71715	23-12 TASK 885
		24-11782	24-51 TASK 838
		24-11784	24-51 TASK 836
		24-11786	24-51 TASK 833
		24-11787	24-32 TASK 817
		24-12056	24-32 TASK 820
		24-12126	24-51 TASK 841
		24-12127	24-51 TASK 842
		24-12128	24-51 TASK 843
		24-13801	24-61 TASK 805
		24-13815	24-61 TASK 806
		24-13817	24-33 TASK 818
		31-50007	31-44 TASK 821
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52107	31-44 TASK 853
		31-52108	31-44 TASK 854
		31-52212	31-41 TASK 918
		31-52231	31-41 TASK 914
		31-52232	31-41 TASK 915
		31-52321	31-41 TASK 918
		31-52322	31-41 TASK 918
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-52531	31-43 TASK 813
		31-52532	31-43 TASK 814
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-53721	31-41 TASK 832
		31-53722	31-41 TASK 833
		31-53731	31-41 TASK 832
		31-53732	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54201	31-41 TASK 916
		31-54202	31-41 TASK 917
		31-54231	31-41 TASK 916
		31-54232	31-41 TASK 917
		31-54252	31-41 TASK 917
		31-54291	31-41 TASK 916
		31-54501	31-43 TASK 854
		31-54502	31-43 TASK 854
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-55711	31-41 TASK 840
		31-55712	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56107	31-44 TASK 853
		31-56108	31-44 TASK 854
		31-56201	31-41 TASK 919
		31-56202	31-41 TASK 920
		31-56232	31-41 TASK 920
		31-56241	31-41 TASK 919
		31-57701	31-41 TASK 842
		31-57702	31-41 TASK 843
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58107	31-44 TASK 853
		31-58108	31-44 TASK 854
		31-58232	31-41 TASK 922

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		31-58281	31-41 TASK 921
		31-58321	31-41 TASK 918
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-58581	31-43 TASK 855
		31-58582	31-43 TASK 855
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-68891	31-43 TASK 876
		31-68899	31-43 TASK 883
		31-68900	31-43 TASK 884
		31-68906	31-43 TASK 890
		31-69873	31-45 TASK 801
		31-69874	31-45 TASK 802
		31-69875	31-45 TASK 803
		31-69876	31-45 TASK 804
		31-69917	31-42 TASK 885
		31-69918	31-42 TASK 885
		31-69919	31-42 TASK 885
		31-69920	31-42 TASK 885
		31-69921	31-42 TASK 886
		31-69922	31-42 TASK 886
		31-69923	31-42 TASK 886
		31-69924	31-42 TASK 886

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232 011 00	DATALINK SYS (EICAS ADVISORY)	(continued)	
		31-69925	31-42 TASK 886
		31-69926	31-42 TASK 886
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		31-83071	31-61 TASK 863
		31-83072	31-61 TASK 864
		31-83073	31-61 TASK 865
		31-83074	31-61 TASK 866
		31-83081	31-61 TASK 894
		31-83082	31-61 TASK 895
		31-83083	31-61 TASK 896
		31-83084	31-61 TASK 897
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814
232 012 00	DATALINK LOST (EICAS ADVISORY)		23-21 TASK 809
232 013 00	DATALINK AVAIL (EICAS COMM LOW)		23-27 TASK 896
232 016 00	DATA COMM MGMT (EICAS STATUS)	23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805

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232 016 00	DATA COMM MGMT (EICAS STATUS)	(continued)	
		23-71071	23-27 TASK 806
		23-71072	23-27 TASK 807
		23-71093	23-27 TASK 810
		23-71094	23-27 TASK 811
		24-13801	24-61 TASK 805
		31-50007	31-44 TASK 821
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52212	31-41 TASK 918
		31-52231	31-41 TASK 914
		31-52232	31-41 TASK 915
		31-52391	31-41 TASK 914
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-52531	31-43 TASK 813
		31-52532	31-43 TASK 814
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-53721	31-41 TASK 832
		31-53722	31-41 TASK 833

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232 016 00	DATA COMM MGMT (EICAS STATUS)	(continued)	
		31-53731	31-41 TASK 832
		31-53732	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54231	31-41 TASK 916
		31-54232	31-41 TASK 917
		31-54252	31-41 TASK 917
		31-54291	31-41 TASK 916
		31-54391	31-41 TASK 916
		31-54501	31-43 TASK 854
		31-54502	31-43 TASK 854
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-55711	31-41 TASK 840
		31-55712	31-41 TASK 841
		31-55721	31-41 TASK 840
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56201	31-41 TASK 919
		31-56202	31-41 TASK 920
		31-56232	31-41 TASK 920
		31-56241	31-41 TASK 919
		31-56462	31-41 TASK 920
		31-57701	31-41 TASK 842
		31-57702	31-41 TASK 843
		31-57732	31-41 TASK 843
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58321	31-41 TASK 918
		31-58462	31-41 TASK 922
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859

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232 016 00	DATA COMM MGMT (EICAS STATUS)	(continued)	
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-83071	31-61 TASK 863
		31-83072	31-61 TASK 864
		31-83073	31-61 TASK 865
		31-83074	31-61 TASK 866
		31-83081	31-61 TASK 894
		31-83082	31-61 TASK 895
		31-83083	31-61 TASK 896
		31-83084	31-61 TASK 897
232 022 00	VHF DATALINK (EICAS ADVISORY)	23-52001	23-12 TASK 801
		23-52002	23-12 TASK 802
		23-52003	23-12 TASK 803
		23-52801	23-12 TASK 868
		23-52802	23-12 TASK 869
		23-52803	23-12 TASK 870
		23-52891	23-12 TASK 823
		23-52892	23-12 TASK 824
		23-52893	23-12 TASK 825
		23-53002	23-12 TASK 827
		23-53003	23-12 TASK 828
		23-53892	23-12 TASK 833
		23-53893	23-12 TASK 834
		23-71071	23-27 TASK 806
		23-71072	23-27 TASK 807
		23-71081	23-27 TASK 808
		23-71082	23-27 TASK 809
		23-71093	23-27 TASK 810
		23-71094	23-27 TASK 811
		23-71714	23-12 TASK 884
		23-71715	23-12 TASK 885
		24-11787	24-32 TASK 817
		24-12056	24-32 TASK 820

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232 022 00	VHF DATALINK (EICAS ADVISORY)	(continued)	
		24-13815	24-61 TASK 806
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52231	31-41 TASK 914
		31-52232	31-41 TASK 915
		31-52321	31-41 TASK 918
		31-52322	31-41 TASK 918
		31-52531	31-43 TASK 813
		31-52532	31-43 TASK 814
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-53721	31-41 TASK 832
		31-53722	31-41 TASK 833
		31-53731	31-41 TASK 832
		31-53732	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54231	31-41 TASK 916
		31-54232	31-41 TASK 917
		31-54252	31-41 TASK 917
		31-54291	31-41 TASK 916
		31-54501	31-43 TASK 854
		31-54502	31-43 TASK 854
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-55711	31-41 TASK 840
		31-55712	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56201	31-41 TASK 919
		31-56202	31-41 TASK 920
		31-56232	31-41 TASK 920
		31-56241	31-41 TASK 919

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232 022 00	VHF DATALINK (EICAS ADVISORY)	(continued)	
		31-57701	31-41 TASK 842
		31-57702	31-41 TASK 843
		31-69917	31-42 TASK 885
		31-69918	31-42 TASK 885
		31-69919	31-42 TASK 885
		31-69920	31-42 TASK 885
		31-69921	31-42 TASK 886
		31-69922	31-42 TASK 886
		31-69923	31-42 TASK 886
		31-69924	31-42 TASK 886
		31-69925	31-42 TASK 886
		31-69926	31-42 TASK 886
232 023 00	SATCOM DATALINK (EICAS ADVISORY)	23-60021	23-15 TASK 801
		23-60041	23-15 TASK 803
		23-60191	23-15 TASK 920
		23-60201	23-15 TASK 921
		23-60291	23-15 TASK 852
		23-60451	23-15 TASK 824
		23-60461	23-15 TASK 825
		23-60511	23-15 TASK 842
		23-61071	23-15 TASK 908
		23-61101	23-15 TASK 909
		23-61121	23-15 TASK 910
		23-61321	23-15 TASK 911
		23-61481	23-15 TASK 912
		23-61491	23-15 TASK 954
		23-61501	23-15 TASK 956
		23-61503	23-15 TASK 958
		23-61631	23-15 TASK 962
		23-61883	23-15 TASK 988
		23-68801	23-15 TASK 843
		23-68893	23-15 TASK 833
		23-69905	23-15 TASK 835
		23-69907	23-15 TASK 844
		23-69915	23-15 TASK 838

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232 023 00	SATCOM DATALINK (EICAS ADVISORY)	(continued)	
		23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805
		24-11782	24-51 TASK 838
		24-11786	24-51 TASK 833
		24-12126	24-51 TASK 841
		24-12127	24-51 TASK 842
		24-12128	24-51 TASK 843
		24-13801	24-61 TASK 805
		24-13817	24-33 TASK 818
		31-50007	31-44 TASK 821
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51107	31-44 TASK 853
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51122	23-27 TASK 802
		31-51123	23-27 TASK 898
		31-51124	23-27 TASK 899
		31-51141	31-44 TASK 827
		31-51142	31-44 TASK 828
		31-51143	31-44 TASK 831
		31-51144	31-44 TASK 832
		31-51341	31-44 TASK 833
		31-51342	31-44 TASK 834
		31-51343	31-44 TASK 835

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232 023 00	SATCOM DATALINK (EICAS ADVISORY)	(continued)	
		31-51344	31-44 TASK 836
		31-52013	31-43 TASK 866
		31-52014	31-43 TASK 867
		31-52107	31-44 TASK 853
		31-52108	31-44 TASK 854
		31-52212	31-41 TASK 918
		31-52501	31-43 TASK 809
		31-52502	31-43 TASK 810
		31-52511	31-43 TASK 854
		31-52512	31-43 TASK 854
		31-53701	31-41 TASK 832
		31-53702	31-41 TASK 833
		31-53711	31-41 TASK 832
		31-53712	31-41 TASK 833
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54201	31-41 TASK 916
		31-54202	31-41 TASK 917
		31-55701	31-41 TASK 840
		31-55702	31-41 TASK 841
		31-56013	31-43 TASK 870
		31-56014	31-43 TASK 871
		31-56107	31-44 TASK 853
		31-56108	31-44 TASK 854
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58107	31-44 TASK 853
		31-58108	31-44 TASK 854
		31-58232	31-41 TASK 922
		31-58281	31-41 TASK 921
		31-58321	31-41 TASK 918
		31-58531	31-43 TASK 831
		31-58532	31-43 TASK 832
		31-58581	31-43 TASK 855
		31-58582	31-43 TASK 855

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232 023 00	SATCOM DATALINK (EICAS ADVISORY)	(continued)	
		31-59702	31-41 TASK 859
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59722	31-41 TASK 859
		31-59731	31-41 TASK 858
		31-59732	31-41 TASK 859
		31-62011	31-43 TASK 843
		31-62012	31-43 TASK 844
		31-62020	31-43 TASK 845
		31-62071	31-43 TASK 850
		31-62072	31-43 TASK 851
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-68891	31-43 TASK 876
		31-68899	31-43 TASK 883
		31-68900	31-43 TASK 884
		31-68906	31-43 TASK 890
		31-69931	31-42 TASK 887
		31-69932	31-42 TASK 887
		31-69953	31-42 TASK 894
		31-69954	31-42 TASK 894
		31-69955	31-42 TASK 894
		31-69956	31-42 TASK 894
		34-48011	34-53 TASK 801
		34-48012	34-53 TASK 802
		34-48020	34-53 TASK 803
		34-48021	34-53 TASK 804
		34-48022	34-53 TASK 805
		34-48030	34-53 TASK 806
		34-48031	34-53 TASK 807
		34-48032	34-53 TASK 808
		34-48801	34-53 TASK 809
		34-48802	34-53 TASK 810
		34-48892	34-53 TASK 813
		34-48893	34-53 TASK 814

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232 024 00	HF DATALINK (EICAS ADVISORY)	23-51001	23-11 TASK 811
		23-51002	23-11 TASK 812
		23-51893	23-11 TASK 820
		23-51894	23-11 TASK 821
		23-51895	23-11 TASK 822
		23-51896	23-11 TASK 823
		24-11784	24-51 TASK 836
		24-12127	24-51 TASK 842
		24-12128	24-51 TASK 843
		31-69873	31-45 TASK 801
		31-69874	31-45 TASK 802
		31-69875	31-45 TASK 803
		31-69876	31-45 TASK 804
232 025 00	HF DATALINK OFF (EICAS MEMO)		23-27 TASK 912
232 031 00	COMM (EICAS COMM MED)		23-27 TASK 887
232 032 00	COMM (EICAS COMM MED)		23-27 TASK 887
232 033 00	COMM (EICAS COMM LOW)		23-27 TASK 887
232 034 00	COMM (EICAS COMM LOW)		23-27 TASK 887
232 041 00	ATC DATALINK LOST (EICAS ADVISORY)		34-53 TASK 835
232 042 00	ATC (EICAS COMM HI)		34-53 TASK 834
232 043 00	ATC (EICAS COMM HI)		34-53 TASK 834
232 044 00	ATC (EICAS COMM MED)		34-53 TASK 834
232 045 00	ATC (EICAS COMM MED)		34-53 TASK 834
232 046 00	ATC COMM (EICAS STATUS)	23-75000	23-27 TASK 886
		23-75001	23-27 TASK 847
		23-75002	23-27 TASK 851
		23-75011	23-27 TASK 892
		23-75012	23-27 TASK 893
		23-75015	23-27 TASK 921
		23-75016	23-27 TASK 922
		23-75021	23-27 TASK 894
		23-75022	23-27 TASK 894
		23-75041	23-27 TASK 839
		23-75042	23-27 TASK 840
		23-75100	23-27 TASK 886
		23-75511	23-27 TASK 845

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232 046 00	ATC COMM (EICAS STATUS)	(continued)	
		23-75512	23-27 TASK 846
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11787	24-32 TASK 817
		24-12056	24-32 TASK 820
		24-13815	24-61 TASK 806
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51181	23-27 TASK 837
		31-51182	23-27 TASK 838
		31-51183	23-27 TASK 847
		31-51184	23-27 TASK 851
		31-51191	23-27 TASK 837
		31-51192	23-27 TASK 838
		31-51193	23-27 TASK 847
		31-51194	23-27 TASK 851
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-68801	31-43 TASK 892
		31-68802	31-43 TASK 893
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69455	31-42 TASK 846
		31-69456	31-42 TASK 846
		31-69457	31-42 TASK 846

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232 046 00	ATC COMM (EICAS STATUS)	(continued)	
		31-69458	31-42 TASK 846
		31-69459	31-42 TASK 846
		31-69460	31-42 TASK 846
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69655	31-42 TASK 873
		31-69656	31-42 TASK 873
		31-69657	31-42 TASK 873
		31-69658	31-42 TASK 873
		31-69659	31-42 TASK 873
		31-69660	31-42 TASK 873
		34-61031	34-61 TASK 917
		34-61032	34-61 TASK 918
		34-61033	34-61 TASK 919
		34-61041	34-61 TASK 847
		34-61042	34-61 TASK 848
		34-61043	34-61 TASK 849
		34-68801	34-61 TASK 819
		34-68802	34-61 TASK 819
		34-68803	34-61 TASK 819
		34-68841	34-61 TASK 917
		34-68842	34-61 TASK 919
		34-68843	34-61 TASK 918
		34-68861	34-61 TASK 820
		34-68862	34-61 TASK 821
		34-68863	34-61 TASK 822
		34-69401	34-61 TASK 917
		34-69402	34-61 TASK 918
		34-69403	34-61 TASK 919
		34-69601	34-61 TASK 847
		34-69602	34-61 TASK 848
		34-69603	34-61 TASK 849
232 051 00	COMM BUSY (EICAS COMM MED)		23-27 TASK 888
232 061 00	PRINTER (EICAS COMM MED)		23-27 TASK 895
232 062 00	PRINTER (EICAS COMM MED)		23-27 TASK 895

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232 063 00	PRINTER (EICAS COMM LOW)		23-27 TASK 895
232 064 00	PRINTER (EICAS COMM LOW)		23-27 TASK 895
232 071 00	ELT ON (EICAS ADVISORY)		23-24 TASK 801
232 081 00	FMC (EICAS COMM MED)		23-27 TASK 889
232 480 41	Maintenance memo shows on the MAT: DCMF IN LEFT AIMS.	23-71021 23-71022 23-71040 23-71051 23-71052 23-71071 23-71093 23-71511 24-13801 31-50007 31-50012 31-51013 31-51014 31-51015 31-51016 31-51107 31-51122 31-51124 31-52013 31-52231 31-52391 31-52511 31-52531 31-53701 31-53711 31-53721 31-53731 31-54013 31-54231 31-54291 31-54391	23-27 TASK 816 23-27 TASK 817 23-27 TASK 803 23-27 TASK 804 23-27 TASK 805 23-27 TASK 806 23-27 TASK 810 23-27 TASK 835 24-61 TASK 805 31-44 TASK 821 31-44 TASK 802 31-44 TASK 863 31-44 TASK 864 31-43 TASK 801 31-43 TASK 802 31-44 TASK 853 23-27 TASK 802 23-27 TASK 899 31-43 TASK 866 31-41 TASK 914 31-41 TASK 914 31-43 TASK 854 31-43 TASK 813 31-41 TASK 832 31-41 TASK 832 31-41 TASK 832 31-41 TASK 832 31-43 TASK 868 31-41 TASK 916 31-41 TASK 916 31-41 TASK 916

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
232 480 41	Maintenance memo shows on the MAT: DCMF IN LEFT AIMS.	(continued)	
		31-54501	31-43 TASK 854
		31-55701	31-41 TASK 840
		31-55711	31-41 TASK 840
		31-55721	31-41 TASK 840
		31-56013	31-43 TASK 870
		31-56201	31-41 TASK 919
		31-56241	31-41 TASK 919
		31-57701	31-41 TASK 842
		31-58013	31-43 TASK 872
		31-58321	31-41 TASK 918
		31-58531	31-43 TASK 831
		31-59711	31-41 TASK 858
		31-59721	31-41 TASK 858
		31-59731	31-41 TASK 858
		31-68802	31-43 TASK 893
232 480 42	Maintenance memo shows on the MAT: DCMF IN RIGHT AIMS.	23-71021	23-27 TASK 816
		23-71022	23-27 TASK 817
		23-71040	23-27 TASK 803
		23-71051	23-27 TASK 804
		23-71052	23-27 TASK 805
		23-71072	23-27 TASK 807
		23-71094	23-27 TASK 811
		23-71512	23-27 TASK 836
		24-13801	24-61 TASK 805
		31-50008	31-44 TASK 822
		31-50011	31-44 TASK 801
		31-51013	31-44 TASK 863
		31-51014	31-44 TASK 864
		31-51015	31-43 TASK 801
		31-51016	31-43 TASK 802
		31-51108	31-44 TASK 854
		31-51121	23-27 TASK 801
		31-51123	23-27 TASK 898

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232 480 42	Maintenance memo shows on the MAT: DCMF IN RIGHT AIMS.	(continued)	
		31-52014	31-43 TASK 867
		31-52212	31-41 TASK 918
		31-52232	31-41 TASK 915
		31-52512	31-43 TASK 854
		31-52532	31-43 TASK 814
		31-53702	31-41 TASK 833
		31-53712	31-41 TASK 833
		31-53722	31-41 TASK 833
		31-53732	31-41 TASK 833
		31-54014	31-43 TASK 869
		31-54232	31-41 TASK 917
		31-54252	31-41 TASK 917
		31-54502	31-43 TASK 854
		31-55702	31-41 TASK 841
		31-55712	31-41 TASK 841
		31-56014	31-43 TASK 871
		31-56202	31-41 TASK 920
		31-56232	31-41 TASK 920
		31-56462	31-41 TASK 920
		31-57702	31-41 TASK 843
		31-57732	31-41 TASK 843
		31-58014	31-43 TASK 873
		31-58462	31-41 TASK 922
		31-58532	31-43 TASK 832
		31-59722	31-41 TASK 859
		31-59732	31-41 TASK 859
		31-68801	31-43 TASK 892
232 498 00	VHF DATALINK OFF (EICAS MEMO)		23-27 TASK 890
232 499 00	SATCOM DATALINK OFF (EICAS MEMO)		23-27 TASK 891
232 611 41	SELCAL: call switch does not reset; PTT reset OK - left HF.		23-21 TASK 801
232 611 42	SELCAL: call switch does not reset; PTT reset OK - right HF.		23-21 TASK 802
232 612 41	SELCAL: call switch does not reset; PTT reset OK - left VHF.		23-21 TASK 803

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232 612 42	SELCAL: call switch does not reset; PTT reset OK - right VHF.		23-21 TASK 804
232 612 43	SELCAL: call switch does not reset; PTT reset OK - center VHF.		23-21 TASK 805
232 613 41	SELCAL: call light does not come on when called - left VHF.		23-21 TASK 806
232 613 42	SELCAL: call light does not come on when called - right VHF.		23-21 TASK 807
232 613 43	SELCAL: call light does not come on when called - center VHF.		23-21 TASK 808
232 613 48	SELCAL: call light does not come on when called - all radios.		23-21 TASK 811
232 614 41	SELCAL: call light does not come on when called - left HF.		23-21 TASK 812
232 614 42	SELCAL: call light does not come on when called - right HF.		23-21 TASK 813
232 642 00	Emergency Locator Transmitter (ELT): LED does not flash the correct number of times during BITE test.		23-24 TASK 803
232 643 00	Emergency Locator Transmitter (ELT): no ELT signal on VHF when ELT switch set to ON during test.		23-24 TASK 804
232 644 00	Emergency Locator Transmitter (ELT): ELT ON message does not operate correctly during operational test.		23-24 TASK 801
232 651 41	ACARS: menu pages do not show when ACARS menu key selected - left CDU.		23-27 TASK 818
232 651 42	ACARS: menu pages do not show when ACARS menu key selected - right CDU.		23-27 TASK 819
232 651 43	ACARS: menu pages do not show when ACARS menu key selected - center CDU.		23-27 TASK 820
232 652 41	ACARS: item selections do not respond to line item selection keys - left CDU.		23-27 TASK 821
232 652 42	ACARS: item selections do not respond to line item selection keys - right CDU.		23-27 TASK 822
232 652 43	ACARS: item selections do not respond to line item selection keys - center CDU.		23-27 TASK 823
232 653 41	ACARS: CDU does not arm VHF (center) for ACARS - left CDU.		23-27 TASK 824
232 657 00	ACARS: does not transmit or receive messages.		23-27 TASK 897

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232 658 00	ACARS: cannot cancel CPDLC COMM messages in NEW MESSAGES queue.		23-27 TASK 917
233 001 00	PASSENGER ADDRESS (EICAS STATUS)	23-00001 23-38801 23-38841 23-81004 24-13815 31-58013 31-58014 31-58121 31-58122 31-69401 31-69402 31-69413 31-69414	23-39 TASK 932 23-39 TASK A03 23-39 TASK 933 23-91 TASK 804 24-61 TASK 806 31-43 TASK 872 31-43 TASK 873 31-41 TASK 856 31-41 TASK 857 31-42 TASK 825 31-42 TASK 825 31-42 TASK 830 31-42 TASK 830
233 611 00	Passenger address handset (flight deck) problem.		23-39 TASK 979
233 801 00	CSCP indication during ALL TEST or software load: Shows message OPEN CABIN DOOR or SET PARKING BRAKE or SET AIRPLANE TO GROUND CONDITION.		23-39 TASK A20
234 001 00	CABIN ALERT (EICAS COMM MED)		23-42 TASK 801
234 002 00	CABIN ALERT (EICAS COMM MED)		23-42 TASK 801
234 003 00	CABIN READY (EICAS COMM MED)		23-42 TASK 802
234 004 00	CABIN CALL (EICAS COMM MED)		23-42 TASK 803
234 005 00	CABIN CALL (EICAS COMM LOW)		23-42 TASK 803
234 011 00	CABIN INTERPHONE (EICAS STATUS)	23-00001 23-00002 23-38801 23-38841 23-81004 24-13815 31-58013 31-58014 31-58121 31-58122 31-69401	23-39 TASK 932 23-39 TASK 932 23-39 TASK A03 23-39 TASK 933 23-91 TASK 804 24-61 TASK 806 31-43 TASK 872 31-43 TASK 873 31-41 TASK 856 31-41 TASK 857 31-42 TASK 825

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234 011 00	CABIN INTERPHONE (EICAS STATUS)	(continued) 31-69402 31-69413 31-69414	31-42 TASK 825 31-42 TASK 830 31-42 TASK 830
234 611 00	Ground crew call horn: does not come on when selected on CDU.		23-43 TASK 802
234 613 00	CALL light on audio control panels: does not come on when FLIGHT DECK CALL switch on P40 panel is pushed.		23-43 TASK 803
234 811 00	Audio entertainment player: does not operate.		23-98 TASK 803
234 831 00	Service interphone: inoperative at all jacks.		23-41 TASK 801
234 833 00	Service interphone: does not connect to flight interphone with SERV INTPH switch set to ON.		23-41 TASK 802
234 835 00	Service interphone: problem at specific jack - jack adjacent to weather radar transceiver.		23-41 TASK 803
234 836 00	Service interphone: problem at specific jack - jack at P40 nose gear electrical service panel.		23-41 TASK 804
234 837 00	Service interphone: problem at specific jack - jack at E3 rack in main equipment center.		23-41 TASK 805
234 838 00	Service interphone: problem at specific jack - jack at P35 forward cargo handling accessory panel.		23-41 TASK 806
234 839 41	Service interphone: problem at specific jack - jack at engine (left) nacelle.		23-41 TASK 807
234 839 42	Service interphone: problem at specific jack - jack at engine (right) nacelle.		23-41 TASK 808
234 840 41	Service interphone: problem at specific jack - jack at refuel station (left wing).		23-41 TASK 809
234 840 42	Service interphone: problem at specific jack - jack at refuel station (right wing).		23-41 TASK 810
234 841 00	Service interphone: problem at specific jack - jack at P56 wheel well electrical service panel.		23-41 TASK 811
234 842 00	Service interphone: problem at specific jack - jack at aft cargo handling panel.		23-41 TASK 812
234 843 00	Service interphone: problem at specific jack - jack in bulk cargo area.		23-41 TASK 813
234 844 00	Service interphone: problem at specific jack - jack at forward tail cone.		23-41 TASK 814
234 845 00	Service interphone: problem at specific jack - jack at mid tail cone.		23-41 TASK 815

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234 846 00	Service interphone: problem at specific jack - jack in APU compartment.		23-41 TASK 816
235 001 00	RADIO TRANSMIT (EICAS ADVISORY)		23-51 TASK 832
235 011 00	GROUND CALL (EICAS COMM MED)		23-43 TASK 801
235 611 31	Flight interphone: Transmission problem - captain's.		23-51 TASK 811
235 611 32	Flight interphone: Transmission problem - first officer's.		23-51 TASK 812
235 611 33	Flight interphone: Transmission problem - first observer's.		23-51 TASK 813
235 612 31	Flight interphone: reception problem - captain's.		23-51 TASK 814
235 612 32	Flight interphone: reception problem - first officer's.		23-51 TASK 815
235 612 33	Flight interphone: reception problem - first observer's.		23-51 TASK 816
235 613 48	Flight interphone: reception and transmission problem at all stations.		23-51 TASK 817
235 631 31	Flight deck speaker problem - captain's.		23-51 TASK 818
235 631 32	Flight deck speaker problem - first officer's.		23-51 TASK 819
235 641 31	Microphone (hand) problem - captain's.		23-51 TASK 820
235 641 32	Microphone (hand) problem - first officer's.		23-51 TASK 821
235 641 33	Microphone (hand) problem - first observer's.		23-51 TASK 822
235 641 34	Microphone (hand) problem - second observer's.		23-51 TASK 823
235 646 31	Headset problem - captain's.		23-51 TASK 824
235 646 32	Headset problem - first officer's.		23-51 TASK 825
235 646 33	Headset problem - first observer's.		23-51 TASK 826
235 646 34	Headset problem - second observer's.		23-51 TASK 827
235 651 31	Audio control panel problem - captain's.		23-51 TASK 828
235 651 32	Audio control panel problem - first officer's.		23-51 TASK 829
235 651 33	Audio control panel problem - first observer's.		23-51 TASK 830
235 651 34	Audio control panel problem - second observer's.		23-51 TASK 831
237 611 00	Voice recorder: Signal problem at monitor jack.		23-71 TASK 801
237 621 00	Voice recorder: STATUS light does not come on with TEST switch pushed.		23-71 TASK 803

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237 622 00	Voice recorder: STATUS light does not come on as specified in voice recorder battery backup power functional test.		23-71 TASK 807
237 623 00	Voice recorder: STATUS light does not come on in air mode during voice recorder system test.		23-71 TASK 808
239 001 00	ARINC 629 DATA BUS (EICAS STATUS)	23-81004 23-81005 23-81006 23-81007 31-52013 31-52014 31-52121 31-52122 31-54013 31-54014 31-54121 31-54122 31-56013 31-56014 31-56121 31-56122 31-58013 31-58014 31-58121 31-58122 31-69401 31-69402 31-69501 31-69502 31-69601 31-69602 31-69701 31-69702	23-91 TASK 804 23-91 TASK 805 23-91 TASK 806 23-91 TASK 807 31-43 TASK 866 31-43 TASK 867 31-41 TASK 821 31-41 TASK 822 31-43 TASK 868 31-43 TASK 869 31-41 TASK 838 31-41 TASK 839 31-43 TASK 870 31-43 TASK 871 31-41 TASK 848 31-41 TASK 849 31-43 TASK 872 31-43 TASK 873 31-41 TASK 856 31-41 TASK 857 31-42 TASK 825 31-42 TASK 825 31-42 TASK 852 31-42 TASK 852 31-42 TASK 857 31-42 TASK 857 31-42 TASK 879 31-42 TASK 879
239 011 41	OPBC L (EICAS STATUS)	23-41001 23-41002 23-45010	23-93 TASK 819 23-93 TASK 844 23-93 TASK 881

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
239 011 41	OPBC L (EICAS STATUS)	(continued)	
		23-47010	23-93 TASK 801
		23-48801	23-93 TASK 881
		23-48841	23-93 TASK 819
		23-48861	23-93 TASK 844
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		23-91010	23-93 TASK 816
		24-13815	24-61 TASK 806
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69409	31-42 TASK 828
		31-69410	31-42 TASK 828
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69609	31-42 TASK 860
		31-69610	31-42 TASK 860
239 011 42	OPBC R (EICAS STATUS)	23-42001	23-93 TASK 841
		23-42002	23-93 TASK 845
		23-46010	23-93 TASK 806
		23-47020	23-93 TASK 802
		23-48802	23-93 TASK 806
		23-48842	23-93 TASK 841
		23-48862	23-93 TASK 845
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		23-91020	23-93 TASK 878
		24-12056	24-32 TASK 820

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
239 011 42	OPBC R (EICAS STATUS)	(continued)	
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69411	31-42 TASK 829
		31-69412	31-42 TASK 829
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69611	31-42 TASK 861
		31-69612	31-42 TASK 861
239 012 01	OPIC LA1 (EICAS STATUS)	23-91010	23-93 TASK 816
		23-91020	23-93 TASK 878
239 012 02	OPIC LA2 (EICAS STATUS)	23-47010	23-93 TASK 801
		23-47020	23-93 TASK 802
239 013 01	OPIC RA1 (EICAS STATUS)	23-48010	23-93 TASK 803
		23-48020	23-93 TASK 804
239 013 02	OPIC RA2 (EICAS STATUS)	23-92010	23-93 TASK 879
		23-92020	23-93 TASK 880
239 021 41	PDCU L (EICAS STATUS)	23-41570	23-93 TASK 887
239 021 42	PDCU R (EICAS STATUS)	23-42920	23-93 TASK 888

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-00001	Passenger Address System has a fault.	23-39 TASK 932
23-00002	Cabin Interphone System has a fault.	23-39 TASK 932
23-01001	Cabin System Management Unit (CSMU) does not respond. Detected by: CSCP.	23-39 TASK 845
23-01006	Cabin System Management Unit (CSMU) has no response from IFE LRU. Detected by: CSMU.	23-39 TASK A14
23-01010	Cabin System Management Unit (CSMU) has an internal fault. Detected by: CSMU.	23-39 TASK 846
23-01013	Cabin System Management Unit (CSMU) discrete output circuit is shorted. Detected by: CSMU.	23-39 TASK 848
23-01014	Cabin System Management Unit (CSMU) discrete output circuit is open. Detected by: CSMU.	23-39 TASK 849
23-01015	Cabin System Management Unit (CSMU) discrete output circuit is failed. Detected by: CSMU.	23-39 TASK 849
23-01016	Configuration Database is missing or failed. Detected by: CSCP.	23-39 TASK 986
23-01017	Cabin System Management Unit (CSMU) hardware has incorrect configuration. Detected by: CSMU.	23-39 TASK 850
23-01018	Cabin System Management Unit (CSMU) Operational Program Software is missing or failed. Detected by: CSMU.	23-39 TASK 851
23-01019	Cabin System Management Unit (CSMU) Configuration Database is missing or failed. Detected by: CSMU.	23-39 TASK 852
23-01034	Cabin System Management Unit (CSMU) shop mode program pin circuit is grounded. Detected by: CSMU.	23-39 TASK 853
23-01037	Cabin System Management Unit (CSMU) has no input from any LRU on System ARINC 629 Bus (right). Detected by: CSMU.	23-39 TASK 856
23-01038	Cabin System Management Unit (CSMU) has a System ARINC 629 Bus (right) fault. Detected by: CSMU.	23-39 TASK 856
23-01039	Cabin System Management Unit (CSMU) has a System ARINC 629 Bus (right) fault. Detected by: CSMU.	23-39 TASK 857
23-01044	Cabin System Management Unit (CSMU) has a 10Base2 Intersystem Bus fault. Detected by: CSMU.	23-39 TASK 950
23-01055	Cabin System Management Unit (CSMU) has an ARINC 628 bus fault. Detected by: CSMU.	23-39 TASK A19
23-01145	Cabin System Management Unit (CSMU) has a Cabin Interphone Controller NORM/ALT switching fault. Detected by: CSMU.	23-39 TASK 847
23-01146	Cabin System Management Unit (CSMU) has a Passenger Address Controller NORM/ALT switching fault. Detected by: CSMU.	23-39 TASK 847

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-01401	Passenger Address/Cabin Interphone Controller (PAC) does not respond. Detected by: CSMU.	23-39 TASK 868
23-01403	Passenger Address/Cabin Interphone Controller (PAC) has no response from any Speaker Drive Modules in column. Detected by: PAC.	23-39 TASK 869
23-01410	Passenger Address/Cabin Interphone Controller (PAC) has an internal fault. Detected by: PAC.	23-39 TASK 816
23-01414	Passenger Address/Cabin Interphone Controller (PAC) discrete output circuit is open. Detected by: PAC.	23-39 TASK 949
23-01415	Passenger Address/Cabin Interphone Controller (PAC) discrete output circuit is failed. Detected by: PAC.	23-39 TASK 949
23-01417	Passenger Address/Cabin Interphone Controller (PAC) hardware has incorrect configuration. Detected by: PAC.	23-39 TASK 819
23-01418	Passenger Address/Cabin Interphone Controller (PAC) Operational Program Software is missing or failed. Detected by: PAC.	23-39 TASK 884
23-01419	Passenger Address/Cabin Interphone Controller (PAC) Configuration Database is missing or failed. Detected by: PAC.	23-39 TASK 821
23-01428	Passenger Address/Cabin Interphone Controller (PAC) program line output circuit is shorted. Detected by: PAC.	23-39 TASK 885
23-01429	Passenger Address/Cabin Interphone Controller (PAC) program line output circuit is open. Detected by: PAC.	23-39 TASK 885
23-01430	Passenger Address/Cabin Interphone Controller (PAC) program line output circuit is failed. Detected by: PAC.	23-39 TASK 885
23-01434	Passenger Address/Cabin Interphone Controller (PAC) shop mode program pin circuit is grounded. Detected by: PAC.	23-39 TASK 886
23-01437	Passenger Address/Cabin Interphone Controller (PAC) has no input from any LRU on System ARINC 629 Bus (left). Detected by: PAC.	23-39 TASK 927
23-01438	Passenger Address/Cabin Interphone Controller (PAC) has a System ARINC 629 Bus (left) fault. Detected by: PAC.	23-39 TASK 927
23-01439	Passenger Address/Cabin Interphone Controller (PAC) has a System ARINC 629 Bus (left) fault. Detected by: PAC.	23-39 TASK 926
23-01448	Passenger Address/Cabin Interphone Controller (PAC) has a SDM column x digital audio bus fault. Detected by: PAC.	23-39 TASK 974
23-01453	Passenger Address/Cabin Interphone Controller (PAC) has an SDM column x data bus fault. Detected by: PAC.	23-39 TASK 975
23-01474	Passenger Address/Cabin Interphone Controller (PAC) has an audio output circuit fault. Detected by: PAC.	23-39 TASK 887
23-01479	Passenger Address/Cabin Interphone Controller (PAC) audio input circuit is failed. Detected by: PAC.	23-39 TASK A01

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23-01480	Passenger Address/Cabin Interphone Controller (PAC) audio input circuit is failed. Detected by: PAC.	23-39 TASK A01
23-01548	Passenger Address/Cabin Interphone Controller (PAC) has a Passenger Address Controller NORM/ALT switching fault. Detected by: CSCP.	23-39 TASK 992
23-01601	Passenger Address/Cabin Interphone Controller (CIC) does not respond. Detected by: CSMU.	23-39 TASK 814
23-01602	Passenger Address/Cabin Interphone Controller (CIC) does not respond. Detected by: PAC.	23-39 TASK 815
23-01603	Passenger Address/Cabin Interphone Controller (CIC) has an internal redundant bus fault. Detected by: CSCP.	23-39 TASK 990
23-01610	Passenger Address/Cabin Interphone Controller (CIC) has an internal fault. Detected by: CIC.	23-39 TASK 816
23-01613	Passenger Address/Cabin Interphone Controller (CIC) discrete output circuit is shorted. Detected by: CIC.	23-39 TASK 817
23-01614	Passenger Address/Cabin Interphone Controller (CIC) discrete output circuit is open. Detected by: CIC.	23-39 TASK 818
23-01615	Passenger Address/Cabin Interphone Controller (CIC) discrete output circuit is failed. Detected by: CIC.	23-39 TASK 818
23-01617	Passenger Address/Cabin Interphone Controller (CIC) hardware has incorrect configuration. Detected by: CIC.	23-39 TASK 819
23-01618	Passenger Address/Cabin Interphone Controller (CIC) Operational Program Software is missing or failed. Detected by: CIC.	23-39 TASK 820
23-01619	Passenger Address/Cabin Interphone Controller (CIC) Configuration Database is missing or failed. Detected by: CIC.	23-39 TASK 821
23-01634	Passenger Address/Cabin Interphone Controller (CIC) shop mode program pin circuit is grounded. Detected by: CIC.	23-39 TASK 822
23-01674	Passenger Address/Cabin Interphone Controller (CIC) has an audio output circuit fault. Detected by: CIC.	23-39 TASK 823
23-01708	Passenger Address/Cabin Interphone Controller (CIC) has a CI x data/audio bus fault. Detected by: CIC.	23-39 TASK 991
23-01710	Passenger Address/Cabin Interphone Controller (CIC) has no input from Control Display Unit (center). Detected by: CIC.	23-39 TASK 824
23-01711	Passenger Address/Cabin Interphone Controller (CIC) has an ARINC 429 Bus fault. Detected by: CIC.	23-39 TASK 825
23-01713	Passenger Address/Cabin Interphone Controller (CIC) has a Flight Deck Handset off hook. Detected by: CIC.	23-39 TASK 827
23-01717	Passenger Address/Cabin Interphone Controller (CIC) has an audio channel fault. Detected by: CIC.	23-39 TASK 991

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-01747	Passenger Address/Cabin Interphone Controller (CIC) has a Cabin Interphone Controller NORM/ALT switching fault. Detected by: CSCP.	23-39 TASK 992
23-01810	Zone Management Unit (Cabin Interphone) has an internal fault. Detected by: ZMU.	23-39 TASK 830
23-01861	Zone Management Unit (Cabin Interphone) has a Cabin Attendant Handset fault. Detected by: CIC.	23-39 TASK 828
23-01867	Zone Management Unit (Cabin Interphone) discrete output circuit is shorted. Detected by: ZMU.	23-39 TASK 831
23-01868	Zone Management Unit (Cabin Interphone) discrete output circuit is open. Detected by: ZMU.	23-39 TASK 832
23-01869	Zone Management Unit (Cabin Interphone) discrete output circuit is failed. Detected by: ZMU.	23-39 TASK 832
23-01870	Zone Management Unit (Cabin Interphone) has incorrect 28V DC supply voltage. Detected by: ZMU.	23-39 TASK 995
23-01907	Zone Management Unit (Cabin Interphone) does not respond. Detected by: CIC.	23-39 TASK 829
23-01915	Zone Management Unit (Cabin Interphone) has a Cabin Attendant Handset off hook. Detected by: CIC.	23-39 TASK 828
23-02401	Zone Management Unit (ZMU) does not respond on Intersystem Bus. Detected by: CSCP.	23-39 TASK 961
23-02402	Zone Management Unit (ZMU) and all subsequent ZMUs do not respond. Detected by: CSCP.	23-39 TASK 962
23-02403	Zone Management Unit (ZMU) has no response from any Overhead Electronics Units in column. Detected by: ZMU.	23-39 TASK 910
23-02410	Zone Management Unit (ZMU) has an internal fault. Detected by: ZMU.	23-39 TASK 912
23-02417	Zone Management Unit (ZMU) hardware has incorrect configuration. Detected by: ZMU.	23-39 TASK 925
23-02418	Zone Management Unit (ZMU) Operational Program Software is missing or failed. Detected by: ZMU.	23-39 TASK 917
23-02419	Zone Management Unit (ZMU) Configuration Database is missing or failed. Detected by: ZMU.	23-39 TASK 918
23-02421	Zone Management Unit (ZMU) does not respond on BFE Application Bus. Detected by: ZMU.	23-39 TASK 912
23-02424	Zone Management Unit (ZMU) does not respond on any bus. Detected by: CSCP.	23-39 TASK 965
23-02428	Zone Management Unit (ZMU) program line output circuit is shorted. Detected by: ZMU.	23-39 TASK 919
23-02429	Zone Management Unit (ZMU) program line output circuit is open. Detected by: ZMU.	23-39 TASK 919

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-02430	Zone Management Unit (ZMU) program line output circuit is failed. Detected by: ZMU.	23-39 TASK 919
23-02434	Zone Management Unit (ZMU) shop mode program pin circuit is grounded. Detected by: ZMU.	23-39 TASK 921
23-02444	Zone Management Unit (ZMU) has a 10Base2 Intersystem Bus fault. Detected by: ZMU.	23-39 TASK 967
23-02453	Zone Management Unit (ZMU) has an OEU column x data bus fault. Detected by: ZMU.	23-39 TASK 969
23-02467	Zone Management Unit (ZMU) discrete output circuit is shorted. Detected by: ZMU.	23-39 TASK 831
23-02468	Zone Management Unit (ZMU) discrete output circuit is open. Detected by: ZMU.	23-39 TASK 832
23-02469	Zone Management Unit (ZMU) discrete output circuit is failed. Detected by: ZMU.	23-39 TASK 832
23-02470	Zone Management Unit (ZMU) has incorrect 28V DC supply voltage. Detected by: ZMU.	23-39 TASK 995
23-02472	Zone Management Unit (ZMU) has incorrect program pin configuration. Detected by: ZMU.	23-39 TASK 922
23-02531	Zone Management Unit (ZMU) has an internal 10Base2 Intersystem Bus termination relay fault. Detected by: ZMU.	23-39 TASK 912
23-02532	Zone Management Unit (ZMU) has an incorrect 10Base2 Intersystem Bus termination. Detected by: ZMU.	23-39 TASK 972
23-02533	Zone Management Unit (ZMU) has an internal 10Base2 BFE Application Bus termination fault. Detected by: ZMU.	23-39 TASK 912
23-02801	Cabin System Control Panel (CSCP) does not respond. Detected by: CSMU.	23-39 TASK 835
23-02802	Cabin System Control Panel (CSCP) has no response from any LRU on intersystem bus except CSMU. Detected by: CSCP.	23-39 TASK 834
23-02803	Cabin System Control Panel (CSCP) has no response from any LRU on intersystem bus. Detected by: CSCP.	23-39 TASK 833
23-02810	Cabin System Control Panel (CSCP) has an internal fault. Detected by: CSCP.	23-39 TASK 836
23-02817	Cabin System Control Panel (CSCP) hardware has incorrect configuration. Detected by: CSCP.	23-39 TASK 837
23-02818	Cabin System Control Panel (CSCP) Operational Program Software is missing or failed. Detected by: CSCP.	23-39 TASK 838
23-02819	Cabin System Control Panel (CSCP) Configuration Database is missing or failed. Detected by: CSCP.	23-39 TASK 839
23-02834	Cabin System Control Panel (CSCP) shop mode program pin circuit is grounded. Detected by: CSCP.	23-39 TASK 841

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-02842	Cabin System Control Panel (CSCP) has a Control Panel Intersystem Bus fault. Detected by: CSCP.	23-39 TASK 840
23-02857	Cabin System Control Panel (CSCP) has an internal mass memory device fault. Detected by: CSCP.	23-39 TASK 842
23-02938	Cabin System Control Panel (CSCP) has an internal video preview fault. Detected by: CSCP.	23-39 TASK 836
23-02939	Cabin System Control Panel (CSCP) has an internal LCD/Touchscreen fault. Detected by: CSCP.	23-39 TASK 843
23-02940	Cabin System Control Panel (CSCP) has an internal audio jack fault. Detected by: CSCP.	23-39 TASK 836
23-02950	Operational Program Software stored in CSCP for selected unit is failed. Detected by: CSCP.	23-39 TASK 844
23-03001	Cabin Area Control Panel (CACP) does not respond. Detected by: ZMU.	23-39 TASK 807
23-03010	Cabin Area Control Panel (CACP) has an internal fault. Detected by: CACP.	23-39 TASK 808
23-03017	Cabin Area Control Panel (CACP) hardware has incorrect configuration. Detected by: CACP.	23-39 TASK 809
23-03018	Cabin Area Control Panel (CACP) Operational Program Software is missing or failed. Detected by: CACP.	23-39 TASK 811
23-03019	Cabin Area Control Panel (CACP) Configuration Database is missing or failed. Detected by: CACP.	23-39 TASK 812
23-03034	Cabin Area Control Panel (CACP) shop mode program pin circuit is grounded. Detected by: CACP.	23-39 TASK 810
23-03201	Speaker Drive Module (SDM) does not respond. Detected by: PAC.	23-39 TASK 889
23-03202	Speaker Drive Module (SDM) and all subsequent SDMs in column do not respond. Detected by: PAC.	23-39 TASK 890
23-03210	Speaker Drive Module (SDM) has an internal fault. Detected by: SDM.	23-39 TASK 891
23-03217	Speaker Drive Module (SDM) hardware has incorrect configuration. Detected by: SDM.	23-39 TASK 892
23-03218	Speaker Drive Module (SDM) Operational Program Software is missing or failed. Detected by: SDM.	23-39 TASK 893
23-03219	Speaker Drive Module (SDM) Configuration Database is missing or failed. Detected by: SDM.	23-39 TASK 894
23-03227	Speaker Drive Module (SDM) program line input circuit is open. Detected by: SDM.	23-39 TASK 896
23-03228	Speaker Drive Module (SDM) program line output circuit is shorted. Detected by: SDM.	23-39 TASK 897

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-03229	Speaker Drive Module (SDM) program line output circuit is open. Detected by: SDM.	23-39 TASK 897
23-03230	Speaker Drive Module (SDM) program line output circuit is failed. Detected by: SDM.	23-39 TASK 897
23-03234	Speaker Drive Module (SDM) shop mode program pin circuit is grounded. Detected by: SDM.	23-39 TASK 895
23-03247	Speaker Drive Module 1 (SDM-1) and all subsequent SDMs have a digital audio bus fault. Detected by: PAC.	23-39 TASK 898
23-03249	Speaker Drive Module (SDM) and all subsequent SDMs have a digital audio bus fault. Detected by: PAC.	23-39 TASK 959
23-03250	Speaker Drive Module (SDM) has a digital audio bus fault. Detected by: SDM.	23-39 TASK 891
23-03276	Speaker Drive Module (SDM) has an internal chime fault. Detected by: SDM.	23-39 TASK 891
23-03277	Speaker Drive Module (SDM) has an analog input circuit shorted. Detected by: SDM.	23-39 TASK 899
23-03278	Speaker Drive Module (SDM) has an analog input circuit open. Detected by: SDM.	23-39 TASK 904
23-03279	Speaker Drive Module (SDM) has an analog input circuit failed. Detected by: SDM.	23-39 TASK 900
23-03302	Speaker Drive Module (SDM) audio output circuit is shorted. Detected by: SDM.	23-39 TASK 901
23-03303	Speaker Drive Module (SDM) audio output circuit is open. Detected by: SDM.	23-39 TASK 902
23-03304	Speaker Drive Module (SDM) audio output circuit is failed. Detected by: SDM.	23-39 TASK 903
23-03305	Speaker Drive Module (SDM) power output circuit is shorted. Detected by: SDM.	23-39 TASK 904
23-03352	Speaker Drive Module (SDM) is installed, but is not defined in Configuration Database. Detected by: PAC.	23-39 TASK 954
23-03353	Speaker Drive Module (SDM) is not installed. Detected by: PAC.	23-39 TASK 955
23-03354	Speaker Drive Module (SDM) address is out of sequence. Detected by: PAC.	23-39 TASK 958
23-03401	Overhead Electronics Unit (OEU) does not respond. Detected by: ZMU.	23-39 TASK 870
23-03402	Overhead Electronics Unit (OEU) and all subsequent OEUs in column do not respond. Detected by: ZMU.	23-39 TASK 872
23-03410	Overhead Electronics Unit (OEU) has an internal fault. Detected by: OEU.	23-39 TASK 871

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-03417	Overhead Electronics Unit (OEU) hardware has incorrect configuration. Detected by: OEU.	23-39 TASK 873
23-03418	Overhead Electronics Unit (OEU) Operational Program Software is missing or failed. Detected by: OEU.	23-39 TASK 874
23-03419	Overhead Electronics Unit (OEU) Configuration Database is missing or failed. Detected by: OEU.	23-39 TASK 875
23-03427	Overhead Electronics Unit (OEU) program line input circuit is failed. Detected by: OEU.	23-39 TASK 876
23-03428	Overhead Electronics Unit (OEU) program line output circuit is shorted. Detected by: OEU.	23-39 TASK 877
23-03429	Overhead Electronics Unit (OEU) program line output circuit is open. Detected by: OEU.	23-39 TASK 877
23-03430	Overhead Electronics Unit (OEU) program line output circuit is failed. Detected by: OEU.	23-39 TASK 877
23-03434	Overhead Electronics Unit (OEU) shop mode program pin circuit is grounded. Detected by: OEU.	23-39 TASK 878
23-03468	Overhead Electronics Unit (OEU) discrete output circuit is open. Detected by: OEU.	23-39 TASK 882
23-03469	Overhead Electronics Unit (OEU) discrete output circuit is failed. Detected by: OEU.	23-39 TASK 882
23-03479	Overhead Electronics Unit (OEU) discrete output circuit is failed. Detected by: OEU.	23-39 TASK 882
23-03481	Overhead Electronics Unit (OEU) discrete output circuit is shorted. Detected by: OEU.	23-39 TASK 879
23-03482	Overhead Electronics Unit (OEU) has an incorrect device. Detected by: OEU.	23-39 TASK 880
23-03483	Overhead Electronics Unit (OEU) discrete output circuit is failed. Detected by: OEU.	23-39 TASK 880
23-03485	Overhead Electronics Unit (OEU) discrete output circuit is shorted. Detected by: OEU.	23-39 TASK 881
23-03486	Overhead Electronics Unit (OEU) discrete output circuit is open. Detected by: OEU.	23-39 TASK 882
23-03487	Overhead Electronics Unit (OEU) discrete output circuit is failed. Detected by: OEU.	23-39 TASK 882
23-03488	Overhead Electronics Unit (OEU) discrete output circuit is failed. Detected by: OEU.	23-39 TASK 882
23-03489	Overhead Electronics Unit (OEU) 28V AC output circuit is shorted. Detected by: OEU.	23-39 TASK 883
23-03490	Overhead Electronics Unit (OEU) 12V AC output circuit is shorted. Detected by: OEU.	23-39 TASK 883

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-03491	Overhead Electronics Unit (OEU) 5V AC output circuit is shorted. Detected by: OEU.	23-39 TASK 883
23-03493	Overhead Electronics Unit (OEU) 28V AC output circuit is failed. Detected by: OEU.	23-39 TASK 993
23-03494	Overhead Electronics Unit (OEU) 12V AC output circuit is failed. Detected by: OEU.	23-39 TASK 993
23-03495	Overhead Electronics Unit (OEU) 5V AC output circuit is failed. Detected by: OEU.	23-39 TASK 993
23-03519	Overhead Electronics Unit (OEU) 28V output circuit is failed. Detected by: OEU.	23-39 TASK 883
23-03552	Overhead Electronics Unit (OEU) is installed, but is not defined in Configuration Database. Detected by: ZMU.	23-39 TASK 952
23-03553	Overhead Electronics Unit (OEU) is not installed. Detected by: ZMU.	23-39 TASK 953
23-03554	Overhead Electronics Unit (OEU) address is out of sequence. Detected by: ZMU.	23-39 TASK 958
23-03754	Seat Electronics Unit (SEU) address is out of sequence. Detected by: ZMU.	23-39 TASK 958
23-04006	Cabin System Control Panel (CSCP) has no response from any LRU on Intersystem bus except ZMU X. Detected by: CSCP.	23-39 TASK A12
23-04010	Cabin System Control Panel (CSCP) has an internal fault. Detected by: CSCP.	23-39 TASK A06
23-04017	Cabin System Control Panel (CSCP) hardware has incorrect configuration. Detected by: CSCP.	23-39 TASK A07
23-04018	Cabin System Control Panel (CSCP) Operational Program Software is missing or failed. Detected by: CSCP.	23-39 TASK A11
23-04019	Cabin System Control Panel (CSCP) Configuration Database is missing or failed. Detected by: CSCP.	23-39 TASK A09
23-04053	Cabin System Control Panel (CSCP) has an EIA-485 bus fault. Detected by: CSCP.	23-39 TASK A05
23-04056	Cabin System Control Panel (CSCP) is connected to wrong bus port; CSCP may be in wrong location. Detected by: CSCP.	23-39 TASK A18
23-04057	Cabin System Control Panel (CSCP) has an internal mass memory device fault. Detected by: CSCP.	23-39 TASK A06
23-04058	Mass Memory Card (MMC) is missing or failed. Detected by: CCP .	23-39 TASK A08
23-04059	Mass Memory Card (MMC) is not correct or Floppy Disk Drive (FDD) should be removed. Detected by: CCP .	23-39 TASK A13
23-04060	Mass Memory Card (MMC) is not correct or Floppy Disk Drive (FDD) is missing or failed. Detected by: CCP .	23-39 TASK A13

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-04062	Cabin System Control Panel (CSCP) has detected a duplicate CSCP on ZMU x Port y. Detected by: CSCP.	23-39 TASK A22
23-04071	Cabin Control panel (CCP) has an internal fault. Detected by: CCP.	23-39 TASK A05
23-04139	Cabin System Control Panel (CSCP) has an internal LCD/Touchscreen fault. Detected by: CSCP.	23-39 TASK A05
23-04145	Cabin System Control Panel (CSCP) has a Passenger Address Controller NORM/ALT switching fault. Detected by: CSCP.	23-39 TASK A05
23-04146	Cabin System Control Panel (CSCP) has a Passenger Address Controller NORM/ALT switching fault. Detected by: CSCP.	23-39 TASK A05
23-04149	Configuration Database (CDB) stored in CSCP is failed. Detected by: CSCP.	23-39 TASK A09
23-04150	Operational Program Software (OPS) stored in CSCP for selected unit is failed. Detected by: CSCP.	23-39 TASK A07
23-04210	Cabin Area Control Panel (CACP) has an internal fault. Detected by: CACP.	23-39 TASK A05
23-04217	Cabin Area Control Panel (CACP) hardware has incorrect configuration. Detected by: CACP.	23-39 TASK A07
23-04218	Cabin Area Control Panel (CACP) Operational Program Software is missing or failed. Detected by: CACP.	23-39 TASK A10
23-04219	Cabin Area Control Panel (CACP) Configuration Database is missing or failed. Detected by: CACP.	23-39 TASK A09
23-04253	Cabin Area Control Panel (CACP) has an EIA-485 bus fault. Detected by: CACP.	23-39 TASK A05
23-04257	Cabin Area Control Panel (CACP) has a mass memory device fault. Detected by: CACP.	23-39 TASK A06
23-04339	Cabin Area Control Panel (CACP) has an internal LCD/Touchscreen fault. Detected by: CACP.	23-39 TASK A05
23-38801	Pass. Address/Cabin Interphone Controller has no output on any bus.	23-39 TASK A03
23-38841	Pass. Address/Cabin Interphone Controller has no output on System ARINC 629 Bus (left).	23-39 TASK 933
23-38862	Cabin System Management Unit has no output on System ARINC 629 Bus (right).	23-39 TASK 934
23-41001*	System ARINC 629 (L) Coupler in P111 (OPBC-L) has a fault.	23-93 TASK 819
23-41002*	System ARINC 629 (R) Coupler in P211 (OPBC-L) has a fault.	23-93 TASK 844
23-41010	AFT CROSSFEED Switch signal is invalid.	23-93 TASK 803
23-41020	AFT OUTFLOW VALVE Switch signal is invalid.	23-93 TASK 803

*If the MAT shows LATCHED for the correlated EICAS message, then you must erase the EICAS message after you complete the FIM task.

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23-41025	AIMS-2, CMCF LDI 3114-BCG-00W-16; AIR CLEANER Switch signal is invalid. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; AIR CLEANER switch signal is invalid.	23-93 TASK 803
23-41030	AIR COND RESET Switch signal is invalid.	23-93 TASK 803
23-41040	APU BLEED AIR Switch signal is invalid.	23-93 TASK 803
23-41050*	APU Fire Switch signal is invalid.	23-93 TASK 801
23-41060*	APU Fuel Shutoff Valve signal is invalid.	23-93 TASK 803
23-41070	APU GEN Switch signal is invalid.	23-93 TASK 801
23-41080	APU Maintenance Switch signal is invalid.	23-93 TASK 803
23-41090	APU Selector signal is invalid.	23-93 TASK 803
23-41095	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; BEACON LIGHT Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; BEACON Light Switch signal is invalid.	23-93 TASK 803
23-41100*	WING ANTI-ICE Selector signal is invalid.	23-93 TASK 803
23-41105	WING Light Switch signal is invalid.	23-93 TASK 803
23-41110	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 DEMAND PUMP Selector signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 DEMAND Pump Selector signal is invalid.	23-93 TASK 801
23-41120	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 DEMAND PUMP Selector signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 DEMAND Pump Selector signal is invalid.	23-93 TASK 803

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23-41130	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 PRIMARY Pump Switch signal is invalid.	23-93 TASK 801
23-41140	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 PRIMARY Pump Switch signal is invalid.	23-93 TASK 803
23-41150	AFT CARGO FIRE ARM Switch signal is invalid.	23-93 TASK 803
23-41160*	CARGO FIRE BTL DISCH Switch signal is invalid.	23-93 TASK 801
23-41170*	FWD CARGO FIRE ARM Switch signal is invalid.	23-93 TASK 801
23-41180	AFT CARGO TEMP Selector signal is invalid.	23-93 TASK 803
23-41190	Bulk CARGO TEMP Select Switch signal is invalid.	23-93 TASK 803
23-41200	C ISLN Switch signal is invalid.	23-93 TASK 801
23-41220	AUTOSTART Switch signal is invalid.	23-93 TASK 801
23-41230	EQUIP COOLING Switch signal is invalid.	23-93 TASK 803
23-41240*	FIRE/OVHT TEST Switch signal is invalid.	23-93 TASK 801
23-41250	Flight Deck Temp Control signal is invalid.	23-93 TASK 801
23-41260	FUEL JETTISON ARM Switch signal is invalid.	23-93 TASK 801
23-41270	FUEL SHUTOFF VLV BATTERY signal is invalid.	23-93 TASK 801
23-41280	FUEL TO REMAIN Selector signal is invalid.	23-93 TASK 803
23-41290	FWD CARGO A/C switch signal is invalid.	23-93 TASK 803
23-41300	FWD CROSSFEED Switch signal is invalid.	23-93 TASK 801
23-41310	FWD OUTFLOW VALVE Switch signal is invalid.	23-93 TASK 801
23-41320	GASPER Switch signal is invalid.	23-93 TASK 801
23-41330	HUMID switch signal is invalid.	23-93 TASK 801
23-41340	L DEMAND Pump Selector signal is invalid.	23-93 TASK 803
23-41350	L FWD FUEL PUMPS Switch signal is invalid.	23-93 TASK 801

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-41360*	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; L PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; L PRIMARY Pump Switch signal is invalid.	23-93 TASK 801
23-41370*	LDG ALT Selector signal is invalid.	23-93 TASK 801
23-41380	L PUMPS AFT Switch signal is invalid.	23-93 TASK 803
23-41390	BACKUP GEN L Switch signal is invalid.	23-93 TASK 801
23-41400	L BUS TIE Switch signal is invalid.	23-93 TASK 801
23-41410	CENTER L FUEL PUMPS Switch signal is invalid.	23-93 TASK 801
23-41420	L EEC MODE Switch signal is invalid.	23-93 TASK 801
23-41430	L ENG BLEED AIR Switch signal is invalid.	23-93 TASK 801
23-41440	L FUEL JETTISON NOZZLE Switch signal is invalid.	23-93 TASK 801
23-41450	L GEN CTRL Switch signal is invalid.	23-93 TASK 801
23-41460	L DRIVE DISC Switch signal is invalid.	23-93 TASK 801
23-41470	L ISLN Switch signal is invalid.	23-93 TASK 801
23-41480	LEFT LANDING Light Switch signal is invalid.	23-93 TASK 801
23-41490	L PACK Switch signal is invalid.	23-93 TASK 801
23-41500	L TRIM AIR Switch signal is invalid.	23-93 TASK 801
23-41510	LOGO Light Switch signal is invalid.	23-93 TASK 803
23-41520	LOWER RECIRC FANS Switch signal is invalid.	23-93 TASK 803
23-41530	L ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	23-93 TASK 801
23-41540	L ENG FUEL SPAR VLV signal is invalid.	23-93 TASK 801
23-41550	L ENGINE ANTI-ICE Selector signal is invalid.	23-93 TASK 801
23-41560	L START/IGNITION Selector signal is invalid.	23-93 TASK 801
23-41570	Panel Data Concentrator Unit (left) has a fault.	23-93 TASK 887
23-41580	L RUNWAY TURNOFF Light Switch signal is invalid.	23-93 TASK 801
23-41590	Master Brightness Control Card has no output or is failed.	23-93 TASK 817
23-41600	Master Dim & Test Dimmer Card (1) has no output or is failed.	23-93 TASK 818
23-41660	NAV Light Switch signal is invalid.	23-93 TASK 803
23-41670	NO SMOKING Selector signal is invalid.	23-93 TASK 801
23-41675	NO PASSENGER ELEC Sign signal is invalid.	23-93 TASK 914
23-41680	NOSE LANDING Switch signal is invalid.	23-93 TASK 801

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-41690	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; PASS OXYGEN Switch signal is invalid. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3114-BCG-00W-16; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; PASS/SUPRNMRY OXYGEN Switch signal is invalid.	23-93 TASK 801
23-41700	CABIN TEMP Switch signal is invalid.	23-93 TASK 803
23-41710	R DEMAND Pump Selector signal is invalid.	23-93 TASK 801
23-41720*	R PRIMARY Pump Switch signal is invalid.	23-93 TASK 803
23-41730	RAM AIR TURBINE Switch signal is invalid.	23-93 TASK 803
23-41740	R AFT FUEL PUMPS Switch signal is invalid.	23-93 TASK 801
23-41750	BACKUP GEN R Switch signal is invalid.	23-93 TASK 803
23-41760	R BUS TIE Switch signal is invalid.	23-93 TASK 803
23-41770	CENTER R FUEL PUMPS Switch signal is invalid.	23-93 TASK 803
23-41780	R ENG BLEED AIR Switch signal is invalid.	23-93 TASK 803
23-41790	R FUEL JETTISON NOZZLE Switch signal is invalid.	23-93 TASK 803
23-41800	R FWD FUEL PUMPS Switch signal is invalid.	23-93 TASK 803
23-41810	R GEN CTRL Switch signal is invalid.	23-93 TASK 803
23-41820	DRIVE DISC R Switch signal is invalid.	23-93 TASK 803
23-41830	R ISLN Switch signal is invalid.	23-93 TASK 803
23-41840	RIGHT LANDING Light Switch signal is invalid.	23-93 TASK 803
23-41850	R PACK Switch signal is invalid.	23-93 TASK 803
23-41860	R TRIM AIR Switch signal is invalid.	23-93 TASK 803
23-41870	R EEC MODE Switch signal is invalid.	23-93 TASK 803
23-41880	R ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	23-93 TASK 803
23-41890	R ENG FUEL SPAR VLV signal is invalid.	23-93 TASK 803
23-41900	R ENGINE ANTI-ICE Selector signal is invalid.	23-93 TASK 803
23-41910	R START/IGNITION Selector signal is invalid.	23-93 TASK 803
23-41930	R RUNWAY TURNOFF Light Switch signal is invalid.	23-93 TASK 803
23-41940	SEAT BELTS Selector signal is invalid.	23-93 TASK 801
23-41945	IFE PASS SEATS Switch signal is invalid.	23-93 TASK 803
23-41950	STORM Light Switch signal is invalid.	23-93 TASK 803

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-41955	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; CABIN UTILITY Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; CABIN UTILITY switch signal is invalid.	23-93 TASK 803
23-41960	STROBE Light Switch signal is invalid.	23-93 TASK 801
23-41970	TAXI Light Switch signal is invalid.	23-93 TASK 801
23-41980	UPPER RECIRC FANS Switch signal is invalid.	23-93 TASK 801
23-41990	FWD CARGO AC SELECT signal is invalid.	23-93 TASK 803
23-42001*	System ARINC 629 (L) Coupler in P111 (OPBC-R) has a fault.	23-93 TASK 841
23-42002*	System ARINC 629 (R) Coupler in P211 (OPBC-R) has a fault.	23-93 TASK 845
23-42010	AFT CROSSFEED Switch signal is invalid.	23-93 TASK 804
23-42020	AFT OUTFLOW VALVE Switch signal is invalid.	23-93 TASK 804
23-42025	AIMS-2, CMCF LDI 3114-BCG-00W-16; AIR CLEANER Switch signal is invalid. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; AIR CLEANER switch signal is invalid.	23-93 TASK 802
23-42030	AIR COND RESET Switch signal is invalid.	23-93 TASK 804
23-42040	APU BLEED AIR Switch signal is invalid.	23-93 TASK 804
23-42050*	APU Fire Switch signal is invalid.	23-93 TASK 802
23-42060*	APU Fuel Shutoff Valve signal is invalid.	23-93 TASK 804
23-42070	APU GEN Switch signal is invalid.	23-93 TASK 802
23-42080	APU Maintenance Switch signal is invalid.	23-93 TASK 804
23-42090	APU Selector signal is invalid.	23-93 TASK 804
23-42095	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; BEACON LIGHT Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; BEACON Light Switch signal is invalid.	23-93 TASK 804
23-42100*	WING ANTI-ICE Selector signal is invalid.	23-93 TASK 804
23-42105	WING Light Switch signal is invalid.	23-93 TASK 804

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23-42110	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 DEMAND PUMP Selector signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 DEMAND Pump Selector signal is invalid.	23-93 TASK 802
23-42120	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 DEMAND PUMP Selector signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 DEMAND Pump Selector signal is invalid.	23-93 TASK 804
23-42130	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 PRIMARY Pump Switch signal is invalid.	23-93 TASK 802
23-42140	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 PRIMARY Pump Switch signal is invalid.	23-93 TASK 804
23-42150	AFT CARGO FIRE ARM Switch signal is invalid.	23-93 TASK 804
23-42160*	CARGO FIRE BTL DISCH Switch signal is invalid.	23-93 TASK 802
23-42170*	FWD CARGO FIRE ARM Switch signal is invalid.	23-93 TASK 802
23-42180	AFT CARGO TEMP Select Switch signal is invalid.	23-93 TASK 804
23-42190	Bulk CARGO TEMP Select Switch signal is invalid.	23-93 TASK 804
23-42200	C ISLN Switch signal is invalid.	23-93 TASK 802
23-42220	AUTOSTART Switch signal is invalid.	23-93 TASK 802
23-42230	EQUIP COOLING Switch signal is invalid.	23-93 TASK 804
23-42240*	FIRE/OVHT TEST Switch signal is invalid.	23-93 TASK 802
23-42250	Flight Deck Temp Control signal is invalid.	23-93 TASK 802
23-42260	FUEL JETTISON ARM Switch signal is invalid.	23-93 TASK 802
23-42270	FUEL SHUTOFF VLV BATTERY signal is invalid.	23-93 TASK 802

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23-42280	FUEL TO REMAIN Selector signal is invalid.	23-93 TASK 804
23-42290	FWD CARGO A/C switch signal is invalid.	23-93 TASK 804
23-42300	FWD CROSSFEED Switch signal is invalid.	23-93 TASK 802
23-42310	FWD OUTFLOW VALVE Switch signal is invalid.	23-93 TASK 802
23-42320	GASPER Switch signal is invalid.	23-93 TASK 802
23-42330	HUMID switch signal is invalid.	23-93 TASK 802
23-42340	L DEMAND Pump Selector signal is invalid.	23-93 TASK 804
23-42350	L FWD FUEL PUMPS Switch signal is invalid.	23-93 TASK 802
23-42360*	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; L PRIMARY PUMP Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; L PRIMARY Pump Switch signal is invalid.	23-93 TASK 802
23-42370*	LDG ALT Selector signal is invalid.	23-93 TASK 802
23-42380	L PUMPS AFT Switch signal is invalid.	23-93 TASK 804
23-42390	BACKUP GEN L Switch signal is invalid.	23-93 TASK 802
23-42400	L BUS TIE Switch signal is invalid.	23-93 TASK 802
23-42410	CENTER L FUEL PUMPS Switch signal is invalid.	23-93 TASK 802
23-42420	L EEC MODE Switch signal is invalid.	23-93 TASK 802
23-42430	L ENG BLEED AIR Switch signal is invalid.	23-93 TASK 802
23-42440	L FUEL JETTISON NOZZLE Switch signal is invalid.	23-93 TASK 802
23-42450	L GEN CTRL Switch signal is invalid.	23-93 TASK 802
23-42460	L DRIVE DISC Switch signal is invalid.	23-93 TASK 802
23-42470	L ISLN Switch signal is invalid.	23-93 TASK 802
23-42480	LEFT LANDING Light Switch signal is invalid.	23-93 TASK 802
23-42490	L PACK Switch signal is invalid.	23-93 TASK 802
23-42500	L TRIM AIR Switch signal is invalid.	23-93 TASK 802
23-42510	LOGO Light Switch signal is invalid.	23-93 TASK 804
23-42520	LOWER RECIRC FANS Switch signal is invalid.	23-93 TASK 804
23-42530	L ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	23-93 TASK 802
23-42540	L ENG FUEL SPAR VLV signal is invalid.	23-93 TASK 802
23-42550	L ENGINE ANTI-ICE Selector signal is invalid.	23-93 TASK 802
23-42560	L START/IGNITION Selector signal is invalid.	23-93 TASK 802
23-42580	L RUNWAY TURNOFF Light Switch signal is invalid.	23-93 TASK 802

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-42610	Master Dim & Test Dimmer Card (2) has no output or is failed.	23-93 TASK 842
23-42620	Master Dim & Test Dimmer Card (3) has no output or is failed.	23-93 TASK 843
23-42660	NAV Light Switch signal is invalid.	23-93 TASK 804
23-42670	NO SMOKING Selector signal is invalid.	23-93 TASK 802
23-42675	NO PASSENGER ELEC Sign signal is invalid.	23-93 TASK 919
23-42680	NOSE LANDING Switch signal is invalid.	23-93 TASK 802
23-42690	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; PASS OXYGEN Switch signal is invalid. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3114-BCG-00W-16; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; PASS/SUPRNMRY OXYGEN Switch signal is invalid.	23-93 TASK 802
23-42700	CABIN TEMP Switch signal is invalid.	23-93 TASK 804
23-42710	R DEMAND Pump Selector signal is invalid.	23-93 TASK 802
23-42720*	R PRIMARY Pump Switch signal is invalid.	23-93 TASK 804
23-42730	RAM AIR TURBINE Switch signal is invalid.	23-93 TASK 804
23-42740	R AFT FUEL PUMPS Switch signal is invalid.	23-93 TASK 802
23-42750	BACKUP GEN R Switch signal is invalid.	23-93 TASK 804
23-42760	R BUS TIE Switch signal is invalid.	23-93 TASK 804
23-42770	CENTER R FUEL PUMPS Switch signal is invalid.	23-93 TASK 804
23-42780	R ENG BLEED AIR Switch signal is invalid.	23-93 TASK 804
23-42790	R FUEL JETTISON NOZZLE Switch signal is invalid.	23-93 TASK 804
23-42800	R FWD FUEL PUMPS Switch signal is invalid.	23-93 TASK 804
23-42810	R GEN CTRL Switch signal is invalid.	23-93 TASK 804
23-42820	DRIVE DISC R Switch signal is invalid.	23-93 TASK 804
23-42830	R ISLN Switch signal is invalid.	23-93 TASK 804
23-42840	RIGHT LANDING Light Switch signal is invalid.	23-93 TASK 804
23-42850	R PACK Switch signal is invalid.	23-93 TASK 804
23-42860	R TRIM AIR Switch signal is invalid.	23-93 TASK 804
23-42870	R EEC MODE Switch signal is invalid.	23-93 TASK 804
23-42880	R ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	23-93 TASK 804
23-42890	R ENG FUEL SPAR VLV signal is invalid.	23-93 TASK 804
23-42900	R ENGINE ANTI-ICE Selector signal is invalid.	23-93 TASK 804
23-42910	R START/IGNITION Selector signal is invalid.	23-93 TASK 804
23-42920	Panel Data Concentrator Unit (right) has a fault.	23-93 TASK 888

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-42930	R RUNWAY TURNOFF Light Switch signal is invalid.	23-93 TASK 804
23-42940	SEAT BELTS Selector signal is invalid.	23-93 TASK 802
23-42945	IFE PASS SEATS Switch signal is invalid.	23-93 TASK 802
23-42950	STORM Light Switch signal is invalid.	23-93 TASK 804
23-42955	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; CABIN UTILITY Switch signal is invalid. AIMS-2, CMCF LDI 3114-BCG-00W-16; CABIN UTILITY switch signal is invalid.	23-93 TASK 802
23-42960	STROBE Light Switch signal is invalid.	23-93 TASK 802
23-42970	TAXI Light Switch signal is invalid.	23-93 TASK 802
23-42980	UPPER RECIRC FANS Switch signal is invalid.	23-93 TASK 802
23-42990	FWD CARGO AC SELECT signal is invalid.	23-93 TASK 804
23-43001	Cockpit Voice Recorder has an internal fault, or no power, or auto-power off is enabled.	23-71 TASK 804
23-43002	Cockpit Voice Recorder has no input from Left AIMS on ARINC 429 Bus or is failed.	23-71 TASK 805
23-43003	Cockpit Voice Recorder has an internal fault, no power, or recording is not enabled.	23-71 TASK 806
23-43010	AFT CROSSFEED Switch is failed.	28-22 TASK 801
23-43020	AFT OUTFLOW VALVE Switch is failed.	21-31 TASK 811
23-43030	AIR COND RESET Switch is failed.	21-51 TASK 808
23-43040	APU BLEED AIR Switch is failed.	36-10 TASK 801
23-43050*	APU Fire Switch is failed.	26-22 TASK 801
23-43060*	APU Fuel Shutoff Valve signal is invalid.	28-25 TASK 801
23-43070	APU GEN Switch is failed.	24-22 TASK 801
23-43080	APU Maintenance Switch is failed.	49-10 TASK 805
23-43090	APU Selector is failed.	49-10 TASK 806
23-43095	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; BEACON LIGHT Switch is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; BEACON Light Switch is failed.	33-44 TASK 805
23-43100*	WING ANTI-ICE Selector is failed.	30-11 TASK 803

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-43105	WING Light Switch is failed.	33-41 TASK 803
23-43110	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 DEMAND PUMP Selector is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 DEMAND Pump Selector is failed.	29-11 TASK 880
23-43120	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 DEMAND PUMP Selector is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 DEMAND Pump Selector is failed.	29-11 TASK 881
23-43130	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C1 PRIMARY PUMP Switch is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; C1 PRIMARY Pump Switch is failed.	29-11 TASK 882
23-43140	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; C2 PRIMARY PUMP Switch is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; C2 PRIMARY Pump Switch is failed.	29-11 TASK 883
23-43145	CAMERA LIGHTS Switch is failed.	33-47 TASK 801
23-43150	AFT CARGO FIRE ARM Switch is failed.	26-23 TASK 801
23-43160*	CARGO FIRE BTL DISCH Switch is failed.	26-23 TASK 802
23-43170*	FWD CARGO FIRE ARM Switch is failed.	26-23 TASK 803
23-43180	AFT CARGO TEMP Selector is failed.	21-44 TASK 806
23-43190	Bulk CARGO TEMP Select Switch is failed.	21-44 TASK 807
23-43200	C ISLN Switch is failed.	36-10 TASK 801
23-43230	EQUIP COOLING Switch is failed.	21-27 TASK 805
23-43240*	FIRE/OVHT TEST Switch is failed.	26-23 TASK 804
23-43250	FLT DECK TEMP Control is failed.	21-61 TASK 805
23-43260	FUEL JETTISON ARM Switch is failed.	28-31 TASK 801

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23-43270	FUEL SHUTOFF VLV BATTERY signal is invalid.	28-22 TASK 803
23-43280	FUEL TO REMAIN Selector is failed.	28-31 TASK 802
23-43290	FWD CARGO A/C switch is failed.	21-61 TASK 888
23-43300	FWD CROSSFEED Switch is failed.	28-22 TASK 802
23-43310	FWD OUTFLOW VALVE Switch is failed.	21-31 TASK 807
23-43340	L DEMAND Pump Selector is failed.	29-11 TASK 842
23-43350	L FWD FUEL PUMPS Switch is failed.	28-22 TASK 806
23-43360*	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; L PRIMARY PUMP Switch is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; L PRIMARY Pump Switch is failed.	29-11 TASK 884
23-43370*	LDG ALT Selector is failed.	21-31 TASK 818
23-43380	L PUMPS AFT Switch is failed.	28-22 TASK 808
23-43390	BACKUP GEN L Switch is failed.	24-25 TASK 836
23-43400	L BUS TIE Switch is failed.	24-22 TASK 802
23-43410	CENTER L FUEL PUMPS Switch is failed.	28-22 TASK 804
23-43420	L EEC MODE Switch is failed.	73-29 TASK 824
23-43430	L ENG BLEED AIR Switch is failed.	36-10 TASK 801
23-43440	L FUEL JETTISON NOZZLE Switch is failed.	28-31 TASK 803
23-43450	L GEN CTRL Switch is failed.	24-22 TASK 803
23-43460	L DRIVE DISC Switch is failed.	24-11 TASK 810
23-43470	L ISLN Switch signal is invalid.	36-10 TASK 801
23-43480	LEFT LANDING Light Switch signal is invalid.	33-42 TASK 805
23-43490	L PACK Switch is failed.	21-51 TASK 807
23-43500	L TRIM AIR Switch is failed.	21-62 TASK 803
23-43510	LOGO Light Switch is failed.	33-45 TASK 801
23-43520	LOWER RECIRC FANS Switch is failed.	21-25 TASK 803
23-43530	L ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	28-22 TASK 810
23-43540	L ENG FUEL SPAR VLV signal is invalid.	28-22 TASK 812
23-43550	L ENGINE ANTI-ICE Selector is failed.	30-21 TASK 809
23-43560	L START/IGNITION Selector is failed.	74-21 TASK 805
23-43580	L RUNWAY TURNOFF Light Switch is failed.	33-42 TASK 806
23-43660	NAV Light Switch is failed.	33-43 TASK 802

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-43680	NOSE LANDING Switch is failed.	33-42 TASK 807
23-43690	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; PASS OXYGEN Switch is failed. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3114-BCG-00W-16; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; PASS/SUPRNMRY OXYGEN Switch is failed.	35-20 TASK 803
23-43700	CABIN TEMP Switch is failed.	21-61 TASK 806
23-43710	R DEMAND Pump Selector is failed.	29-11 TASK 885
23-43720*	R PRIMARY Pump Switch is failed.	29-11 TASK 886
23-43730	RAM AIR TURBINE Switch is failed.	29-21 TASK 803
23-43740	R AFT FUEL PUMPS Switch is failed.	28-22 TASK 809
23-43750	BACKUP GEN R Switch is failed.	24-25 TASK 837
23-43760	R BUS TIE Switch is failed.	24-22 TASK 814
23-43770	CENTER R FUEL PUMPS Switch is failed.	28-22 TASK 805
23-43780	R ENG BLEED AIR Switch is failed.	36-10 TASK 801
23-43790	R FUEL JETTISON NOZZLE Switch is failed.	28-31 TASK 804
23-43800	R FWD FUEL PUMPS Switch is failed.	28-22 TASK 807
23-43810	R GEN CTRL Switch is failed.	24-22 TASK 815
23-43820	DRIVE DISC R Switch is failed.	24-11 TASK 811
23-43830	R ISLN Switch is failed.	36-10 TASK 801
23-43840	RIGHT LANDING Light Switch is failed.	33-42 TASK 808
23-43850	R PACK Switch is failed.	21-51 TASK 821
23-43860	R TRIM AIR Switch is failed.	21-62 TASK 805
23-43870	R EEC MODE Switch is failed.	73-29 TASK 825
23-43880	R ENG FUEL SPAR VLV CONTROL RLY signal is invalid.	28-22 TASK 811
23-43890	R ENG FUEL SPAR VLV signal is invalid.	28-22 TASK 813
23-43900	R ENGINE ANTI-ICE Selector is failed.	30-21 TASK 810
23-43910	R START/IGNITION Selector is failed.	74-21 TASK 806
23-43930	R RUNWAY TURNOFF Light Switch is failed.	33-42 TASK 809
23-43940	SEAT BELTS Selector is failed.	33-24 TASK 802
23-43945	IFE PASS SEATS Switch is failed.	23-93 TASK 889
23-43950	STORM Light Switch is failed.	33-11 TASK 801

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23-43955	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; CABIN UTILITY Switch is failed. AIMS-2, CMCF LDI 3114-BCG-00W-16; CABIN UTILITY switch is failed.	23-93 TASK 890
23-43960	STROBE Light Switch is failed.	33-44 TASK 802
23-43970	TAXI Light Switch is failed.	33-42 TASK 810
23-43980	UPPER RECIRC FANS Switch is failed.	21-25 TASK 804
23-43990	FWD CARGO AC SELECT is failed.	21-61 TASK 888
23-45010*	Overhead Panel Bus Controller (L) has an internal fault.	23-93 TASK 881
23-46010*	Overhead Panel Bus Controller (R) has an internal fault.	23-93 TASK 806
23-47010*	Overhead Panel Bus Controller (L) has no input from Overhead Panel Interface Card (left A2) on serial interface RS485.	23-93 TASK 801
23-47020*	Overhead Panel Bus Controller (R) has no input from Overhead Panel Interface Card (left A2) on serial interface RS485.	23-93 TASK 802
23-48010*	Overhead Panel Bus Controller (L) has no input from Overhead Panel Interface Card (right A1) on serial interface RS485.	23-93 TASK 803
23-48020*	Overhead Panel Bus Controller (R) has no input from Overhead Panel Interface Card (right A1) on serial interface RS485.	23-93 TASK 804
23-48801*	Overhead Panel Bus Controller (L) has no output on any bus.	23-93 TASK 881
23-48802*	Overhead Panel Bus Controller (R) has no output on any bus.	23-93 TASK 806
23-48841*	Overhead Panel Bus Controller (L) has no output on System ARINC 629 Bus (left).	23-93 TASK 819
23-48842*	Overhead Panel Bus Controller (R) has no output on System ARINC 629 Bus (left).	23-93 TASK 841
23-48861*	Overhead Panel Bus Controller (L) has no output on System ARINC 629 Bus (right).	23-93 TASK 844
23-48862*	Overhead Panel Bus Controller (R) has no output on System ARINC 629 Bus (right).	23-93 TASK 845
23-49403	Overhead Panel Bus Controller (L) has no input from Left AIMS on System ARINC 629 Bus (left).	23-93 TASK 807
23-49404	Overhead Panel Bus Controller (R) has no input from Left AIMS on System ARINC 629 Bus (left).	23-93 TASK 807
23-49405	Overhead Panel Bus Controller (L) has no input from Right AIMS on System ARINC 629 Bus (left).	23-93 TASK 808

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23-49406	Overhead Panel Bus Controller (R) has no input from Right AIMS on System ARINC 629 Bus (left).	23-93 TASK 808
23-49407	Overhead Panel Bus Controller (L) has no input from Air Supply Cabin Pressure Controller (L) on System ARINC 629 Bus (left).	23-93 TASK 809
23-49408	Overhead Panel Bus Controller (R) has no input from Air Supply Cabin Pressure Controller (L) on System ARINC 629 Bus (left).	23-93 TASK 822
23-49409	Overhead Panel Bus Controller (L) has no input from Air Supply Cabin Pressure Controller (R) on System ARINC 629 Bus (left).	23-93 TASK 823
23-49410	Overhead Panel Bus Controller (R) has no input from Air Supply Cabin Pressure Controller (R) on System ARINC 629 Bus (left).	23-93 TASK 824
23-49411	Overhead Panel Bus Controller (L) has no input from ARINC Signal Gateway (left), LSCF on System ARINC 629 Bus (left).	23-93 TASK 810
23-49412	Overhead Panel Bus Controller (R) has no input from ARINC Signal Gateway (left), LSCF on System ARINC 629 Bus (left).	23-93 TASK 810
23-49413	Overhead Panel Bus Controller (L) has no input from ARINC Signal Gateway (left), RSCF on System ARINC 629 Bus (left).	23-93 TASK 826
23-49414	Overhead Panel Bus Controller (R) has no input from ARINC Signal Gateway (left), RSCF on System ARINC 629 Bus (left).	23-93 TASK 827
23-49415	Overhead Panel Bus Controller (L) has no input from Converter on System ARINC 629 Bus (left).	23-93 TASK 829
23-49416	Overhead Panel Bus Controller (R) has no input from Converter on System ARINC 629 Bus (left).	23-93 TASK 811
23-49419	Overhead Panel Bus Controller (L) has no input from Cabin Temperature Controller (Left) on System ARINC 629 Bus (left).	23-93 TASK 812
23-49420	Overhead Panel Bus Controller (R) has no input from Cabin Temperature Controller (Left) on System ARINC 629 Bus (left).	23-93 TASK 829
23-49421	Overhead Panel Bus Controller (L) has no input from Cabin Temperature Controller (Right) on System ARINC 629 Bus (left).	23-93 TASK 830
23-49422	Overhead Panel Bus Controller (R) has no input from Cabin Temperature Controller (Right) on System ARINC 629 Bus (left).	23-93 TASK 831
23-49429	Overhead Panel Bus Controller (L) has no input from Generator Control Unit (L) on System ARINC 629 Bus (left).	23-93 TASK 814
23-49430	Overhead Panel Bus Controller (R) has no input from Generator Control Unit (L) on System ARINC 629 Bus (left).	23-93 TASK 837

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-49431	Overhead Panel Bus Controller (L) has no input from Generator Control Unit (R) on System ARINC 629 Bus (left).	23-93 TASK 838
23-49432	Overhead Panel Bus Controller (R) has no input from Generator Control Unit (R) on System ARINC 629 Bus (left).	23-93 TASK 839
23-49433	Overhead Panel Bus Controller (L) has no input from Auxiliary Generator Control Unit (AGCU) on System ARINC 629 Bus (left).	23-93 TASK 815
23-49434	Overhead Panel Bus Controller (R) has no input from Auxiliary Generator Control Unit (AGCU) on System ARINC 629 Bus (left).	23-93 TASK 840
23-49435	Overhead Panel Bus Controller (L) has no input from ELMS P310 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 891
23-49436	Overhead Panel Bus Controller (R) has no input from ELMS P310 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 892
23-49437	Overhead Panel Bus Controller (L) has no input from ELMS P210 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 893
23-49438	Overhead Panel Bus Controller (R) has no input from ELMS P210 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 894
23-49603	Overhead Panel Bus Controller (L) has no input from Left AIMS on System ARINC 629 Bus (right).	23-93 TASK 846
23-49604	Overhead Panel Bus Controller (R) has no input from Left AIMS on System ARINC 629 Bus (right).	23-93 TASK 847
23-49605	Overhead Panel Bus Controller (L) has no input from Right AIMS on System ARINC 629 Bus (right).	23-93 TASK 848
23-49606	Overhead Panel Bus Controller (R) has no input from Right AIMS on System ARINC 629 Bus (right).	23-93 TASK 849
23-49607	Overhead Panel Bus Controller (L) has no input from Air Supply Cabin Pressure Controller (L) on System ARINC 629 Bus (right).	23-93 TASK 850
23-49608	Overhead Panel Bus Controller (R) has no input from Air Supply Cabin Pressure Controller (L) on System ARINC 629 Bus (right).	23-93 TASK 851
23-49609	Overhead Panel Bus Controller (L) has no input from Air Supply Cabin Pressure Controller (R) on System ARINC 629 Bus (right).	23-93 TASK 852
23-49610	Overhead Panel Bus Controller (R) has no input from Air Supply Cabin Pressure Controller (R) on System ARINC 629 Bus (right).	23-93 TASK 853
23-49611	Overhead Panel Bus Controller (L) has no input from ARINC Signal Gateway (right), LSCF on System ARINC 629 Bus (right).	23-93 TASK 854

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-49612	Overhead Panel Bus Controller (R) has no input from ARINC Signal Gateway (right), LSCF on System ARINC 629 Bus (right).	23-93 TASK 855
23-49613	Overhead Panel Bus Controller (L) has no input from ARINC Signal Gateway (right), RSCF on System ARINC 629 Bus (right).	23-93 TASK 854
23-49614	Overhead Panel Bus Controller (R) has no input from ARINC Signal Gateway (right), RSCF on System ARINC 629 Bus (right).	23-93 TASK 857
23-49615	Overhead Panel Bus Controller (L) has no input from Converter on System ARINC 629 Bus (right).	23-93 TASK 858
23-49616	Overhead Panel Bus Controller (R) has no input from Converter on System ARINC 629 Bus (right).	23-93 TASK 859
23-49619	Overhead Panel Bus Controller (L) has no input from Cabin Temperature Controller (Left) on System ARINC 629 Bus (right).	23-93 TASK 860
23-49620	Overhead Panel Bus Controller (R) has no input from Cabin Temperature Controller (Left) on System ARINC 629 Bus (right).	23-93 TASK 861
23-49621	Overhead Panel Bus Controller (L) has no input from Cabin Temperature Controller (Right) on System ARINC 629 Bus (right).	23-93 TASK 862
23-49622	Overhead Panel Bus Controller (R) has no input from Cabin Temperature Controller (Right) on System ARINC 629 Bus (right).	23-93 TASK 863
23-49629	Overhead Panel Bus Controller (L) has no input from Generator Control Unit (L) on System ARINC 629 Bus (right).	23-93 TASK 870
23-49630	Overhead Panel Bus Controller (R) has no input from Generator Control Unit (L) on System ARINC 629 Bus (right).	23-93 TASK 871
23-49631	Overhead Panel Bus Controller (L) has no input from Generator Control Unit (R) on System ARINC 629 Bus (right).	23-93 TASK 872
23-49632	Overhead Panel Bus Controller (R) has no input from Generator Control Unit (R) on System ARINC 629 Bus (right).	23-93 TASK 873
23-49633	Overhead Panel Bus Controller (L) has no input from Auxiliary Generator Control Unit (AGCU) on System ARINC 629 Bus (right).	23-93 TASK 874
23-49634	Overhead Panel Bus Controller (R) has no input from Auxiliary Generator Control Unit (AGCU) on System ARINC 629 Bus (right).	23-93 TASK 875
23-49635	Overhead Panel Bus Controller (L) has no input from ELMS P110 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 895

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-49636	Overhead Panel Bus Controller (R) has no input from ELMS P110 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 896
23-49637	Overhead Panel Bus Controller (L) has no input from ELMS P210 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 897
23-49638	Overhead Panel Bus Controller (R) has no input from ELMS P210 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 898
23-49639	Overhead Panel Bus Controller (L) has no input from ELMS P310 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 901
23-49640	Overhead Panel Bus Controller (R) has no input from ELMS P310 Electronics Unit on System ARINC 629 Bus (right).	23-93 TASK 902
23-51001	HF Communication Transceiver (left) has an internal fault.	23-11 TASK 811
23-51002	HF Communication Transceiver (right) has an internal fault.	23-11 TASK 812
23-51010	HF Antenna Coupler (left) has an internal fault.	23-11 TASK 813
23-51012	HF Antenna Coupler (right) has an internal fault.	23-11 TASK 814
23-51026	HF Communication Transceiver (left) Program Pins are incorrect.	23-11 TASK 824
23-51027	HF Communication Transceiver (right) Program Pins are incorrect.	23-11 TASK 825
23-51030	HF Communication Antenna circuit is open or shorted.	23-11 TASK 815
23-51031	HF Communication Transceiver (left) antenna circuit is open or shorted.	23-11 TASK 816
23-51032	HF Communication Transceiver (right) antenna circuit is open or shorted.	23-11 TASK 817
23-51891	HF Communication Transceiver (left) has no output on CMC Output Bus (429).	23-11 TASK 801
23-51892	HF Communication Transceiver (right) has no output on CMC Output Bus (429).	23-11 TASK 802
23-51893	HF Communication Transceiver (left) has no output on DCMF Output Bus (429).	23-11 TASK 820
23-51894	HF Communication Transceiver (right) has no output on DCMF Output Bus (429).	23-11 TASK 821
23-51895	HF Communication Transceiver (left) has no output on any bus.	23-11 TASK 822
23-51896	HF Communication Transceiver (right) has no output on any bus.	23-11 TASK 823
23-52001	Radio Tuning Panel (left) has an internal fault or is turned off.	23-12 TASK 801
23-52002	Radio Tuning Panel (right) has an internal fault or is turned off.	23-12 TASK 802
23-52003	Radio Tuning Panel (center) has an internal fault or is turned off.	23-12 TASK 803

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23-52011	Radio Tuning Panel (left) has no input from Radio Tuning Panel (center) on Output Bus 2.	23-12 TASK 804
23-52012	Radio Tuning Panel (right) has no input from Radio Tuning Panel (left) on Output Bus 2.	23-12 TASK 805
23-52013	Radio Tuning Panel (center) has no input from Radio Tuning Panel (left) on Output Bus 2.	23-12 TASK 806
23-52021	Radio Tuning Panel (left) has no input from Radio Tuning Panel (right) on Output Bus 2.	23-12 TASK 807
23-52022	Radio Tuning Panel (right) has no input from Radio Tuning Panel (center) on Output Bus 2.	23-12 TASK 808
23-52023	Radio Tuning Panel (center) has no input from Radio Tuning Panel (right) on Output Bus 2.	23-12 TASK 809
23-52031	Radio Tuning Panel (left) has no output on Output Bus 2.	23-12 TASK 845
23-52032	Radio Tuning Panel (right) has no output on Output Bus 2.	23-12 TASK 846
23-52033	Radio Tuning Panel (center) has no output on Output Bus 2.	23-12 TASK 847
23-52041	Radio Tuning Panel (left) input from Radio Tuning Panel (center) on Output Bus 2 is out of range or invalid.	23-12 TASK 810
23-52042	Radio Tuning Panel (right) input from Radio Tuning Panel (left) on Output Bus 2 is out of range or invalid.	23-12 TASK 811
23-52043	Radio Tuning Panel (center) input from Radio Tuning Panel (left) on Output Bus 2 is out of range or invalid.	23-12 TASK 812
23-52051	Radio Tuning Panel (left) input from Radio Tuning Panel (right) on Output Bus 2 is out of range or invalid.	23-12 TASK 813
23-52052	Radio Tuning Panel (right) input from Radio Tuning Panel (center) on Output Bus 2 is out of range or invalid.	23-12 TASK 814
23-52053	Radio Tuning Panel (center) input from Radio Tuning Panel (right) on Output Bus 2 is out of range or invalid.	23-12 TASK 815
23-52061	Radio Tuning Panel (left) crosstune signals on Output Bus 2 are out of range or invalid.	23-12 TASK 848
23-52062	Radio Tuning Panel (right) crosstune signals on Output Bus 2 are out of range or invalid.	23-12 TASK 849
23-52071	Radio Tuning Panel (left) input from Left AIMS on General Purpose #2 Bus (AIMS-L)(429) is out of range or invalid.	23-12 TASK 816
23-52072	Radio Tuning Panel (right) input from Left AIMS on General Purpose #2 Bus (AIMS-L)(429) is out of range or invalid.	23-12 TASK 817
23-52073	Radio Tuning Panel (center) input from Left AIMS on General Purpose #2 Bus (AIMS-L)(429) is out of range or invalid.	23-12 TASK 818
23-52081	Radio Tuning Panel (left) input from Right AIMS on General Purpose #2 Bus(AIMS-R)(429) is out of range or invalid.	23-12 TASK 819

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23-52082	Radio Tuning Panel (right) input from Right AIMS on General Purpose #2 Bus(AIMS-R)(429) is out of range or invalid.	23-12 TASK 820
23-52083	Radio Tuning Panel (center) input from Right AIMS on General Purpose #2 Bus(AIMS-R)(429) is out of range or invalid.	23-12 TASK 821
23-52123	Radio Tuning Panel (center) crosstune signals on Output Bus 2 are out of range or invalid.	23-12 TASK 822
23-52801	Radio Tuning Panel (left) has no output on any bus.	23-12 TASK 868
23-52802	Radio Tuning Panel (right) has no output on any bus.	23-12 TASK 869
23-52803	Radio Tuning Panel (center) has no output on any bus.	23-12 TASK 870
23-52891	Radio Tuning Panel (left) has no output on Output Bus 1.	23-12 TASK 823
23-52892	Radio Tuning Panel (right) has no output on Output Bus 1.	23-12 TASK 824
23-52893	Radio Tuning Panel (center) has no output on Output Bus 1.	23-12 TASK 825
23-53001	VHF Communication Transceiver (left) has an internal fault.	23-12 TASK 826
23-53002	VHF Communication Transceiver (right) has an internal fault.	23-12 TASK 827
23-53003	VHF Communication Transceiver (center) has an internal fault.	23-12 TASK 828
23-53031	VHF Communication Antenna (left) circuit is open or shorted.	23-12 TASK 829
23-53032	VHF Communication Antenna (right) circuit is open or shorted.	23-12 TASK 830
23-53033	VHF Communication Antenna (center) circuit is open or shorted.	23-12 TASK 831
23-53891	VHF Communication Transceiver (left) has no output on CMC Output Bus (429).	23-12 TASK 832
23-53892	VHF Communication Transceiver (right) has no output on CMC Output Bus (429).	23-12 TASK 833
23-53893	VHF Communication Transceiver (center) has no output on CMC Output Bus (429).	23-12 TASK 834
23-55010	Audio Management Unit has an internal fault.	23-51 TASK 801
23-55020	Audio Control Panel (Captain) has no output or is failed.	23-51 TASK 802
23-55030	Audio Control Panel (First Officer) has no output or is failed.	23-51 TASK 803
23-55040	Audio Control Panel (Second Observer) has no output or is failed.	23-51 TASK 804
23-55050	Audio Control Panel (First Observer) has no output or is failed.	23-51 TASK 805
23-55841	Audio Management Unit has no output on System ARINC 629 Bus (left).	23-51 TASK 806
23-59464	Audio Management Unit has no input from Left AIMS on System ARINC 629 Bus (left).	23-51 TASK 807
23-59467	Audio Management Unit has no input from Right AIMS on System ARINC 629 Bus (left).	23-51 TASK 808

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23-59470	Audio Management Unit has no input from Control Display Unit (Left) on System ARINC 629 Bus (left).	23-51 TASK 833
23-59473	Audio Management Unit has no input from Control Display Unit (Right) on System ARINC 629 Bus (left).	23-51 TASK 834
23-59476	Audio Management Unit has no input from PSEU 2 (L2) on System ARINC 629 Bus (left).	23-51 TASK 809
23-59901	HF Communication Transceiver (left) has no input from Radio Tuning Panel (left) on Freq/Sel Port A ARINC 429 Bus.	23-11 TASK 803
23-59902	HF Communication Transceiver (right) has no input from Radio Tuning Panel (right) on Freq/Sel Port A ARINC 429 Bus.	23-11 TASK 804
23-59904	HF Communication Transceiver (left) has no input from Left AIMS on CMC Input Bus (429).	23-11 TASK 805
23-59905	HF Communication Transceiver (right) has no input from Left AIMS on CMC Input Bus (429).	23-11 TASK 806
23-59908	HF Communication Transceiver (right) has no input from Radio Tuning Panel (left) on Freq/Sel Port B ARINC 429 Bus.	23-11 TASK 807
23-59909	HF Communication Transceiver (left) has no input from Radio Tuning Panel (right) on Freq/Sel Port B ARINC 429 Bus.	23-11 TASK 808
23-59910	Radio Tuning Panel (left) has no input from Left AIMS on GP Bus 2.	23-12 TASK 835
23-59911	Radio Tuning Panel (right) has no input from Left AIMS on GP Bus 2.	23-12 TASK 850
23-59912	Radio Tuning Panel (center) has no input from Left AIMS on GP Bus 2.	23-12 TASK 851
23-59913	Radio Tuning Panel (left) has no input from Right AIMS on GP Bus 2.	23-12 TASK 852
23-59914	Radio Tuning Panel (right) has no input from Right AIMS on GP Bus 2.	23-12 TASK 853
23-59915	Radio Tuning Panel (center) has no input from Right AIMS on GP Bus 2.	23-12 TASK 854
23-59916	VHF Communication Transceiver (left) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 836
23-59917	VHF Communication Transceiver (right) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 837
23-59918	VHF Communication Transceiver (center) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 838
23-59919	VHF Communication Transceiver (left) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 839
23-59920	VHF Communication Transceiver (right) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 840

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23-59921	VHF Communication Transceiver (center) has no input from Left AIMS on CMC Bus (429).	23-12 TASK 841
23-59923	VHF Communication Transceiver (right) has no input from Left AIMS on DCMF Bus (429).	23-12 TASK 872
23-59924	VHF Communication Transceiver (center) has no input from Left AIMS on DCMF Bus (429).	23-12 TASK 873
23-59926	VHF Communication Transceiver (right) has no input from Right AIMS on DCMF Bus (429).	23-12 TASK 874
23-59927	VHF Communication Transceiver (center) has no input from Right AIMS on DCMF Bus (429).	23-12 TASK 875
23-59928	VHF Communication Transceiver (left) has no input from Radio Tuning Panel (left) on Freq/Sel Port A ARINC 429 Bus.	23-12 TASK 855
23-59929	VHF Communication Transceiver (right) has no input from Radio Tuning Panel (right) on Freq/Sel Port A ARINC 429 Bus.	23-12 TASK 856
23-59930	VHF Communication Transceiver (center) has no input from Radio Tuning Panel (left) on Freq/Sel Port A ARINC 429 Bus.	23-12 TASK 857
23-59931	VHF Communication Transceiver (left) has no input from Radio Tuning Panel (right) on Freq/Sel Port B ARINC 429 Bus.	23-12 TASK 842
23-59932	VHF Communication Transceiver (right) has no input from Radio Tuning Panel (left) on Freq/Sel Port B ARINC 429 Bus.	23-12 TASK 843
23-59933	VHF Communication Transceiver (center) has no input from Radio Tuning Panel (right) on Freq/Sel Port B ARINC 429 Bus.	23-12 TASK 844
23-59940	HF Communication Transceiver (left) has no input from Left AIMS on DCMF Input Bus (429).	23-11 TASK 818
23-59941	HF Communication Transceiver (left) has no input from Right AIMS on DCMF Input Bus (429).	23-11 TASK 819
23-59942	HF Communication Transceiver (right) has no input from Left AIMS on DCMF Input Bus (429).	23-11 TASK 818
23-59943	HF Communication Transceiver (right) has no input from Right AIMS on DCMF Input Bus (429).	23-11 TASK 819
23-59944	HF Communication Transceiver (left) has no input from Left AIMS on IRS Input Bus (429).	23-11 TASK 826
23-59945	HF Communication Transceiver (right) has no input from Right AIMS on IRS Input Bus (429).	23-11 TASK 827
23-59946	HF Communication Transceiver (left) has no input from ATC/Mode S Transponder (left) on ATC-L XT Coord #1 Bus (429).	23-11 TASK 828
23-59947	HF Communication Transceiver (right) has no input from ATC/Mode S Transponder (left) on ATC-L XT Coord #1 Bus (429).	23-11 TASK 829

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-59949	HF Communication Transceiver (left) has no input from ATC/Mode S Transponder (right) on ATC-R XT Coord #2 Bus (429).	23-11 TASK 830
23-59950	HF Communication Transceiver (right) has no input from ATC/Mode S Transponder (right) on ATC-R XT Coord #2 Bus (429).	23-11 TASK 831
23-59952	HF Communication Transceiver (left) has no input from HF Communication Transceiver (right) on Crosstalk Input Bus (429).	23-11 TASK 832
23-59953	HF Communication Transceiver (right) has no input from HF Communication Transceiver (left) on Crosstalk Input Bus (429).	23-11 TASK 833
23-60021	Satellite Data Unit (left) has an internal fault.	23-15 TASK 801
23-60041	High Power Amplifier for HGA (left) has an internal fault.	23-15 TASK 803
23-60161	AIMS-2, CMCF LDI 3114-BCG-00W-16; Satellite Data Unit (left) Program Pins has incorrect configuration. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Satellite Data Unit (left) program pins has incorrect configuration.	23-15 TASK 840
23-60191	High Power Amplifier for HGA (left) has no input from Satellite Data Unit (left) on transmit RF cable.	23-15 TASK 920
23-60201	Satellite Data Unit (left) has no input on Receive RF cable.	23-15 TASK 921
23-60291	Satellite Data Unit (left) has no input from High Power Amplifier for HGA (left) on BITE Bus.	23-15 TASK 852
23-60451	High Power Amplifier for HGA (left) has no input from Satellite Data Unit (left) on Multi-Control Bus.	23-15 TASK 824
23-60461	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3114-BCG-00W-16; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; HGA High Power Amplifier (left) or Satellite Data Unit (left) temperature is too high. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; HGA High Power Amplifier (left) temperature is too high.	23-15 TASK 825
23-60511	Satellite Data Unit (left) input from Left AIMS on General Purpose #1 Bus (429) is invalid.	23-15 TASK 842
23-60541	Satellite Data Unit (left) has an internal fault on communication channel 1.	23-15 TASK 830

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-60551	Satellite Data Unit (left) has an internal fault on communication channel 2.	23-15 TASK 830
23-60561	Satellite Data Unit (left) has an internal fault on communication channel 3.	23-15 TASK 830
23-60571	Satellite Data Unit (left) has an internal fault on communication channel 4.	23-15 TASK 918
23-60581	Satellite Data Unit (left) has an internal fault on communication channel 5.	23-15 TASK 918
23-60591	Satellite Data Unit (left) has an internal fault on communication channel 6.	23-15 TASK 918
23-60601	High Speed Data Unit (left 1) has an internal fault on communication channel 1.	23-15 TASK 946
23-60611	High Speed Data Unit (left 1) has an internal fault on communication channel 2.	23-15 TASK 948
23-60621	High Speed Data Unit (left 1) has an internal fault on communication channel 3.	23-15 TASK 950
23-60631	High Speed Data Unit (left 1) has an internal fault on communication channel 4.	23-15 TASK 952
23-61071	LNA/Diplexer for HGA (top, L sys) has a fault.	23-15 TASK 908
23-61101	Top-Mount Beam Steering Unit (left) has a fault.	23-15 TASK 909
23-61121	AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; HGA High Power Amplifier (left) output circuit is open or shorted. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3114-BCG-00W-16; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; High Gain Antenna system (left) failure or coaxial cable open or shorted.	23-15 TASK 910
23-61321	Satellite Data Unit (left) has no input from Top-Mount Beam Steering Unit (left) on BITE Bus.	23-15 TASK 911
23-61481	Top-Mount Beam Steering Unit (left) has no input from Satellite Data Unit (left) on Multi-Control Bus.	23-15 TASK 912
23-61491	Satellite Data Unit (left) has no input from Top-Mount High-Gain Antenna (left) on Input Bus.	23-15 TASK 954
23-61501	Satellite Data Unit (left) temperature is too high.	23-15 TASK 956
23-61503	Top-Mount High-Gain Antenna (left) has no input from Satellite Data Unit (left) on Multi-Control Bus.	23-15 TASK 958
23-61631	Satellite Data Unit (left) output circuit is open or shorted.	23-15 TASK 962
23-61641	High Speed Data Unit (left 1) Disable discrete from Satellite Data Unit (left) has a fault.	23-15 TASK 964

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-61651	AIMS-2, CMCF LDI 3114-BCG-00W-16; High Speed Data Unit (left 1) Program Pins has incorrect configuration. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; High Speed Data Unit (left 1) program pins has incorrect configuration.	23-15 TASK 966
23-61661	High Speed Data Unit (left 1) has an internal fault.	23-15 TASK 968
23-61671	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; High Speed Data Unit (left 1) has no input from Satellite Data Unit (left) on ARINC 429 Bus. AIMS-2, CMCF LDI 3114-BCG-00W-16; High Speed Data Unit (left 1) has no input from Satellite Data Unit (left) on ARINC 429 bus.	23-15 TASK 970
23-61681	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Satellite Data Unit (left) has no input from High Speed Data Unit (left 1) on ARINC 429 Bus. AIMS-2, CMCF LDI 3114-BCG-00W-16; Satellite Data Unit (left) has no input from High Speed Data Unit (left 1) on ARINC 429 bus.	23-15 TASK 972
23-61691	AIMS-2, CMCF LDI 3114-BCG-00W-16; High Speed Data Unit (left 1) has no input from LNA/ Diplexer for HGA (top, L sys) on Receive RF cable. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; High Speed Data Unit (left 1) has no input from LNA/ Diplexer for HGA (top, L sys) on receive RF cable.	23-15 TASK 974
23-61701	High Power Amplifier for HGA (left) has no input from High Speed Data Unit (left 1) on transmit RF cable.	23-15 TASK 976
23-61883	Top-Mount High-Gain Antenna (left) temperature is too high.	23-15 TASK 988
23-68801	Satellite Data Unit (left) has no output on any bus.	23-15 TASK 843
23-68891	Satellite Data Unit (left) has no output on CFDS Out Bus (429).	23-15 TASK 832
23-68893	Satellite Data Unit (left) has no output on Data to CMU Bus (429).	23-15 TASK 833
23-69903	Satellite Data Unit (left) has no input from Left AIMS on CFDS In Bus (429).	23-15 TASK 834

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23-69905	Satellite Data Unit (left) has no input from Left AIMS on Data Fm CMU 1 Bus (429).	23-15 TASK 835
23-69907	Satellite Data Unit (left) has no input from Right AIMS on Data Fm CMU 2 Bus (429).	23-15 TASK 844
23-69909	Satellite Data Unit (left) has no input from Left AIMS on Data Fm IRS L Bus (429).	23-15 TASK 836
23-69911	Satellite Data Unit (left) has no input from Right AIMS on Data Fm IRS R Bus (429).	23-15 TASK 845
23-69915	Satellite Data Unit (left) has no input from Left AIMS on Airframe ID Bus (429).	23-15 TASK 838
23-69919	Satellite Data Unit (left) has no input from Control Display Unit (Left) on CDU-L SDU Bus (429).	23-15 TASK 846
23-69921	Satellite Data Unit (left) has no input from Control Display Unit (Right) on CDU-R SDU Bus (429).	23-15 TASK 847
23-69925	Satellite Data Unit (left) has no input from Control Display Unit (Center) on CDU-C SDU-PA/CI Bus (429).	23-15 TASK 848
23-69951	Satellite Data Unit (left) has no output on SDU DATA TO CDU Bus (429).	23-15 TASK 850
23-71011	DCMF in Left AIMS has an internal fault.	23-27 TASK 801
23-71012	DCMF in Right AIMS has an internal fault.	23-27 TASK 802
23-71021	DCMF in Left AIMS has incorrect software configuration.	23-27 TASK 816
23-71022	DCMF in Right AIMS has incorrect software configuration.	23-27 TASK 817
23-71040	DCMF in Left AIMS and in Right AIMS have incorrect software configuration.	23-27 TASK 803
23-71050	DCMF in Left AIMS and in Right AIMS have incorrect software configuration.	23-27 TASK 803
23-71051	DCMF in Left AIMS has an internal software fault.	23-27 TASK 804
23-71052	DCMF in Right AIMS has an internal software fault.	23-27 TASK 805
23-71071	DCMF Modem in Left AIMS is inoperative.	23-27 TASK 806
23-71072	DCMF Modem in Right AIMS is inoperative.	23-27 TASK 807
23-71073	CMCF airplane type signal is not available.	23-27 TASK 885
23-71074	CMCF airplane type signal is not available.	23-27 TASK 885
23-71081	DCMF in Left AIMS tuning signal does not agree with tuning signal from Radio Tuning Panel.	23-27 TASK 808
23-71082	DCMF in Right AIMS tuning signal does not agree with tuning signal from Radio Tuning Panel.	23-27 TASK 809
23-71091	DCMF in Left AIMS has incorrect hardware configuration.	23-27 TASK 810
23-71092	DCMF in Right AIMS has incorrect hardware configuration.	23-27 TASK 811

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-71093	DCMF in Left AIMS has incorrect hardware configuration.	23-27 TASK 810
23-71094	DCMF in Right AIMS has incorrect hardware configuration.	23-27 TASK 811
23-71103	DCMF AMI in Left AIMS has incorrect data.	23-27 TASK 812
23-71104	DCMF AMI in Right AIMS has incorrect data.	23-27 TASK 813
23-71111	DCMF in Left AIMS has incorrect software configuration.	23-27 TASK 814
23-71112	DCMF in Right AIMS has incorrect software configuration.	23-27 TASK 815
23-71501	DCMF in Left AIMS has no input from CMCF in Left AIMS on the AIMS Backplane.	23-27 TASK 831
23-71502	DCMF in Right AIMS has no input from CMCF in Left AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 832
23-71503	DCMF in Left AIMS has no input from CMCF in Right AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 833
23-71504	DCMF in Right AIMS has no input from CMCF in Right AIMS on the AIMS Backplane.	23-27 TASK 834
23-71511	DCMF in Left AIMS has no input from DCMF in Right AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 835
23-71512	DCMF in Right AIMS has no input from DCMF in Left AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 836
23-71600	Node Processor in Left AIMS has detected an Ethernet link fault with the MAT.	23-27 TASK 908
23-71601	Node Processor in Left AIMS has detected an Ethernet link fault with the NP in Right AIMS.	23-27 TASK 909
23-71602	Node Processor in Right AIMS has detected an Ethernet link fault with the NP in Left AIMS.	23-27 TASK 909
23-71603	Node Processor in Left AIMS has detected network transfer faults with the MAT.	23-27 TASK 907
23-71604	Node Processor in Right AIMS has detected network transfer faults with the NP in Left AIMS.	23-27 TASK 904
23-71605	Node Processor in Left AIMS has detected network transfer faults with the NP in Right AIMS.	23-27 TASK 904
23-71606	Node Processor in Left AIMS has a hardware fault.	23-27 TASK 900
23-71607	AIMS-2, CMCF LDI 3114-BCG-00W-16; Node Processor in Right AIMS has a hardware fault. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Node Processor in right AIMS has a hardware fault.	23-27 TASK 901
23-71608	Node Processor or DCMF I/F in left AIMS is not functioning.	23-27 TASK 902

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23-71609	Node Processor or DCMF I/F in right AIMS is not functioning.	23-27 TASK 903
23-71610	DCMF or Node Processor in left AIMS has incorrect software.	23-27 TASK 905
23-71611	DCMF or Node Processor in right AIMS has incorrect software.	23-27 TASK 906
23-71710	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; DCMF in Right AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus. AIMS-2, CMCF LDI 3114-BCG-00W-16; DCMF in Right AIMS has no input from Electronic Flight Bag (L) on EFB Datalink bus.	23-27 TASK 913
23-71711	DCMF in Left AIMS has no input from Electronic Flight Bag (L) on EFB Datalink bus.	23-27 TASK 914
23-71712	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; DCMF in Right AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus. AIMS-2, CMCF LDI 3114-BCG-00W-16; DCMF in Right AIMS has no input from Electronic Flight Bag (R) on EFB Datalink bus.	23-27 TASK 915
23-71713	AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; DCMF in Left AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus. AIMS-2, CMCF LDI 3114-BCG-00W-16; DCMF in Left AIMS has no input from Electronic Flight Bag (R) on EFB Datalink bus.	23-27 TASK 916
23-71714	DCMF in Right AIMS has no input from VDR (R) on VDR Data Xfer Bus.	23-12 TASK 884
23-71715	DCMF in Left AIMS has no input from VDR (C) on VDR Data Xfer Bus.	23-12 TASK 885
23-75000	FDCF in Left AIMS and in Right AIMS have incorrect software configuration.	23-27 TASK 886
23-75001	FDCF in Left AIMS has an internal software fault.	23-27 TASK 847
23-75002	FDCF in Right AIMS has an internal software fault.	23-27 TASK 851
23-75011	FDCF in Left AIMS has incorrect software configuration.	23-27 TASK 892
23-75012	FDCF in Right AIMS has incorrect software configuration.	23-27 TASK 893
23-75013	FDCF ATC Database in Left AIMS has incorrect data.	23-27 TASK 919
23-75014	FDCF ATC Database in Right AIMS has incorrect data.	23-27 TASK 920

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23-75015	CPM/Comm(M001) in Left AIMS has an internal fault, ATC Database Corrupt.	23-27 TASK 921
23-75016	CPM/Comm(M001) in Right AIMS has an internal fault, ATC Database Corrupt.	23-27 TASK 922
23-75021	FDCF AML in Left AIMS has incorrect data.	23-27 TASK 894
23-75022	FDCF AML in Right AIMS has incorrect data.	23-27 TASK 894
23-75041	FDCF AML in Left AIMS has incorrect software configuration.	23-27 TASK 839
23-75042	FDCF AML in Right AIMS has incorrect software configuration.	23-27 TASK 840
23-75100	FDCF in Left AIMS and in Right AIMS have incorrect software configuration.	23-27 TASK 886
23-75501	FDCF in Left AIMS has no input from CMCF in Left AIMS on the AIMS Backplane.	23-27 TASK 841
23-75502	FDCF in Right AIMS has no input from CMCF in Left AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 842
23-75503	FDCF in Left AIMS has no input from CMCF in Right AIMS on AIMS Intercabinet Buses (3) and (4).	23-27 TASK 843
23-75504	FDCF in Right AIMS has no input from CMCF in Right AIMS on the AIMS Backplane.	23-27 TASK 844
23-75511	FDCF in Left AIMS has no input from FDCF in Right AIMS on AIMS Intercabinet Buses (1) and (2).	23-27 TASK 845
23-75512	FDCF in Right AIMS has no input from FDCF in Left AIMS on AIMS Intercabinet Buses (1) and (2).	23-27 TASK 846
23-81001*	Flight Controls ARINC 629 Bus (left) is failed.	23-91 TASK 801
23-81002*	Flight Controls ARINC 629 Bus (center) is failed.	23-91 TASK 802
23-81003*	Flight Controls ARINC 629 Bus (right) is failed.	23-91 TASK 803
23-81004*	System ARINC 629 Bus (left) is failed.	23-91 TASK 804
23-81005*	System ARINC 629 Bus (center 1) is failed.	23-91 TASK 805
23-81006*	System ARINC 629 Bus (right) is failed.	23-91 TASK 806
23-81007*	System ARINC 629 Bus (center 2) is failed.	23-91 TASK 807
23-89423	Overhead Panel Bus Controller (L) has no input from ELMS P110 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 899
23-89424	Overhead Panel Bus Controller (R) has no input from ELMS P110 Electronics Unit on System ARINC 629 Bus (left).	23-93 TASK 900
23-91010*	Overhead Panel Bus Controller (L) has no input from Overhead Panel Interface Card (left A1) on serial interface RS485.	23-93 TASK 816
23-91020*	Overhead Panel Bus Controller (R) has no input from Overhead Panel Interface Card (left A1) on serial interface RS485.	23-93 TASK 878

*If the MAT shows LATCHED for the correlated EICAS message, then you must erase the EICAS message after you complete the FIM task.

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
23-92010*	Overhead Panel Bus Controller (L) has no input from Overhead Panel Interface Card (right A2) on serial interface RS485.	23-93 TASK 879
23-92020*	Overhead Panel Bus Controller (R) has no input from Overhead Panel Interface Card (right A2) on serial interface RS485.	23-93 TASK 880
23-94978	Maint. Access Terminal has a Plane Net network error fault.	23-27 TASK 911
23-95002	Relay (HORN ENABLE) in P310 is not in commanded position.	23-43 TASK 804

*If the MAT shows LATCHED for the correlated EICAS message, then you must erase the EICAS message after you complete the FIM task.

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801. HF-L Comm Xcvr No Output on CMC OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51891.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent problem, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
 - 1) If the system test was satisfactory, then ignore this maintenance message.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent problem.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (4) Do a check for 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23101AC at the E6-1 shelf (WDM 23-11-11).
- (5) If there is not 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23101AC, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.

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- (6) If there is 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23101AC, then continue.
- (7) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (8) Do these steps to do a check of the wiring:
- (a) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23101AB at the E6-1 shelf (WDM 23-11-11):

J420-A		DM23101AB
pin A2	.....	pin C4
pin B2	.....	pin D4

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.
- (d) If you do not find a problem with the wiring, then continue:
- (9) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do these steps to do a check of the wiring:
- (a) Remove the IOM(M009) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and connector DM23101AB at the E6-1 shelf (WDM 23-11-11):

J420-A		DM23101AB
pin A2	.....	pin C4
pin B2	.....	pin D4

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M009) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.

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- (d) If you do not find a problem with the wiring, then continue:
- (11) Re-install the IOM(M009) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (12) Replace the IOM(M009) module in the left AIMS cabinet, M31101.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (13) Replace the IOM(M009) module in the left AIMS cabinet, M31101, with the initial IOM(M009) module.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (14) Replace the IOM(M009) module in the right AIMS cabinet, M31201.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.

————— END OF TASK —————

802. HF-R Comm Xcvr No Output on CMC OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51892.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
- 1) If the system test was satisfactory, then ignore this maintenance message.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

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- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (4) Do a check for 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23201AC at the E6-1 shelf (WDM 23-11-21).
 - (5) If there is not 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23201AC, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (6) If there is 115 VAC from pin 2 to pin 8, from pin 3 to pin 8, and from pin 7 to pin 8 of connector DM23201AC, then continue.
 - (7) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (8) Do these steps to do a check of the wiring:
 - (a) Remove the IOM (M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J250-A at the left AIMS cabinet and connector DM23201AB at the E6-1 shelf (WDM 23-11-21)SSM 31-41-03:

J250-A	DM23201AB
pin A4	pin C4
pin B4	pin D4

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

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- 3) Re-install the IOM (M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (9) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do these steps to do a check of the wiring:
 - (a) Remove the IOM(M004) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J250-A at the right AIMS cabinet and connector DM23201AB at the E6-1 shelf (WDM 23-11-21):

J250-A	DM23201AB
pin A4	pin C4
pin B4	pin D4

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M004) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (11) Re-install the IOM(M004) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (12) Replace the IOM(M004) module in the left AIMS cabinet, M31101.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (13) Replace the IOM(M004) module in the left AIMS cabinet, M31101, with the initial IOM(M004) module.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (14) Replace the IOM(M004) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

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Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

803. HF-L Comm Xcvr No Input from RTP-L on Freq/Sel Port A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59901.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the left HF comm xcvr, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Remove the left radio tuning panel (RTP-L), M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23005 at the aft aisle stand panel, P8 and connector DM23101AB at the E6-1 shelf (WDM 23-12-11):

DM23005

pin 2 pin E3

pin 3 pin F3

DM23101AB

- (d) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue:
- (3) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

804. HF-R Comm Xcvr No Input from RTP-R on Freq/Sel Port A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59902.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right HF comm xcvr, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Remove the right radio tuning panel (RTP-R), M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23006 at the aft aisle stand panel, P8 and connector DM23201AB at the E6-1 shelf (WDM 23-12-21):

DM23006

pin 2 pin E3
pin 3 pin F3

DM23201AB

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
 - 2) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue:
- (3) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

805. HF-L Comm Xcvr No Input from AIMS-L on CMC INPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59904.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Open and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left HF communication transceiver (HF-L comm xcvr),
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Do this check of the wiring:

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet on the E3-1 shelf and connector DM23101AB at the E6-1 shelf (WDM 23-11-11) (WDM 45-45-11):

J420-A	DM23101AB
pin F11	pin A4
pin G12	pin B4

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (4) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (5) Install a new IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

806. HF-R Comm Xcvr No Input from AIMS-L on CMC INPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59905.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Open and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
- NOTE:** If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.
- (a) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Remove the IOM(M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J250-A at the left AIMS cabinet on the E3-1 shelf and connector DM23201AB at the E6-1 shelf (WDM 23-11-21) (WDM 45-45-21):

J250-A	DM23201AB
pin F11	pin A4
pin G12	pin B4

- (d) If you find a problem with the wiring, do these steps:
- 1) Repair the wiring.
 - 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (4) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

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- (5) Install a new IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

807. HF-R Comm Xcvr No Input from RTP-L on Freq/Sel Port B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59908.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right HF comm xcvr, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Remove the left radio tuning panel (RTP-L), M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 at the aft aisle stand panel, P8 and connector DM23201AB at the E6-1 shelf (WDM 23-12-11):

DM23005

pin 2 pin E3
pin 3 pin F3

DM23201AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

808. HF-L Comm Xcvr No Input from RTP-R on Freq/Sel Port B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59909.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left HF comm xcvr, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Remove the right radio tuning panel (RTP-R), M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23006 at the aft aisle stand panel, P8 and connector DM23201AB at the E6-1 shelf (WDM 23-12-21):

DM23005

pin 2 pin G3
pin 3 pin H3

DM23201AB

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
- 2) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

809. Left HF Radio Reception/Transmission Problems - Fault Isolation

A. Initial Evaluation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) or a HF communication transceiver (HF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.

B. Fault Isolation Procedure

- (1) Replace the left HF comm xcvr, M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— **END OF TASK** —————

810. Right HF Radio Reception/Transmission Problems - Fault Isolation

A. Initial Evaluation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) or a HF communication transceiver (HF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.

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B. Fault Isolation Procedure

- (1) Replace the right HF comm xcvr, M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— **END OF TASK** —————

811. HF-L Comm Xcvr Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51001.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
 - 1) If the system test was satisfactory, then ignore this maintenance message.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left HF communication transceiver, M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

812. HF-R Comm Xcvr Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51002.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.

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- 1) If the system test was satisfactory, then ignore this maintenance message.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right HF communication transceiver, M23201.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

813. HF-L Antenna Coupler Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51010.

B. Possible Causes

- (1) Left Antenna Coupler
- (2) High Frequency (HF) Communication Transceiver, M23101
- (3) Coaxial Cable
- (4) Audio Management Unit (AMU)

C. Related Data

- (1) WDM 23-11-11
- (2) WDM 23-11-12

D. Initial Evaluation

- (1) Look at the MAT and see if maintenance message 23-51012 also shows at the same time as maintenance message 23-51010.
 - (a) If only maintenance message 23-51010 shows on the MAT, then do the Fault Isolation Procedure below.
 - (b) If maintenance message 23-51010 and 23-51012 both show at the same time, then continue.
 - (c) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

- (d) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (e) Use the MAT to do the HF-L Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801).

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- 1) If the Operational Test is not satisfactory, then do the Fault Isolation Procedure for the maintenance message that shows.
- (f) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (g) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (h) Use the MAT to do the HF-R Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801).
 - 1) If the Operational Test is not satisfactory, then do the Fault Isolation Procedure for the maintenance message that shows.

E. Fault Isolation Procedure

- (1) Replace the Left Antenna Coupler. These are the tasks:
 - HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801
 - HF Communication Antenna Coupler Installation, AMM TASK 23-11-03-400-801
 - (a) Do the Repair Confirmation at the end of this task.
- (2) Replace the Left HF Communication Transceiver, M23101. These are the tasks:
 - HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801
 - HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801
 - (a) Do the Repair Confirmation at the end of this task.
- (3) If the problem continues after the HF-L Transceiver and HF-L Coupler replacement, do the steps that follow:
 - (a) Remove the HF-L Antenna Coupler. This is the task: HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801.
 - (b) Do a check of electrical bonding of the antenna circuit as follows (WDM 23-11-11, WDM 23-11-12):
 - 1) Measure the resistance between the HF-L Coupler mount and the airframe.
 - a) The resistance should be less than 2.5 milliohms.
 - 2) Repair the problems that you find.
 - 3) Do the Repair Confirmation at the end of this task.
 - (c) Do a Coaxial Cable Inspection of the coax cable between the HF-L Transceiver and the HF-L Antenna Coupler (WDM 23-11-12):
 - 1) Remove the Left HF Communication Transceiver, M23101. This is the task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - 2) Do a Coaxial Cable Inspection, AMM TASK 20-10-32-210-801 on the coaxial cable from the HF-L Transceiver mount to the HF-L Antenna Coupler.

NOTE: Look for poor shield connections at the connectors or breakdown of the dielectric material near the bulkhead feed-through.

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- 3) Repair the problems that you find.
- 4) Do the Repair Confirmation at the end of this task.
- (4) If the problem continues and the airplane has been exposed to lightning strike, replace the AMU: These are the tasks:
 - Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
 - Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
- (a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Look at the MAT and see if maintenance message 23-51012 shows.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message then continue the Fault Isolation at the subsequent step.

————— END OF TASK —————

814. HF-R Antenna Coupler Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51012.

B. Possible Causes:

- (1) Right Antenna Coupler
- (2) HF Communication Transceiver, M23201
- (3) Coaxial Cable
- (4) Audio Management Unit (AMU)

C. Related Data

- (1) WDM 23-11-21
- (2) WDM 23-11-22

D. Initial Evaluation

- (1) Look at the MAT and see if maintenance message 23-51010 also shows at the same time as maintenance message 23-51012.
 - (a) If only maintenance message 23-51012 shows on the MAT, then do the Fault Isolation Procedure below.
 - (b) If maintenance message 23-51012 and 23-51010 both show at the same time, then continue.
 - (c) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

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- (d) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (e) Use the MAT to do the HF-R Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801).

- 1) If the Operational Test is not satisfactory, then do the Fault Isolation Procedure for the maintenance message that shows.

- (f) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (g) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (h) Use the MAT to do the HF-L Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801).

- 1) If the Operational Test is not satisfactory, then do the Fault Isolation Procedure for the maintenance message that shows.

E. Fault Isolation Procedure

- (1) Replace the Right Antenna Coupler. These are the tasks:

- HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801
- HF Communication Antenna Coupler Installation, AMM TASK 23-11-03-400-801

- (a) Do the Repair Confirmation at the end of this task.

- (2) Replace the Right HF Communication Transceiver, M23201. These are the tasks:

- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801
- HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- (a) Do the Repair Confirmation at the end of this task.

- (3) If the fault continues after the HF-R Transceiver and HF-R Coupler replacement, do the steps that follow:

- (a) Remove the HF-R Antenna Coupler. This is the task: HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801

- (b) Do a check of electrical bonding of the antenna circuit as follows (WDM 23-11-21, WDM 23-11-22):

- 1) Measure the resistance between the HF-R Coupler mount and the airframe.
 - a) The resistance should be less than 2.5 milliohms.
- 2) Repair the problems that you find.
- 3) Do the Repair Confirmation at the end of this task.

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- (c) Do a Coaxial Cable Inspection of the coax cable between the HF-R Transceiver and the HF-R Antenna Coupler (WDM 23-11-22):
 - 1) Remove the Right HF Communication Transceiver, M23201. This is the task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - 2) Do a Coaxial Cable Inspection, AMM TASK 20-10-32-210-801 on the coaxial cable from the HF-R Transceiver mount to the HF-R Antenna Coupler.

NOTE: Look for poor shield connections at the connectors or breakdown of the dielectric material near the bulkhead feed-through.
 - 3) Repair the problems that you find.
 - 4) Do the Repair Confirmation at the end of this task.
- (4) If the problem continues and the airplane has been exposed to lightning strike, replace the AMU: These are the tasks:
 - Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
 - Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
- (a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Look at the MAT and see if maintenance message 23-51012 shows.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message then continue the Fault Isolation at the subsequent step.

————— END OF TASK —————

815. HF-L And HF-R Antenna Circuits Are Open Or Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51030.

B. Fault Isolation Procedure

- (1) Replace the HF antenna.

These are the tasks:

HF Communication Antenna Removal, AMM TASK 23-11-04-000-801,

HF Communication Antenna Installation, AMM TASK 23-11-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

816. HF-L Antenna Circuit is Open or Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51031.

B. Description

- (1) The Left HF Communication Transceiver Antenna Circuit is open or shorted.

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C. Possible Causes

- (1) HF Communication Antenna, M23098
- (2) Left HF Communication Antenna Coupler
- (3) Left HF Communication Transceiver, M23101
- (4) Coaxial Cable

D. Related Data

- (1) WDM 22-11-15

E. Initial Evaluation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent problem.
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

- (1) Use a Time Domain Reflectometer (TDR) Test Set to do this electrical check of the Left HF Antenna Coaxial Cable:
 - (a) Remove the Left HF Communication Transceiver, M23101. This is the task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Open the HF Antenna Access Panel.
 - (c) Disconnect connector DM23102B from the Left HF Communication Antenna Coupler (WDM 23-11-12).
 - (d) Do an electrical check of the Coaxial Cable (AMM TASK 20-10-32-210-801).
 - 1) If you find a problem with the Coaxial Cable for the Left HF XCVR, do these steps:
 - a) Replace the Coaxial Cable (WDM 23-11-12).
 - b) Re-connect connector DM23102B at the Left HF Communication Antenna Coupler (WDM 23-11-12).
 - c) Close the HF Antenna Access Panel.
 - d) Do the Repair Confirmation at the end of this task.
 - 2) If you do not find a problem with the Coaxial Cable for the Left HF XCVR, then re-connect connector DM23102B at the Left HF Communication Coupler and continue (WDM 23-11-12).
- (2) Install a new Left HF Communication XCVR, M23101. This is the task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) Do the Repair Confirmation at the end of this task.
- (3) Replace left HF Communication Antenna Coupler, M23102. These are the tasks:
 - HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801
 - HF Communication Antenna Coupler Installation, AMM TASK 23-11-03-400-801
 - (a) Do the Repair Confirmation at the end of this task.
- (4) Replace the HF Communication Antenna. These are the tasks:
 - HF Communication Antenna Removal, AMM TASK 23-11-04-000-801
 - HF Communication Antenna Installation, AMM TASK 23-11-04-400-801
 - (a) Do the Repair Confirmation at the end of this task.

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G. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.
- (2) If the MAT shows ACTIVE for the maintenance message, then continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

817. HF-R Antenna Circuit Is Open Or Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51032.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Use a time domain reflectometer (TDR) test set to do this electrical check of the coaxial cable for the right HF communication system:
 - (a) Remove the right HF comm xcvr, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Open the HF antenna access panel.
 - (c) Disconnect connector DM23202B from the right HF communication coupler (WDM 23-11-12).
 - (d) Do an electrical check of the coaxial cable (AMM TASK 20-10-32-210-801).
 - (e) If you find a problem with the coaxial cable for the right HF xcvr, do these steps:
 - 1) Replace the coaxial cable (WDM 23-11-12).
 - 2) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-connect connector DM23102B at the right HF communication coupler (WDM 23-11-12).
 - 4) Close the HF antenna access panel.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (f) If you do not find a problem with the coaxial cable for the right HF xcvr, then do this step:
 - 1) Re-connect connector DM23202B at the right HF communication coupler (WDM 23-11-12).
- (2) Install a new right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace right HF communication antenna coupler, M23202.

These are the tasks:

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HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801,
HF Communication Antenna Coupler Installation, AMM TASK 23-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the HF antenna.

These are the tasks:

HF Communication Antenna Removal, AMM TASK 23-11-04-000-801,
HF Communication Antenna Installation, AMM TASK 23-11-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

818. HF Transceiver Input Problems from left AIMS on DCMF INPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-59940, 23-59942.

B. Description

- (1) Use this task when the HF transceiver (L or R) has input problems from the left AIMS on DCMF INPUT 429 Bus.

C. Possible Causes

- (1) HF Communication Transceiver (L or R), M23101, M23201.
- (2) IOM(M009) in left AIMS.
- (3) Wiring.

D. Circuit Breakers

- (1) These are the circuit breakers related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

E. Related Data

- (1) WDM 23-27-11
- (2) SSM 31-41-03

F. Initial Evaluation

- (1) On the MAT, look for maintenance messages 23–59942 and 23–59940.
 - (a) If you do not see maintenance message 23–59942 or 23–59940, then there was an intermittent fault.
 - (b) If the MAT shows ACTIVE for maintenance message 23–59942, then do the FIM task below for HF-R input problems.
 - (c) If the MAT shows ACTIVE for maintenance message 23–59940, then do the FIM task below for HF-L input problems.

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- (d) If the MAT shows ACTIVE for both maintenance messages 23–59940 and 23–59942, then do the FIM task below for HF-L and HF-R input problems.

G. HF-R Input Problems - Fault Isolation Procedure

- (1) Replace the right HF Communications transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet, M31101.

These are the Tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Remove the right HF communication transceiver (HF-R comm xcvr), M23201

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (4) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (5) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M009) module from the left AIMS cabinet, M31101.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-27-11 and SSM 31-41-03).

J420-A	DM23201AA
pin F13	pin A9
pin G14	pin B9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Install the right HF communications transceiver, M23201.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- 3) Install the IOM(M009) module in the left AIMS cabinet, M31101.

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To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

H. HF-L Input Problems - Fault Isolation Procedure

- (1) Replace the left HF Communications transceiver (HF-L comm xcvr), M23101.

These are the Tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet, M31101.

These are the Tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Remove the left HF communication transceiver (HF-L comm xcvr), M23101

Do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (4) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (5) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M009) module from the left AIMS cabinet, M31101.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-27-11 and SSM 31-41-03).

J420-A

pin F13
pin G14

DM23101AA

pin A9
pin B9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Install the left HF communications transceiver, M23101.

To install it, do this task:

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HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- 3) Install the IOM(M009) module in the left AIMS cabinet, M31101.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

I. HF-L and HF-R Input Problems - Fault Isolation Procedure

- (1) Replace the IOM(M009) module in the left AIMS cabinet, M31101.

These are the Tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance messages, then continue.
- (2) Remove the left HF communication transceiver (HF-L comm xcvr), M23101
To remove it, do this task:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
- (3) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (4) Do these steps to do a check of the wiring:
 - (a) Remove the IOM(M009) module from the left AIMS cabinet, M31101.
To remove it, do this task:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-27-11 and SSM 31-41-03).

J420-A		DM23101AA
pin F13	.....	pin A9
pin G14	.....	pin B9

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the left HF communications transceiver, M23101.
To install it, do this task:
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801
 - 3) Install the IOM(M009) module in the left AIMS cabinet, M31101.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (5) Install the left HF communications transceiver, M23101.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (6) Remove the right HF communication transceiver (HF-R comm xcvr), M23201
To remove it, do this task:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
- (7) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (8) Do these steps to do a check of the wiring:
 - (a) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-27-11 and SSM 31-41-03).

J420-A	DM23201AA
pin F13	pin A9
pin G14	pin B9

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the right HF communications transceiver, M23201.
To install it, do this task:
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801
 - 3) Install the IOM(M009) module in the left AIMS cabinet, M31101.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

819. HF Transceiver Input Problems from right AIMS on DCMF INPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-59941, 23-59943.

B. Description

- (1) Use this task when HF Transceiver (L or R) has input problems from right AIMS on DCMF INPUT 429 Bus.

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C. Possible Causes

- (1) HF Communications Transceiver (L or R), M23101, M23201.
- (2) IOM(M009) in Right AIMS.
- (3) Wiring.

D. Circuit Breakers

- (1) These are the circuit breakers related to the fault.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

E. Related Data

- (1) WDM 23-27-12
- (2) SSM 31-41-06

F. Initial Evaluation

- (1) On the MAT, look for maintenance messages 23–59941 and 23–59943.
 - (a) If you do not see maintenance message 23–59941 or 23–59943, then there was an intermittent fault.
 - (b) If the MAT shows ACTIVE for maintenance message 23–59941, then do the FIM task below for HF-L input problems.
 - (c) If the MAT shows ACTIVE for maintenance message 23–59943, then do the FIM task below for HF-R input problems.
 - (d) If the MAT shows ACTIVE for both maintenance messages 23–59941 and 23–59943, then do the FIM task below for HF-L and HF-R input problems.

G. HF-L Input Problems - Fault Isolation Procedure

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Remove the left HF communication transceiver (HF-L comm xcvr), M23101
To remove it, do this task:

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HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (4) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (5) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M009) module from the right AIMS cabinet, M31201.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-27-12 and SSM 31-41-06).

J420-A	DM23101AA
pin F13	pin E9
pin G14	pin F9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.

- 2) Install the left HF communications transceiver, M23101.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- 3) Install the IOM(M009) module in the right AIMS cabinet, M31201.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

H. HF-R Input problems - Fault Isolation Procedure

- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the IOM(M009) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Remove the right HF communication transceiver (HF-R comm xcvr), M23201.

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (4) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (5) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M009) module from the right AIMS cabinet, M31201.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-27-12 and SSM 31-41-06).

J420-A	DM23201AA
pin F13	pin E9
pin G14	pin F9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.

- 2) Install the right HF communications transceiver, M23201.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- 3) Install the IOM(M009) module in the right AIMS cabinet, M31201.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

I. HF-L and HF-R Input Problems - Fault Isolation Procedure

- (1) Replace the IOM(M009) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance messages, then continue.

- (2) Remove the left HF communication transceiver (HF-L comm xcvr), M23101

To remove it do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

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- (3) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (4) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M009) module from the right AIMS cabinet, M31201.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-27-12 and SSM 31-41-06).

J420-A	DM23101AA
pin F13	pin E9
pin G14	pin F9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.

- 2) Install the left HF communications transceiver, M23101.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801

- 3) Install the IOM(M009) module in the right AIMS cabinet, M31201.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (d) If you do not find a problem with the wiring, then continue:

- (5) Install the left HF communications transceiver, M23101.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (6) Remove the right HF communication transceiver (HF-R comm xcvr), M23201.

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (7) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (8) Do these steps to do a check of the wiring:

- (a) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-27-12 and SSM 31-41-06).

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J420-A

pin F13 pin E9
pin G14 pin F9

DM23201AA

- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Install the IOM(M009) module in the right AIMS cabinet, M31201.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - 3) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

820. **HF-L Comm Xcvr No Output on DCMF OUTPUT 429 Bus - Fault Isolation**

A. **Maintenance Messages**

- (1) This task is for maintenance message: 23-51893.

B. **Description**

- (1) Use this task when the HF Communication Transceiver (Left) has no Output on the DCMF OUTPUT 429 Bus.

C. **Possible Causes**

- (1) HF Communications Transceiver (Left), M23101.
- (2) Wiring.

D. **Circuit Breakers**

- (1) This is the circuit breaker related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

E. **Related Data**

- (1) WDM 23-11-11
- (2) SSM 31-41-03
- (3) SSM 31-41-06

F. **Initial Evaluation**

- (1) On the MAT, look for maintenance message 23–51893
 - (a) If the MAT shows ACTIVE for maintenance message 23–51893, then do the FIM task below.
 - (b) If you do not see maintenance message 23–51893, then there was an intermittent fault.

G. **Fault Isolation Procedure**

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

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HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the left HF communication transceiver (HF-L comm xcvr), M23101
To remove it, do this task:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
- (3) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (4) Do these steps to do a check of the wiring:
 - (a) Remove the IOM(M003) module from the left AIMS cabinet, M31101.
To remove it, do this task:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J240-B at the left AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-11-11 and SSM 31-41-03).

J240-B	DM23101AA
pin A6	pin C9
pin B6	pin D9

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the left HF communications transceiver, M23101.
To install it, do this task:
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Install the IOM(M003) module in the left AIMS cabinet, M31101.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (5) Install the IOM(M003) module in the left AIMS cabinet, M31101.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
- (6) Do these steps to do a check of the wiring:
 - (a) Remove the IOM(M004) module from the right AIMS cabinet, M31201.
To remove it, do this task:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

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- (b) Do a wiring check between these pins of connector J250-B at the right AIMS cabinet and the left HF communication transceiver rack connector DM23101AA (WDM 23-11-11 and SSM 31-41-06).

J250-B	DM23101AA
pin A4	pin C9
pin B4	pin D9

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Install the left HF communications transceiver, M23101.
To install it, do this task:
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Install the IOM(M004) module in the right AIMS cabinet, M31201.
To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

821. HF-R Comm Xcvr No Output on DCMF OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51894.

B. Description

- (1) Use this task when HF Communication Transceiver (Right) no Output on DCMF OUTPUT 429 Bus.

C. Possible Causes

- (1) HF Communications Transceiver (Right), M23201.
- (2) Wiring.

D. Circuit Breakers

- (1) This is the circuit breaker related to the fault:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	15	C23300	R HF COMM

E. Related Data

- (1) WDM 23-11-21
- (2) SSM 31-41-03
- (3) SSM 31-41-06

F. Initial Evaluation

- (1) On the MAT, look for maintenance message 23-51894
 - (a) If you do not see maintenance message 23-51894, then there was an intermittent fault.

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- (b) If the MAT shows ACTIVE for maintenance message 23–51894, then do the FIM task below.

G. Fault Isolation Procedure

- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the right HF communication transceiver (HF-R comm xcvr), M23201

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

- (3) Make sure that this circuit breaker is open and has safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (4) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M004) module from the left AIMS cabinet, M31101.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J250-B at the left AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-11-21 and SSM 31-41-03).

J250-B

pin A4 pin C9
pin B4 pin D9

DM23201AA

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Install the right HF communications transceiver, M23201.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- 3) Install the IOM(M004) module in the left AIMS cabinet, M31101.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

- (d) If you do not find a problem with the wiring, then continue.

- (5) Install the IOM(M004) module in the left AIMS cabinet, M31101.

To install it, do this task:

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Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- (6) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (7) Do these steps to do a check of the wiring:

- (a) Remove the IOM(M003) module from the right AIMS cabinet, M31201.

To remove it, do this task:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Do a wiring check between these pins of connector J240-B at the right AIMS cabinet and the right HF communication transceiver rack connector DM23201AA (WDM 23-11-21 and SSM 31-41-06).

J240-B		DM23201AA
pin A6	.....	pin C9
pin B6	.....	pin D9

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.

- 2) Install the right HF communications transceiver, M23201.

To install it, do this task:

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- 3) Install the IOM(M003) module in the right AIMS cabinet, M31201.

To install it, do this task:

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- 4) If the MAT shows not active for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

822. HF-L Comm Xcvr has no Output on any Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51895.

B. Description

- (1) Use this task when HF Communication Transceiver (Left) has no Output on any Bus.

C. Possible Causes

- (1) HF Communication Transceiver (Left), M23101.
(2) Wiring.

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D. Circuit Breakers

- (1) This is the circuit breaker related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

E. Related Data

- (1) WDM 23-11-11

F. Initial Evaluation

- (1) On the MAT, look for maintenance message 23–51895.
- (a) If you do not see maintenance message 23–51895, then there was an intermittent fault.
 - (b) If the MAT shows ACTIVE only for maintenance message 23–51895, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows ACTIVE for maintenance messages 23-51895 and 23-51896 at the same time, then do these steps.
 - 1) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

- 2) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- 3) Use the MAT to do the HF-L Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801). If there are any failures, then do the Fault Isolation Procedure below.
- 4) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- 5) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- 6) Use the MAT to do the HF-R Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801). If there are any failures, then do the Fault Isolation Procedure for the maintenance message that shows.

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G. Fault Isolation Procedure

- (1) Replace the left HF communication transceiver (HF-L comm xcvr), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Make sure the HF communication transceiver (left) has power as follows:
- (a) Remove the left HF communication transceiver (HF-L comm xcvr), M23101.

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.

- (b) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (c) Do a check for approximately 115 VAC from pin 2 to pin 10, from pin 3 to pin 10, and from pin 7 to pin 10 of connector DM23101AC at the left HF communication transceiver (M23101) (WDM 23-11-11).
- (d) If you do not find 115 VAC from pin 2 to pin 10, from pin 3 to pin 10, and from pin 7 to pin 10 of connector DM23101AC, then continue:
- (3) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- (4) Do these steps to do a check of the wiring:
- (a) Do a wiring check between these pins of connector D5651P at circuit breaker C23301 and the left HF communication transceiver rack connector DM23101AC (WDM 23-11-11).

D5651P		DM23101AC
pin 9	.....	pin 2
pin 27	.....	pin 3
pin 28	.....	pin 7

- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Install the left HF communication Transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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823. HF-R Comm Xcvr has no Output on any Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51896.

B. Description

- (1) Use this task when HF Communication Transceiver (Right) has no Output on any Bus.

C. Possible Causes

- (1) HF Communication Transceiver (Right), M23201.
- (2) Wiring.

D. Circuit Breakers

- (1) This is the circuit breaker related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

E. Related Data

- (1) WDM 23-11-21

F. Initial Evaluation

- (1) On the MAT, look for maintenance message 23-51896.
 - (a) If you do not see maintenance message 23-51896, then there was an intermittent fault.
 - (b) If the MAT shows ACTIVE only for maintenance message 23-51896, then do the Fault Isolation Procedure below.
 - (c) If the MAT shows ACTIVE for maintenance messages 23-51896 and 23-51895 at the same time, then do these steps.
 - 1) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

- 2) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- 3) Use the MAT to do the HF-R Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801). If there are any failures, then do the Fault Isolation Procedure below.
- 4) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

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- 5) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

- 6) Use the MAT to do the HF-L Operational Test (HF Communication System - Operational Test, AMM TASK 23-11-00-710-801). If there are any failures, then do the Fault Isolation Procedure for the maintenance message that shows.

G. Fault Isolation Procedure

- (1) Replace the right HF communication transceiver (HF-R comm xcvr), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Make sure the HF communication transceiver (right) has power as follows:

- (a) Remove the right HF communication transceiver (HF-R comm xcvr), M23201.

To remove it, do this task:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.

- (b) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (c) Do a check for approximately 115 VAC from pin 2 to pin 10, from pin 3 to pin 10, and from pin 7 to pin 10 of connector DM23201AC at the right HF communication transceiver, M23201 (WDM 23-11-21).
- (d) If you do not find 115 VAC from pin 2 to pin 10, from pin 3 to pin 10, and from pin 7 to pin 10 of connector DM23201AC, then continue.
- (3) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

- (4) Do these steps to do a check of the wiring:
- (a) Do a wiring check between these pins of connector D5655P at circuit breaker C23300 and the right HF communication transceiver rack connector DM23201AC (WDM 23-11-21).

D5655P	DM23201AC
pin 32	pin 2
pin 31	pin 3
pin 30	pin 7

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- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the right HF communication Transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

824. HF-L Comm Xcvr Program Pin Failure

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51026.

B. Description

- (1) The left HF communications transceiver has detected that one of these programming pins is open when it should be grounded:
 - CFDS B
 - CFDS C
 - INHIBIT XMIT ON GND
 - MU BUS SPEED
 - PROG PIN PARITY

C. Possible Causes

- (1) Left HF Communications Transceiver (HF-L), M23101
- (2) Wiring

D. Circuit Breakers

- (1) This is the primary circuit breaker related to the fault.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM

E. Related Data

- (1) SSM 23-11-12
- (2) WDM 23-11-11

F. Initial Evaluation

- (1) On the MAT, look for maintenance message 23-51026.
 - (a) If the MAT shows ACTIVE for maintenance message 23-51026, then do the Fault Isolation Procedure below.
 - (b) If you do not see maintenance message 23-51026, then there was an intermittent fault.

G. Fault Isolation Procedure

- (1) Do these steps to do a check of the wiring:
 - (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring check between these pins of connector DM23101AA at the E6-1 shelf and airplane ground (WDM 23-11-11)

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DM23101AA	GBX1-S	
A3	GBX1-S	ground
A5	GBX1-S	ground
E3	GBX1-S	ground
F3	GBX1-S	ground
G3	GBX1-S	ground

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then replace the left HF communication transceiver (HF-L), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— **END OF TASK** —————

825. HF-R Comm Xcvr Program Pin Failure

A. Maintenance Messages

- (1) This task is for maintenance message: 23-51027.

B. Description

- (1) The right HF communications transceiver has detected that one of these programming pins is open when it should be grounded:
- CFDS B
 - CFDS C
 - INHIBIT XMIT ON GND
 - MU BUS SPEED
 - PROG PIN PARITY

C. Possible Causes

- (1) Right HF Communications Transceiver (HF-R), M23201
- (2) Wiring

D. Circuit Breakers

- (1) This is the primary circuit breaker related to the fault.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	15	C23300	R HF COMM

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E. Related Data

- (1) SSM 23-11-22
- (2) WDM 23-11-21

F. Initial Evaluation

- (1) On the MAT, look for maintenance message 23-51027.
 - (a) If the MAT shows ACTIVE for maintenance message 23-51027, then do the Fault Isolation Procedure below.
 - (b) If you do not see maintenance message 23-51027, then there was an intermittent fault.

G. Fault Isolation Procedure

- (1) Do these steps to do a check of the wiring:
 - (a) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring check between these pins of connector DM23201AA at the E6-1 shelf and airplane ground (WDM 23-11-21)

DM23201AA	GBX2-S	
pin A3	GBX2-S	ground
pin A5	GBX2-S	ground
pin E3	GBX2-S	ground
pin F3	GBX2-S	ground
pin G3	GBX2-S	ground

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— **END OF TASK** —————

826. HF-L Comm Xcvr has no input from Left AIMS on IRS Input Bus.

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59944.

B. Description

- (1) The left HF communication transceiver is not receiving ARINC 429 IRU data from the left AIMS cabinet over the position input bus.

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C. Possible Causes

- (1) Left HF Communications Transceiver (HF-L), M23101
- (2) IOM (M008) module from the left AIMS cabinet, M31101
- (3) Wiring

D. Related Data

- (1) SSM 31-41-31
- (2) WDM 31-41-31

E. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 23-69909
 - 34-10082
 - 34-9920
 - 34-49922
 - 34-49937
 - 34-49961
 - 34-50005
 - 34-50011
 - 34-59931
 - 34-59932
- (a) If the MAT shows ACTIVE for all of the maintenance messages, including 23-59944, then do the Total Left AIMS Inertial Reference Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59944 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59944, then there was an intermittent fault.

F. Total Left AIMS Inertial Reference Bus Failure - Fault Isolation

- (1) Replace the IOM (M008) module in the left AIMS cabinet, M31101.
These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance messages, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM (M008) from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
 - (b) Do a wiring check between these pins of connector J410-A of the left AIMS cabinet, M31101, and terminal block TB3005 on the left integration panel, P105 (WDM 31-41-31):

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J410-A	TB3005
pin F13	pin UA41
pin G14	pin UB41

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM (M008) in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.

G. Local Bus Failure - Fault Isolation

- (1) Do this check of the wiring:
- (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring continuity check between these pins of connectors DM23101AA at the E6-1 shelf and terminal block TB1402 on the E1-4 shelf WDM 31-41-31:

DM23101AA	TB1402
pin E7	pin UA93
pin F7	pin UB93

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— END OF TASK —————

827. HF-R Comm Xcvr has no input from Right AIMS on IRS Input Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59945.

B. Description

- (1) The right HF communication transceiver is not receiving ARINC 429 IRU data from the right AIMS cabinet over the position input bus.

C. Possible Causes

- (1) Right HF Communications Transceiver (HF-R), M23201
- (2) IOM (M008) module from the right AIMS cabinet, M31201

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(3) Wiring

D. Related Data

- (1) SSM 31-41-31
- (2) WDM 34-41-32

E. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 23-69911
 - 34-49919
 - 34-49923
 - 34-49964
 - 34-50006
 - 34-50012
 - 34-59934
 - 34-59935
- (a) If the MAT shows ACTIVE for all of the maintenance messages, including 23-59945, then do the Total Right AIMS Inertial Reference Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59945 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59945, then there was an intermittent fault.

F. Total Right AIMS Inertial Reference Bus Failure - Fault Isolation

- (1) Replace the IOM (M008) module in the right AIMS cabinet, M31201.
These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance messages, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM (M008) from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
 - (b) Do a wiring check between these pins of connector J410-A of the right AIMS cabinet, M31201, and terminal block TB2302 on the E2-3 shelf (WDM 34-41-32):

J410-A	TB2302
pin F13	pin UA65
pin G14	pin UB65

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM (M008) in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- 3) If the MAT shows NOT ACTIVE for the maintenance messages (or if the messages do not show), you corrected the fault.

G. Local Bus Failure - Fault Isolation

- (1) Do this check of the wiring:
 - (a) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring continuity check between these pins of connectors DM23201AA at the E6-1 shelf and terminal block TB2302 at the E2-3 shelf WDM 34-41-32:

DM23201AA	TB2302
pin E7	pin UA61
pin F7	pin UB61

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— END OF TASK —————

828. HF-L Comm Xcvr has no input from ATC/Mode S Transponder (left) on ATC-L XT Coord #1 Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59946.

B. Description

- (1) The left HF communication transceiver is not receiving ARINC 429 data from the left ATC/Mode S Transponder over the ICAO Address #1 bus.

C. Possible Causes

- (1) ATC/Mode S Transponder (left), M34107
- (2) HF Communication Transceiver (left), M23101
- (3) Wiring

D. Circuit Breakers

- (1) These are the circuit breakers related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C34445	ATC L
G	2	C23301	L HF COMM

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E. Related Data

- (1) SSM 23-11-12
- (2) SSM 34-53-11
- (3) WDM 23-11-11
- (4) WDM 34-53-12

F. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 31-52271
 - 31-58322
 - 31-69949
 - 31-69950
- (a) If the MAT shows ACTIVE for all of the above maintenance messages, including 23-59946, then do the Total ATC-L XT Coord #1 Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59946 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59946, then there was an intermittent fault.

G. Total ATC-L XT Coord #1 Bus Failure - Fault Isolation

- (1) Replace the left ATC/Mode S Transponder, M34107.

These are the tasks:
ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801,
ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left ATC/Mode S Transponder. To remove it, do this task: ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801
 - (b) Do a wiring continuity check between these pins of connectors DM34107AA and terminal block TB1301 at the E1-3 shelf WDM 34-53-12:

DM34107AA	TB1301
pin G5	pin UA37
pin H5	pin UB37
- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left ATC/Mode S Transponder, M34107. To install it, do this task: ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for all of the maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.

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These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

H. Local Bus Failure - Fault Isolation

(1) Do this check of the wiring:

- (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Do a wiring continuity check between these pins of connectors DM23101AA and terminal block TB6101 at the E6-1 shelf WDM 23-11-11:

DM23101AA	TB6101
pin C3	pin QA21
pin B3	pin QB21

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for all of the maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

— END OF TASK —

829. HF-R Comm Xcvr has no input from ATC/Mode S Transponder (left) on ATC-L XT Coord #1 Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59947.

B. Description

- (1) The right HF communication transceiver is not receiving ARINC 429 data from the left ATC/Mode S Transponder over the ICAO Address #1 bus.

C. Possible Causes

- (1) ATC/Mode S Transponder (left), M34107
- (2) HF Communication Transceiver (right), M23201
- (3) Wiring

D. Circuit Breakers

- (1) These are the circuit breakers related to the fault:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
E	25	C34446	ATC R
G	15	C23300	R HF COMM

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E. Related Data

- (1) SSM 23-11-12
- (2) SSM 34-53-11
- (3) WDM 23-11-11
- (4) WDM 34-53-12

F. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 31-52271
 - 31-58322
 - 31-69949
 - 31-69950
- (a) If the MAT shows ACTIVE for all of the above maintenance messages, including 23-59947, then do the Total ATC-L XT Coord #1 Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59947 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59947, then there was an intermittent fault.

G. Total ATC-L XT Coord #1 Bus Failure - Fault Isolation

- (1) Replace the left ATC/Mode S Transponder, M34107.
These are the tasks:
ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801,
ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left ATC/Mode S Transponder. To remove it, do this task: ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801
 - (b) Do a wiring continuity check between these pins of connectors DM34107AA and terminal block TB1301 at the E1-3 shelf WDM 34-53-12:

DM34107AA	TB1301
pin G5	pin UA37
pin H5	pin UB37
- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left ATC/Mode S Transponder, M34107. To install it, do this task: ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for all of the maintenance messages (or if the messages do not show), you corrected the fault.

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- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

H. Local Bus Failure - Fault Isolation

- (1) Do this check of the wiring:

- (a) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Do a wiring continuity check between these pins of connectors DM23201AA and terminal block TB6101 at the E6-1 shelf WDM 23-11-11:

DM23201AA	TB6101
pin B3	pin QA21
pin C3	pin QB21

- (c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

———— **END OF TASK** ————

830. HF-L Comm Xcvr has no input from ATC/Mode S Transponder (right) on ATC-R XT Coord #2 Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59949.

B. Description

- (1) The left HF communication transceiver is not receiving ARINC 429 data from the right ATC/Mode S Transponder over the ICAO Address #2 bus.

C. Possible Causes

- (1) ATC/Mode S Transponder (right), M34207
- (2) HF Communication Transceiver (left), M23101
- (3) Wiring

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D. Circuit Breakers

- (1) These are the circuit breakers related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C34446	ATC R
G	2	C23301	L HF COMM

E. Related Data

- (1) SSM 23-11-12
- (2) SSM 34-53-21
- (3) WDM 23-11-11
- (4) WDM 34-53-22

F. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 31-52272
 - 31-54211
 - 31-69951
 - 31-69952
- (a) If the MAT shows ACTIVE for all of the maintenance messages, including 23-59946, then do the Total ATC-R XT Coord #2 Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59949 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59949, then there was an intermittent fault.

G. Total ATC-R XT Coord #2 Bus Failure - Fault Isolation

- (1) Replace the right ATC/Mode S Transponder, M32107.

These are the tasks:

ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801,
ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue. If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right ATC/Mode S Transponder. To remove it, do this task: ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801
 - (b) Do a wiring continuity check between these pins of connector DM34127AA and terminal block TB2301 at the E2-3 shelf WDM 34-53-22:

DM34207AA	TB2301
pin G5	pin UA45
pin H5	pin UB45
- (c) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
 - 2) Re-install the right ATC/Mode S Transponder, M34207. To install it, do this task: ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for all of the maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.
- These are the tasks:
- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

H. Local Bus Failure - Fault Isolation

- (1) Do this check of the wiring:
- (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring continuity check between these pins of connector DM23101AA and terminal block TB6101 at the E6-1 shelf WDM 23-11-21:

DM23101AA	TB6101
pin C7	pin QA23
pin D7	pin QB23

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.
- These are the tasks:
- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— END OF TASK —————

831. HF-R Comm Xcvr has no input from ATC/Mode S Transponder (right) on ATC-R XT Coord #2 Bus

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59950.

B. Description

- (1) The right HF communication transceiver is not receiving ARINC 429 data from the right ATC/Mode S Transponder over the ICAO Address #2 bus.

C. Possible Causes

- (1) ATC/Mode S Transponder (right), M34207
- (2) HF Communication Transceiver (right), M23201

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(3) Wiring

D. Circuit Breakers

(1) These are the circuit breakers related to the fault:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C34446	ATC R
G	15	C23300	R HF COMM

E. Related Data

- (1) SSM 23-11-12
- (2) SSM 34-53-21
- (3) WDM 23-11-21
- (4) WDM 34-53-22

F. Initial Evaluation

- (1) On the MAT, look for these maintenance messages:
 - 31-52272
 - 31-54211
 - 31-69951
 - 31-69952
- (a) If the MAT shows ACTIVE for all of the maintenance messages, including 23-59950, then do the Total ATC-R XT Coord #2 Bus Failure - Fault Isolation procedure below.
- (b) If the MAT shows ACTIVE for maintenance message 23-59950 only, then do the Local Bus Failure - Fault Isolation procedure below.
- (c) If you do not see maintenance message 23-59950, then there was an intermittent fault.

G. Total ATC-R XT Coord #2 Bus Failure - Fault Isolation

- (1) Replace the right ATC/Mode S Transponder, M32207.
These are the tasks:
ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801,
ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right ATC/Mode S Transponder. To remove it, do this task: ATC/Mode S Transponder Removal, AMM TASK 34-53-01-000-801
 - (b) Do a wiring continuity check between these pins of connectors DM34207AA and terminal block TB2301 at the E2-3 shelf WDM 34-53-22:

DM34207AA	TB2301
pin G5	pin UA45
pin H5	pin UB45

- (c) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
 - 2) Re-install the right ATC/Mode S Transponder, M34207. To install it, do this task: ATC/Mode S Transponder Installation, AMM TASK 34-53-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for all five maintenance messages (or if the messages do not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.
- These are the tasks:
- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

H. Local Bus Failure - Fault Isolation

- (1) Do this check of the wiring:
- (a) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring continuity check between these pins of connector DM23201AA and terminal block TB6101 at the E6-1 shelf WDM 23-11-21:
- | DM23201AA | TB6101 |
|-----------|----------|
| pin C7 | pin QA23 |
| pin D7 | pin QB23 |
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance messages (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, replace the right HF communication transceiver (HF-R), M23201.
- These are the tasks:
- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— END OF TASK —————

832. HF-L Crosstalk Input Bus Activity Failure - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59952.

B. Description

- (1) The Left HF Communication Transceiver is not receiving ARINC 429 data from the Right HF Transceiver over the Crosstalk Input Bus.

C. Possible Causes

- (1) Right HF Communication Transceiver (HF-R), M23201
- (2) Left HF Communication Transceiver (HF-L), M23101

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- (3) Wiring

D. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

E. Related Data

- (1) SSM 23-11-12
(2) WDM 23-11-11

F. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

- (2) On the MAT, look for maintenance message 23-59952.
- (a) If the MAT shows ACTIVE for maintenance message 23-59952, then do the Fault Isolation Procedure below.
- (b) If the MAT shows NOT ACTIVE for maintenance message 23-59952, then there was an intermittent problem.

G. Fault Isolation Procedure

- (1) Replace the Right HF Communication Transceiver (HF-R), M23201. These are the tasks:
- HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801
 - HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (2) If the problem continues after the HF-R Transceiver replacement, do this check of the Crosstalk Bus Wiring between HF-L and HF-R.
- (a) Remove the Left HF Communication Transceiver, M23101. Do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Remove the Right HF Communication Transceiver, M23201. Do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (c) Do a wiring continuity check between these pins of connectors DM23101AA and DM23201AA at the E6-1 shelf (WDM 23-11-11):

DM23101AA	DM23201AA
pin J5	pin G5
pin K5	pin H5

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the Left HF Communication Transceiver, M23101. Do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

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- 3) Re-install the Right HF Communication Transceiver, M23201. Do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.
- (e) If you do not find a problem with the wiring, replace the Right HF Communication Transceiver (HF-R), M23201. These are the tasks:
 - HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801
 - HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the problem.

————— END OF TASK —————

833. HF-R Crosstalk Input Bus Activity Failure

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59953.

B. Description

- (1) The right HF communication transceiver is not receiving ARINC 429 data from the left HF transceiver over the crosstalk input bus.

C. Possible Causes

- (1) Left HF Communication Transceiver (HF-L), M23101
- (2) Right HF Communication Transceiver (HF-R), M23201
- (3) Wiring

D. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

E. Related Data

- (1) SSM 23-11-12
- (2) WDM 23-11-11

F. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	2	C23301	L HF COMM
G	15	C23300	R HF COMM

- (2) On the MAT, look for maintenance message 23-59953.
 - (a) If the MAT shows ACTIVE for maintenance message 23-59953, then do the Fault Isolation Procedure below.
 - (b) If you do not see maintenance message 23-59953, then there was an intermittent fault.

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G. Fault Isolation Procedure

- (1) Replace the left HF communication transceiver (HF-L), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (2) If the fault continues after HF-L transceiver replacement, do this check of the crosstalk bus wiring between HF-L and HF-R.
 - (a) Remove the left HF communication transceiver, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Remove the right HF communication transceiver, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (c) Do a wiring continuity check between these pins of connectors DM23201AA and DM23101AA at the E6-1 shelf (WDM 23-11-11):

DM23201AA

pin J5

pin K5

DM23101AA

pin G5

pin H5

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left HF communication transceiver, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 3) Re-install the right HF communication transceiver, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, replace the left HF communication transceiver (HF-L), M23101.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

————— **END OF TASK** —————

834. HF System Operation Is Intermittent At High Altitudes - Fault Isolation

A. Description

- (1) HF operation of either the HF-L or HF-R system is intermittent, or does not tune, at high altitudes, but operates normally on the ground or at low altitudes.

NOTE: This fault indicates that the HF coupler has lost internal pressurization.

B. Possible Causes

- (1) High Frequency Coupler, Left, M23102
- (2) High Frequency Coupler, Right, M23202

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C. Fault Isolation Procedure

- (1) Replace the HF coupler for the affected system. These are the tasks:
HF Communication Antenna Coupler Removal, AMM TASK 23-11-03-000-801
HF Communication Antenna Coupler Installation, AMM TASK 23-11-03-400-801

————— **END OF TASK** —————

835. HF Transceiver (left) - internal cooling fan does not operate - Fault Isolation

A. Possible Causes

- (1) HF transceiver, M23101

B. Related Data

- (1) WDM 23-11-11.

C. Initial Evaluation

- (1) Do a test for the internal cooling fan of the left HF Communication Transceiver (HF Communication System - System Test, AMM TASK 23-11-00-730-801).
 - (a) If the test of the internal cooling fan is satisfactory, then do the repair confirmation at the end of this task to make sure that the left HF communication system is serviceable.
 - (b) If the test of the internal cooling fan is not satisfactory, then do the fault isolation procedure below.

D. Fault Isolation Procedure

- (1) Replace the left HF communication transceiver, M23101.
These are the tasks:
HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,
HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - (a) If the internal cooling fan test is satisfactory, then you corrected the fault.

E. Repair Confirmation

- (1) Do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.

————— **END OF TASK** —————

836. HF Transceiver (right) - internal cooling fan does not operate - Fault Isolation

A. Possible Causes

- (1) HF transceiver, M23201

B. Related Data

- (1) WDM 23-11-21.

C. Initial Evaluation

- (1) Do a test for the internal cooling fan of the right HF Communication Transceiver (HF Communication System - System Test, AMM TASK 23-11-00-730-801).
 - (a) If the test of the internal cooling fan is satisfactory, then do the repair confirmation at the end of this task to make sure that the right HF communication system is serviceable.
 - (b) If the test of the internal cooling fan is not satisfactory, then do the fault isolation procedure below.

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D. Fault Isolation Procedure

- (1) Replace the right HF communication transceiver, M23201.

These are the tasks:

HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801,

HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.

- (a) If the internal cooling fan test is satisfactory, then you corrected the fault.

E. Repair Confirmation

- (1) Do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.

———— **END OF TASK** ————

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801. RTP-L Internal Fault Or RTP-L Is Off - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52001.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is off at the left radio tuning panel (RTP-L).
 - (a) If the PNL OFF switch light is off, then push the PNL OFF switch.
 - (b) If the PNL OFF switch light is on, then continue.
- (2) Replace the left RTP, M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

802. RTP-R Internal Fault Or RTP-R Is Off - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52002.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is off at the right radio tuning panel (RTP-R).
 - (a) If the PNL OFF switch light is off, then push the PNL OFF switch.
 - (b) If the PNL OFF switch light is on, then continue.
- (2) Replace the right RTP, M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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803. RTP-C Internal Fault Or RTP-C Is Off - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52003.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is off at the center radio tuning panel (RTP-C).
 - (a) If the PNL OFF switch light is off, then push the PNL OFF switch.
 - (b) If the PNL OFF switch light is on, then continue.
- (2) Replace the center RTP, M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

804. RTP-L No Input from RTP-C on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52011.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:

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- (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23005 and connector DM23007 at the aft aisle stand panel, P8 (WDM 23-12-31):

DM23005	DM23007
pin 8	pin 5
pin 9	pin 6

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

805. RTP-R No Input from RTP-L on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52012.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

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Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 and connector DM23006 at the aft aisle stand panel, P8 (WDM 23-12-11):

DM23006		DM23005
pin 8	.....	pin 5
pin 9	.....	pin 6
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

806. RTP-C No Input from RTP-L on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52013.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23005 and connector DM23007 at the aft aisle stand panel, P8 (WDM 23-12-11):
- | DM23007 | DM23005 |
|-----------------|---------|
| pin 8 | pin 5 |
| pin 9 | pin 6 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

807. RTP-L No Input from RTP-R on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52021.

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B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 and connector DM23006 at the aft aisle stand panel, P8 (WDM 23-12-21):

DM23005	DM23006
pin 11	pin 5
pin 12	pin 6

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new right radio tuning panel (RTP), M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) Make sure the PNL OFF switch light is off at the right radio tuning panel.

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- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

808. RTP-R No Input from RTP-C on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52022.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
(b) If the MAT shows ACTIVE for the maintenance message, then continue.
(2) Do this check of the wiring:
(a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
(b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
(c) Do a wiring check between these pins of connector DM23006 and connector DM23007 at the aft aisle stand panel, P8 (WDM 23-12-31):

DM23006

pin 11
pin 12

DM23007

pin 5
pin 6

- (d) If you find a problem with the wiring, then do these steps:
1) Repair the wiring.
2) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

809. RTP-C No Input from RTP-R on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52023.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23006 and connector DM23007 at the aft aisle stand panel, P8 (WDM 23-12-21):

DM23007

pin 11 pin 5
pin 12 pin 6

DM23006

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- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

810. RTP-L Input from RTP-C on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52041.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the center RTP, M23007.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

811. RTP-R Input from RTP-L on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52042.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
(b) If the MAT shows ACTIVE for the maintenance message, then continue.
(2) Replace the left RTP, M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

812. RTP-C Input from RTP-L on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52043.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left RTP, M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

813. RTP-L Input from RTP-R on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52051.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right RTP, M23006.

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These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

814. RTP-R Input from RTP-C on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52052.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the center RTP, M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

815. RTP-C Input from RTP-R on Output-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52053.

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B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right RTP, M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

816. RTP-L Input from AIMS-L on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52071.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

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Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

817. RTP-R Input from AIMS-L on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52072.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

818. RTP-C Input from AIMS-L on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52073.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

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Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

819. RTP-L Input from AIMS-R on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52081.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

820. RTP-R Input from AIMS-R on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52082.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

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These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

821. RTP-C Input from AIMS-R on GP-2 429 Bus is Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52083.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

822. RTP-C Output-2 429 Bus Signals are Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52123.

B. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

823. **RTP-L No Output on Output-1 429 Bus - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52891.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
- 1) If the system test was satisfactory, then ignore this maintenance message.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Remove the left VHF communication Transceiver (VHF comm xcvr), M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (c) Do a wiring check between these pins of connector DM23103AB at the E1-3 shelf and connector DM23005 at the aft aisle stand panel (WDM 23-12-11):

DM23103AB

pin A11 pin 2
pin B11 pin 3

DM23005

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- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (4) Do this check of the wiring:
- (a) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the E1-3 and DM23203AB at the E2-3 shelf (WDM 23-12-11):

DM23103AB

pin A11
pin B11

DM23203AB

pin A7
pin B7

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (5) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (6) Do this check of the wiring:
- (a) Remove the IOM(M004) module in the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the E1-2 shelf and J250-A at the E3-1 shelf (WDM 23-12-11):

DM23103AB

pin A11
pin B11

J250-A

pin A5
pin B5

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.

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- 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (7) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (8) Do this check of the wiring:
- (a) Remove the IOM(M003) module in the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the aft aisle stand panel and J240-A at the E2-1 shelf (WDM 23-12-11):
- | DM23103AB | J240-A |
|-------------------|---------------|
| pin A11 | pin A5 |
| pin B11 | pin B5 |
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M003) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (9) Re-install the IOM(M003) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do this check of the wiring:
- (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the E1-3 and DM23303AB at the E1-2 shelf (WDM 23-12-11):
- | DM23103AB | DM23303AB |
|-------------------|------------------|
| pin A11 | pin A11 |
| pin B11 | pin B11 |
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (11) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (12) Do this check of the wiring:
 - (a) Remove the left HF comm xcvr, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the E1-3 and DM23101AB at the E6-1 shelf (WDM 23-12-11):

DM23103AB	DM23101AB
pin A11	pin E3
pin B11	pin F3

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (13) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (14) Do this check of the wiring:
 - (a) Remove the right HF comm xcvr, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring check between these pins of connector DM23103AB at the E1-3 and DM23201AB at the E6-1 shelf (WDM 23-12-11):

DM23103AB	DM23201AB
pin A11	pin G3
pin B11	pin H3

- (c) Repair any wiring problems you find.
- (d) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (e) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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824. RTP-R No Output on Output-1 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52892.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
 - 1) If the system test was satisfactory, then ignore this maintenance message.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the right VHF Communication Transceiver (VHF comm xcvr), M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (c) Do a wiring check between these pins of connector DM23203AB at the E2-3 shelf and connector DM23006 at the aft aisle stand panel, P8 (WDM 23-12-21):

DM23203AB	DM23006
pin A11	pin 2
pin B11	pin 3
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the left VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (4) Do this check of the wiring:
 - (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Do a wiring check between these pins of connector DM23203AB at the E2-3 and DM23303AB at the E1-2 shelf (WDM 23-12-21):

DM23203AB	DM23303AB
pin A11	pin A7
pin B11	pin B7
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (5) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (6) Do this check of the wiring:
 - (a) Remove the IOM(M003) module in the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector DM23203AB at the E2-3 shelf and J240-A at the E3-1 shelf (WDM 23-12-21):

DM23203AB	J240-A
pin A11	pin A5
pin B11	pin B5
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (7) Re-install the IOM(M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (8) Do this check of the wiring:
- (a) Remove the IOM(M004) module in the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector DM23203AB at the E2-3 shelf and J250-A at the E2-1 shelf (WDM 23-12-21):

DM23203AB	J250-A
pin A11	pin A5
pin B11	pin B5

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (9) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do this check of the wiring:
- (a) Remove the left HF comm xcvr, M23101. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
- (b) Do a wiring check between these pins of connector DM23203AB at the E2-3 and DM23101AB at the E6-1 shelf (WDM 23-12-21):

DM23203AB	DM23101AB
pin A11	pin G3
pin B11	pin H3

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.

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- (11) Re-install the left HF comm xcvr, M23101. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (12) Do this check of the wiring:
 - (a) Remove the right HF comm xcvr, M23201. To remove it, do this task: HF Communication Transceiver Removal, AMM TASK 23-11-05-000-801.
 - (b) Do a wiring check between these pins of connector DM23203AB at the E2-3 and DM23201AB at the E6-1 shelf (WDM 23-12-21):

DM23203AB	DM23201AB
pin A11	pin E3
pin B11	pin F3

- (c) Repair any wiring problems you find.
- (d) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (e) Re-install the right HF comm xcvr, M23201. To install it, do this task: HF Communication Transceiver Installation, AMM TASK 23-11-05-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

825. RTP-C No Output on Output-1 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52893.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, but it has been an intermittent fault, then do these steps:

NOTE: The HF transceiver can reset during normal operation. This can cause this maintenance message to show temporarily.

- (a) To communicate with another airplane or ground control station, do this task: HF Communication System - System Test, AMM TASK 23-11-00-730-801.
 - 1) If the system test was satisfactory, then ignore this maintenance message.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

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Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23006 and connector DM23007 at the aft aisle stand panel (WDM 23-12-31):

DM23006	DM23007
pin 18	pin 2
pin 19	pin 3

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If you do not find a problem with the wiring, then continue.
 - (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (4) Do this check of the wiring:
 - (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Do a wiring check between these pins of connector DM23005 and connector DM23007 at the aft aisle stand panel (WDM 23-12-31):

DM23005	DM23007
pin 18	pin 2
pin 19	pin 3

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (d) If you do not find a problem with the wiring, then continue.
- (5) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (6) Do this check of the wiring:
- (a) Remove the IOM(M008) module in the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector DM23007 at the P8 panel and J410-A at the E3-1 shelf (WDM 23-12-31):
- | DM23007 | J410-A |
|----------------|---------------|
| pin 2 | pin A2 |
| pin 3 | pin B2 |
- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the IOM(M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (7) Re-install the IOM(M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (8) Do this check of the wiring:
- (a) Remove the IOM(M008) module in the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector DM23007 at the P8 panel and J410-A at the E2-1 shelf (WDM 23-12-31):
- | DM23007 | J410-A |
|----------------|---------------|
| pin 2 | pin A2 |
| pin 3 | pin B2 |
- (c) Repair any wiring problems you find.
- (d) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (e) Re-install the IOM(M008) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

826. VHF-L Comm Xcvr has an Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53001.

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B. Fault Isolation Procedure

- (1) Replace the left VHF communication transceiver (VHF-L comm xcvr), M23103.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

827. VHF-R Comm Xcvr has an Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53002.

B. Fault Isolation Procedure

- (1) Replace the right VHF communication transceiver (VHF-R comm xcvr), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

828. VHF-C Comm Xcvr has an Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53003.

B. Fault Isolation Procedure

- (1) Replace the center VHF communication transceiver (VHF-C comm xcvr), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

829. Left VHF Comm Antenna (Open or Shorted) Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53031.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the left VHF communication antenna (VHF comm antenna), M23104.

These are the tasks:

VHF Communication Antenna - Removal, AMM TASK 23-12-03-000-801,

VHF Communication Antenna - Installation, AMM TASK 23-12-03-400-801.

- (a) Do these steps to do a transmit test with the left VHF communication system:
- 1) Do these steps at a radio tuning panel (P8):
 - a) Push the VHF L switch.
 - b) Set the STANDBY frequency display to an approved test frequency.
 - c) Push the display transfer switch.
 - 2) Use a headset when you do the next step.
 - 3) Do these steps at the applicable audio control panel:
 - a) Push the VHF L transmit switch.
 - b) Adjust the VHF L receiver control for a satisfactory sound level.
 - c) Push and hold the push-to-talk (PTT) switch to transmit while you speak to the other radio operator.
 - d) Release the PTT switch while you listen to the other radio operator.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the coaxial cable between the left VHF communication transceiver (VHF comm xcvr), M23103, and the left VHF comm antenna, M23104 (AMM TASK 20-10-32-210-801) (WDM 23-12-12):
- (3) If you find a problem with the coaxial cable, then do these steps:
- (a) Replace or repair the coaxial cable (WDM 23-12-12).
 - (b) Do a transmit test with the left VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left VHF comm xcvr, M23103.
- These are the tasks:
- VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (a) Do a transmit test with the left VHF communication system.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

830. Right VHF Comm Antenna (Open or Shorted) Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53032.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right VHF communication antenna (VHF comm antenna), M23204.

These are the tasks:

VHF Communication Antenna - Removal, AMM TASK 23-12-03-000-801,

VHF Communication Antenna - Installation, AMM TASK 23-12-03-400-801.

- (a) Do these steps to do a transmit test with the right VHF communication system:
 - 1) Do these steps at a radio tuning panel (P8):
 - a) Push the VHF R switch.
 - b) Set the STANDBY frequency display to an approved test frequency.
 - c) Push the display transfer switch.
 - 2) Use a headset when you do the next step.
 - 3) Do these steps at the applicable audio control panel:
 - a) Push the VHF R transmit switch.
 - b) Adjust the VHF R receiver control for a satisfactory sound level.
 - c) Push and hold the push-to-talk (PTT) switch to transmit while you speak to the other radio operator.
 - d) Release the PTT switch while you listen to the other radio operator.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the coaxial cable between the right VHF communication transceiver (VHF comm xcvr), M23203, and the right VHF comm antenna, M23204 (AMM TASK 20-10-32-210-801) (WDM 23-12-22):
- (3) If you find a problem with the coaxial cable, then do these steps:
 - (a) Replace or repair the coaxial cable (WDM 23-12-22).
 - (b) Do a transmit test with the right VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right VHF comm xcvr, M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) Do a transmit test with the right VHF communication system.



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- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

831. Center VHF Comm Antenna (Open or Shorted) Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53033.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the center VHF communication antenna (VHF comm antenna), M23304.

These are the tasks:

VHF Communication Antenna - Removal, AMM TASK 23-12-03-000-801,

VHF Communication Antenna - Installation, AMM TASK 23-12-03-400-801.

- (a) Do these steps to do a transmit test with the center VHF communication system:
- 1) Do these steps at a radio tuning panel (P8):
 - a) Push the VHF C switch.
 - b) Set the STANDBY frequency display to an approved test frequency.
 - c) Push the display transfer switch.
 - 2) Use a headset when you do the next step.
 - 3) Do these steps at the applicable audio control panel:
 - a) Push the VHF C transmit switch.
 - b) Adjust the VHF C receiver control for a satisfactory sound level.
 - c) Push and hold the push-to-talk (PTT) switch to transmit while you speak to the other radio operator.
 - d) Release the PTT switch while you listen to the other radio operator.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the coaxial cable between the center VHF communication transceiver (VHF comm xcvr), M23303, and the center VHF comm antenna, M23304 (AMM TASK 20-10-32-210-801) (WDM 23-12-32):
- (3) If you find a problem with the coaxial cable, then do these steps:
- (a) Replace or repair the coaxial cable (WDM 23-12-32).
 - (b) Do a transmit test with the center VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the center VHF comm xcvr, M23303.

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These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) Do a transmit test with the center VHF communication system.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

832. VHF-L Comm Xcvr No Output on CMC OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53891.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left VHF communication transceiver (VHF comm xcvr), M23103.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the left VHF comm xcvr, M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C23601	VHF COMM L

- (4) Do a check for 28 VDC from pin 2 to pin 4 of connector DM23103AC at the E1-3 shelf (WDM 23-12-12):
- (5) If there is not 28 VDC at pin 2 of connector DM23103AC, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (6) If there is 28 VDC at pin 2 of connector DM23103AC, then continue.
(7) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C23601	VHF COMM L

- (8) Do this check of the wiring:
- (a) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector J420-B at the E3-1 shelf and connector DM23103AB at the E1-3 shelf (WDM 23-12-12):

J420-B		DM23103AB
pin A3	.....	pin C14
pin B3	.....	pin D14

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (9) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do this check of the wiring:
- (a) Remove the IOM(M009) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Do a wiring check between these pins of connector J420-B at the E2-1 shelf and connector DM23103AB at the E1-3 shelf (WDM 23-12-12):

J420-B		DM23103AB
pin A1	.....	pin C14
pin B1	.....	pin D14

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M009) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:

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- (11) Re-install the IOM(M009) module in the right AIMS cabinet, M31201. To install it, do this task:
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (12) Replace the IOM(M009) module in the left AIMS cabinet, M31101.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (13) Replace the IOM(M009) module in the left AIMS cabinet, M31101, with the initial IOM(M009) module.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (14) Replace the IOM(M009) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

833. VHF-R Comm Xcvr No Output on CMC OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53892.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right VHF communication transceiver (VHF comm xcvr), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	21	C23600	VHF COMM R

- (4) Do a check for 28 VDC from pin 2 to pin 4 of connector DM23203AC at the E2-3 shelf (WDM 23-12-22):
- (5) If there is not 28 VDC at pin 2 of connector DM23203AC, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (6) If there is 28 VDC at pin 2 of connector DM23203AC, then continue.
- (7) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	21	C23600	VHF COMM R

- (8) Do this check of the wiring:
 - (a) Remove the IOM(M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J250-B at the E3-1 shelf and connector DM23203AB at the E1-3 shelf (WDM 23-12-22):

J250-B		DM23203AB
pin A3	.....	pin C14
pin B3	.....	pin D14

- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (9) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do this check of the wiring:
 - (a) Remove the IOM(M004) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

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- (b) Do a wiring check between these pins of connector J250-A at the E2-1 shelf and connector DM23203AB at the E1-3 shelf (WDM 23-12-22):

J250-A	DM23203AB
pin A7	pin C14
pin B7	pin D14

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M004) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (11) Re-install the IOM(M004) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (12) Replace the IOM(M004) module in the left AIMS cabinet, M31101.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (13) Replace the IOM(M004) module in the left AIMS cabinet, M31101, with the initial IOM(M004) module.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (14) Replace the IOM(M004) module in the right AIMS cabinet, M31201.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

834. VHF-C Comm Xcvr No Output on CMC OUTPUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-53893.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center VHF communication transceiver (VHF comm xcvr), M23303.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	8	C23604	VHF COMM C

- (4) Do a check for 28 VDC from pin 2 to pin 4 of connector DM23303AC at the E1-2 shelf (WDM 23-12-32):
- (5) If there is not 28 VDC at pin 2 of connector DM23303AC, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (6) If there is 28 VDC at pin 2 of connector DM23303AC, then continue.
- (7) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	8	C23604	VHF COMM C

- (8) Do this check of the wiring:
 - (a) Remove the IOM(M008) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J410-A at the E3-1 shelf and connector DM23303AB at the E1-2 shelf (WDM 23-12-32):

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J410-A

pin A6 pin C14
pin B6 pin D14

DM23303AB

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M008) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (9) Re-install the IOM(M008) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (10) Do this check of the wiring:
- (a) Remove the IOM(M008) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Do a wiring check between these pins of connector J410-A at E2-1 shelf and connector DM23303AB at the E1-2 shelf (WDM 23-12-32):

J410-A

pin A5 pin C14
pin B5 pin D14

DM23303AB

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M008) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue:
- (11) Re-install the IOM(M008) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (12) Replace the IOM(M008) module in the left AIMS cabinet, M31101.
- These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (13) Replace the IOM(M008) module in the left AIMS cabinet, M31101, with the initial IOM(M008) module.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (14) Replace the IOM(M008) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

835. RTP-L No Input from AIMS-L on GP-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59910.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
(2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) Make sure the PNL OFF switch light is off on the left RTP.
(b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
(c) If the MAT shows ACTIVE for the maintenance message, then continue.
(2) Do this check of the wiring:
(a) Remove the IOM(M003) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
(b) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
(c) Do a wiring check between these pins of connector J240-A at the E3-1 shelf and connector DM23005 at the aft aisle stand panel, P8 (WDM 31-41-22):

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J240-A	DM23005
pin F13	pin 14
pin G14	pin 15

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) Make sure the PNL OFF switch light is off on the left RTP.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

836. VHF-L Comm Xcvr No Input from AIMS-L on CMC INPUT PORT A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59916.

B. Initial Evaluation

- (1) AIRPLANES WITH AIMS CPM/COMM OPS S/W 3165-HNP-002-03 OR AIMS CPM/COMM OPS S/W 3162-HNP-002-04;

This may be a nuisance message; do the steps that follow:

- (a) Open and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	21	C23600	VHF COMM R

NOTE: This maintenance message can be set when the left VHF transceiver detects activity from AIMS on the right data bus before it detects any activity on the left data bus. When you cycle power to the left VHF transceiver, it may clear this fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left VHF communication transceiver (VHF-L comm xcvr), M23103.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the left VHF comm xcvr, M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the E3-1 shelf and connector DM23103AB at the E1-3 shelf (WDM 45-45-11):
- | J420-A | DM23103AB |
|-------------------|------------------|
| pin F11 | pin A6 |
| pin G12 | pin B6 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the IOM(009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

837. VHF-R Comm Xcvr No Input from AIMS-L on CMC INPUT PORT A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59917.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right VHF communication transceiver (VHF-R comm xcvr), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the E3-1 shelf and connector DM23203AB at the E2-3 shelf (WDM 45-45-11):

J420-A		DM23203AB
pin F11	.....	pin A6
pin G12	.....	pin B6
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

838. VHF-C Comm Xcvr No Input from AIMS-L on CMC INPUT PORT A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59918.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center VHF communication transceiver (VHF-C comm xcvr), M23303.
- These are the tasks:
- VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
- VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the E3-1 shelf and connector DM23303AB at the E1-2 shelf (WDM 45-45-11):

J420-A

pin F11

pin G12

DM23303AB

pin A6

pin B6

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new IOM(M009) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

839. VHF-L Comm Xcvr No Input from AIMS-L on CMC INPUT PORT B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59919.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left VHF communication transceiver (VHF-L comm xcvr), M23103.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left VHF comm xcvr, M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the IOM(M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J250-A at the E3-1 shelf and connector DM23103AB at the E1-3 shelf (WDM 45-45-21):

J250-A		DM23103AB
pin F11	.....	pin C6
pin G12		pin D6
 - (d) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring.

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- 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (4) Install a new IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

840. VHF-R Comm Xcvr No Input from AIMS-L on CMC INPUT PORT B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59920.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right VHF communication transceiver (VHF-R comm xcvr), M23203.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the IOM(M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J250-A at the E3-1 shelf and connector DM23203AB at the E2-3 shelf (WDM 45-45-21):

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J250-A

pin F11 pin C6
pin G12 pin D6

DM23203AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

841. VHF-C Comm Xcvr No Input from AIMS-L on 429 CMC INPUT PORT B Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59921.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center VHF communication transceiver (VHF-C comm xcvr), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:

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- (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the IOM(M004) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J250-A at the E3-1 shelf and connector DM23303AB at the E1-2 shelf (WDM 45-45-21):

J250-A	DM23303AB
pin F11	pin C6
pin G12	pin D6

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new IOM(M004) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— END OF TASK ————

842. VHF-L Comm Xcvr No Input from RTP-R on Freq/Sel Port B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59931.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left VHF communication transceiver (VHF-L comm xcvr), M23103.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left VHF comm xcvr, M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the right radio tuning panel (RTP-R), M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23006 at the aft aisle stand panel, P8 and connector DM23103AB at the E1-3 shelf (WDM 23-12-21):

DM23006

pin 2 pin A7
pin 3 pin B7

DM23103AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— END OF TASK ————

843. VHF-R Comm Xcvr No Input from RTP-L on Freq/Sel Port B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59932.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

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- (1) Replace the right VHF communication transceiver (VHF-R comm xcvr), M23203.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the left radio tuning panel (RTP-L), M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 at the aft aisle stand panel, P8 and connector DM23203AB at the E2-3 shelf (WDM 23-12-11):

DM23005	DM23203AB
pin 2	pin A7
pin 3	pin B7
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

844. VHF-C Comm Xcvr No Input from RTP-R on Freq/Sel Port B 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59933.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center VHF communication transceiver (VHF-C comm xcvr), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the right radio tuning panel (RTP-R), M23006. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (c) Do a wiring check between these pins of connector DM23006 at the and connector DM23303AB at the E1-2 shelf (WDM 23-12-21):

DM23006	DM23303AB
pin 2	pin A7
pin 3	pin B7

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

845. RTP-L No Output on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52031.

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B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 and connector DM23006 at the aft aisle stand panel, P8 (WDM 23-12-11):

DM23005	DM23006
pin 5	pin 8
pin 6	pin 9

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Do this check of the wiring:
 - (a) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.

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- (b) Do a wiring check between these pins of connector DM23005 and connector DM23007 at the aft aisle stand panel, P8 (WDM 23-12-11):

DM23005	DM23007
pin 5	pin 8
pin 6	pin 9

- (c) Repair any wiring problems you find.
- (d) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (e) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

846. RTP-R No Output on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52032.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.
- These are the tasks:
- Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23006 and connector DM23005 at the aft aisle stand panel, P8 (WDM 23-12-21):

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DM23006

pin 5
pin 6

DM23005

pin 11
pin 12

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Do this check of the wiring:
 - (a) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (b) Do a wiring check between these pins of connector DM23006 and connector, DM23007 at the aft aisle stand panel, P8 (WDM 23-12-21):

DM23006

pin 5
pin 6

DM23005

pin 11
pin 12

- (c) Repair any wiring problems you find.
- (d) Re-install the left RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (e) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

847. RTP-C No Output on Output-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52033.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is off at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23007 and connector DM23005 at the aft aisle stand panel, P8 (WDM 23-12-31):

DM23007	DM23005
pin 5	pin 8
pin 6	pin 9

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Do this check of the wiring:
- (a) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (b) Do a wiring check between these pins of connector DM23007 and connector DM23006 at the aft aisle stand panel, P8 (WDM 23-12-31):

DM23007	DM23006
pin 5	pin 11
pin 6	pin 12

- (c) Repair any wiring problems you find.

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- (d) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (e) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

848. RTP-L Output-2 429 Bus Signals are Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52061.

B. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

849. RTP-R Output-2 429 Bus Signals are Out of Range or Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52062.

B. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

850. RTP-R No Input from AIMS-L on Input-3 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59911.

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B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) Make sure the PNL OFF switch light is off on the right RTP.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM(M003) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector J240-A at the E3-1 shelf and connector DM23006 at the aft aisle stand panel, P8 (WDM 31-41-22):

J240-A	DM23006
pin F13	pin 14
pin G14	pin 15
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) Make sure the PNL OFF switch light is off on the right RTP.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- (4) Install a new IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

851. RTP-C No Input from AIMS-L on GP-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59912.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) Make sure the PNL OFF switch light is off on the center RTP.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM(M003) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector J240-A at the E3-1 shelf and connector DM23007 at the aft aisle stand panel, P8 (WDM 31-41-22):

J240-A

pin F13
pin G14

DM23007

pin 14
pin 15

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- 3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) Make sure the PNL OFF switch light is off on the center RTP.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (4) Install a new IOM(M003) module in the left AIMS cabinet, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

852. RTP-L No Input from AIMS-R on GP-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59913.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left radio tuning panel (RTP-L), M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) Make sure the PNL OFF switch light is off on the left RTP.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM(M003) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Remove the left RTP, M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector J240-A at the E2-1 shelf and connector DM23005 at the aft aisle stand panel, P8 (WDM 31-41-24):

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J240-A	DM23005
pin F13	pin 16
pin G14	pin 17

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) Make sure the PNL OFF switch light is off on the left RTP.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

853. RTP-R No Input from AIMS-R on GP-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59914.

B. Initial Evaluation

- (1) Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right radio tuning panel (RTP-R), M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) Make sure the PNL OFF switch light is off on the right RTP.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- Remove the IOM(M003) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - Remove the right RTP, M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - Do a wiring check between these pins of connector J240-A at the E2-1 shelf and connector DM23006 at the aft aisle stand panel, P8 (WDM 31-41-24):
- | J240-A | DM23006 |
|-------------------|---------|
| pin F13 | pin 16 |
| pin G14 | pin 17 |
- (d) If you find a problem with the wiring, then do these steps:
- Repair the wiring.
 - Re-install the IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - Make sure the PNL OFF switch light is off on the right RTP.
 - If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— END OF TASK ————

854. RTP-C No Input from AIMS-R on GP-2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59915.

B. Initial Evaluation

- Make sure the PNL OFF switch light is OFF at each radio tuning panel (left, right, and center).
- If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

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- (1) Replace the center radio tuning panel (RTP-C), M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) Make sure the PNL OFF switch light is off on the center RTP.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the IOM(M003) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Remove the center RTP, M23007. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector J240-A at the E2-1 shelf and connector DM23007 at the aft aisle stand panel, P8 (WDM 31-41-24):

J240-A	DM23007
pin F13	pin 16
pin G14	pin 17
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) Make sure the PNL OFF switch light is off on the center RTP.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a wiring problem, then continue.
- (3) Re-install the center RTP, M23007. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (4) Install a new IOM(M003) module in the right AIMS cabinet, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

855. VHF-L Comm Xcvr No Input from RTP-L on Freq/Sel Port A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59928.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left VHF communication transceiver (VHF-L comm xcvr), M23103.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the left VHF comm xcvr, M23103. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the left radio tuning panel (RTP-L), M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 at the aft aisle stand panel, P8 and connector DM23103AB at the E1-3 shelf (WDM 23-12-11):

DM23005

pin 2 pin A11
pin 3 pin B11

DM23103AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the left VHF comm xcvr, M23103. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

856. VHF-R Comm Xcvr No Input from RTP-R on Freq/Sel Port A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59929.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right VHF communication transceiver (VHF-R comm xcvr), M23203.
- These are the tasks:
- VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
- VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the right VHF comm xcvr, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the right radio tuning panel (RTP-R), M23006. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
- (c) Do a wiring check between these pins of connector DM23006 at the aft aisle stand panel, P8 and connector DM23203AB at the E2-3 shelf (WDM 23-12-21):

DM23006

pin 2 pin A11
pin 3 pin B11

DM23203AB

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the right VHF comm xcvr, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new right RTP, M23006. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

857. VHF-C Comm Xcvr No Input from RTP-L on Freq/Sel Port A 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59930.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the center VHF communication transceiver (VHF-C comm xcvr), M23303.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the center VHF comm xcvr, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the left radio tuning panel (RTP-L), M23005. To remove it, do this task: Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801.
 - (c) Do a wiring check between these pins of connector DM23005 at the aft aisle stand panel, P8 and connector DM23303AB at the E1-2 shelf (WDM 23-12-11):

DM23005

pin 2
pin 3

DM23303AB

pin A11
pin B11

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- 3) Re-install the left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Re-install the center VHF comm xcvr, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Install a new left RTP, M23005. To install it, do this task: Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

866. RTP (L, C, or R) Shows Dashes In Frequency Window - Fault Isolation

A. Fault Isolation Procedure

NOTE: Dashes can appear in the RTP frequency window during a VHF communication, as follows. If the mic is held for 35 seconds when the airplane is on the ground, the VHF communication transceiver keyline timer function disables the transceiver, dashes will appear in the radio tuning panel (RTP) frequency window, and the RADIO TRANSMIT advisory EICAS message will appear.

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP), a VHF communication transceiver (VHF comm xcvr), or a HF communication transceiver (HF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.

————— END OF TASK —————

867. RTP (L, C, or R) Shows PANEL FAIL In Frequency Window - Fault Isolation

A. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.

————— END OF TASK —————

868. RTP-L No Output On Any Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52801.

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B. Fault Isolation Procedure

- (1) Replace the left radio tuning panel (RTP-L), M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

869. RTP-R No Output On Any Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52802.

B. Fault Isolation Procedure

- (1) Replace the right radio tuning panel (RTP-R), M23006.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

870. RTP-C No Output On Any Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-52803.

B. Fault Isolation Procedure

- (1) Replace the center radio tuning panel (RTP-C), M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

872. VHF-R No Input from AIMS-L on CMU DATA PORT A Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59923.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the VHF communication transceiver (VHF-R) (right), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the VHF communication transceiver (VHF-R) (right), M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the IOM(M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23203AB at the E2-3 shelf (WDM 23-27-11):
- | J420-A | DM23203AB |
|-------------------|------------------|
| pin F13 | pin A12 |
| pin G14 | pin B12 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the VHF communication transceiver (VHF-R) (right), M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the VHF communications transceiver (VHF-R) (right), M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.

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(3)

Replace the left electronics unit, N46102.

These are the tasks:

Electronic Unit Removal, AMM TASK 46-11-03-000-801,

Electronic Unit Installation, AMM TASK 46-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

873. **VHF-C No Input from AIMS-L on CMU DATA PORT A Bus - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59924.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the VHF communication transceiver (VHF-C) (center), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the VHF communication transceiver (VHF-C) (center), M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
- (b) Remove the IOM(M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23303AB at the E1-2 shelf (WDM 23-27-11):

J420-A

pin F13

pin G14

DM23303AB

pin A12

pin B12

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.

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- 2) Re-install the VHF communication transceiver (VHF-C) (center), M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the VHF communication transceiver (VHF-C) (center), M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3)
- Replace the left electronics unit, N46102.
- These are the tasks:
- Electronic Unit Removal, AMM TASK 46-11-03-000-801,
Electronic Unit Installation, AMM TASK 46-11-03-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

874. VHF-R No Input from AIMS-R on CMU DATA PORT B Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59926.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the VHF communication transceiver (VHF-R) (right), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the VHF communication transceiver (VHF-R) (right), M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the IOM(M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and connector DM23203AB at the E2-3 shelf (WDM 23-27-12):

J420-A

pin F13
pin G14

DM23203AB

pin C12
pin D12

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the VHF communication transceiver (VHF-R) (right), M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the VHF communication transceiver (VHF-R) (right), M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.

(3)

Replace the left electronics unit, N46102.

These are the tasks:

Electronic Unit Removal, AMM TASK 46-11-03-000-801,

Electronic Unit Installation, AMM TASK 46-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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875. VHF-C No Input from AIMS-R on CMU DATA PORT B Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59927.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the VHF communication transceiver (VHF-C) (center), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the VHF communication transceiver (VHF-C) (center), M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the IOM(M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and connector DM23303AB at the E1-2 shelf (WDM 23-27-12):

J420-A

pin F13 pin C12
pin G14 pin D12

DM23303AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the VHF communication transceiver (VHF-C) (center), M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:

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- 1) Install a new IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the VHF communication transceiver (VHF-C) (center), M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3)

Replace the left electronics unit, N46102.

These are the tasks:

Electronic Unit Removal, AMM TASK 46-11-03-000-801,

Electronic Unit Installation, AMM TASK 46-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

876. Left Radio Tuning Panel Does Not Transfer VHF Radio - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is OFF at the left radio tuning panel (RTP).
- (2) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a RTP or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.
- (3) Replace the left RTP, M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

————— **END OF TASK** —————

877. Right Radio Tuning Panel Does Not Transfer VHF Radio - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is OFF at the right radio tuning panel (RTP).
- (2) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a RTP or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.

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- (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.
- (3) Replace the right RTP, M23006.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

————— **END OF TASK** —————

878. Center Radio Tuning Panel Does Not Transfer VHF Radio - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is OFF at the center radio tuning panel (RTP).
- (2) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a RTP or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.
- (3) Replace the center RTP, M23007.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

————— **END OF TASK** —————

879. Left Radio Tuning Panel Does Not Transfer HF Radio - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is OFF at the left radio tuning panel (RTP).
- (2) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a RTP or a HF communication transceiver (HF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or HF comm xcvr does not show in Existing Faults, then continue.
- (3) Replace the left RTP, M23005.
These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

————— **END OF TASK** —————

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880. Right Radio Tuning Panel Does Not Transfer HF Radio - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the PNL OFF switch light is OFF at the right radio tuning panel (RTP).
- (2) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a RTP or a HF communication transceiver (HF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or HF comm xcvr does not show in Existing Faults, then continue.
- (3) Replace the right RTP, M23006.

These are the tasks:
Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

————— END OF TASK —————

881. Left VHF System Reception/Transmission Problems - Fault Isolation

A. Initial Evaluation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.
- (2) Do these steps to do a reception/transmission test of the left VHF communication system:

NOTE: VHF COMMUNICATIONS MAY BE DEGRADED DUE TO EXTERNAL INTERFERENCE OR SIGNAL BLOCKAGE WHILE THE AIRPLANE IS ON THE GROUND. BEFORE YOU DECLARE A VHF SYSTEM FAULT, MAKE SURE YOU ATTEMPT TO TRANSMIT AND RECEIVE AT SEVERAL FREQUENCIES ACROSS THE VHF FREQUENCY BAND. MAKE SURE THE AIRCRAFT IS NOT IN OR NEAR ANY LARGE METAL STRUCTURES, IN SOME CASES, YOU CAN MOVE THE AIRCRAFT TO CORRECT THE DEFECTIVE CONDITION.

 - (a) Do the left VHF test at left RTP with the captain's ACP and headset:
 - 1) On left RTP, push the VHF L switch.
 - 2) Do these steps at the ACP:
 - a) Push the VHF L receiver volume control.
 - b) Push the VHF L transmitter select switch.
 - c) Turn the VHF L receiver volume control to approximately the middle position.
 - 3) Speak with the radio tower operator:
 - a) On the ACP, push and hold the Mic/Interphone switch in the MIC position while you speak.

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- b) Release the Mic/Interphone switch while you listen.
- c) Make sure the quality of the transmitted and received voice is good.
- 4) Slowly turn the VHF L receiver volume control on the ACP while you hear the received voice.
 - a) Make sure the audio level changes smoothly without a change in voice quality.
- 5) On the ACP, push the VHF L receiver volume control.
- (3) If there is a left VHF system reception or transmission problem, then continue.

B. Fault Isolation Procedure

- (1) Do a check of the coaxial cable between the left VHF communication transceiver (VHF comm xcvr), M23103, and the left VHF communication antenna, M23104 (AMM TASK 20-10-32-210-801) (WDM 23-12-12):
 - (2) If you find a problem with the coaxial cable, then do these steps:
 - (a) Replace or repair the coaxial cable (WDM 23-12-12).
 - (b) Do a transmit test with the left VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
 - (3) Replace the left VHF comm xcvr, M23103.
- These are the tasks:
- VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Do a reception/transmission test of the left VHF system.
 - (5) If there is a left VHF system reception or transmission problem, then continue.
 - (6) Replace the left RTP, M23005.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

882. Right VHF Reception/Transmission Problems - Fault Isolation

A. Initial Evaluation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.

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- (2) Do these steps to do a reception/transmission test of the right VHF communication system:

NOTE: VHF COMMUNICATIONS MAY BE DEGRADED DUE TO EXTERNAL INTERFERENCE OR SIGNAL BLOCKAGE WHILE THE AIRPLANE IS ON THE GROUND. BEFORE YOU DECLARE A VHF SYSTEM FAULT, MAKE SURE YOU ATTEMPT TO TRANSMIT AND RECEIVE AT SEVERAL FREQUENCIES ACROSS THE VHF FREQUENCY BAND. MAKE SURE THE AIRCRAFT IS NOT IN OR NEAR ANY LARGE METAL STRUCTURES, IN SOME CASES, YOU CAN MOVE THE AIRCRAFT TO CORRECT THE DEFECTIVE CONDITION.

- (a) Do the right VHF test at right RTP with the captain's ACP and headset:
- 1) On right RTP, push the VHF R switch.
 - 2) Do these steps at the ACP:
 - a) Push the VHF R receiver volume control.
 - b) Push the VHF R transmitter select switch.
 - c) Turn the VHF R receiver volume control to approximately the middle position.
 - 3) Speak with the radio tower operator:
 - a) On the ACP, push and hold the Mic/Interphone switch in the MIC position while you speak.
 - b) Release the Mic/Interphone switch while you listen.
 - c) Make sure the quality of the transmitted and received voice is good.
 - 4) Slowly turn the VHF R receiver volume control on the ACP while you hear the received voice.
 - a) Make sure the audio level changes smoothly without a change in voice quality.
 - 5) On the ACP, push the VHF R receiver volume control.
- (3) If there is a right VHF system reception or transmission problem, then continue.

B. Fault Isolation Procedure

- (1) Do a check of the coaxial cable between the right VHF communication transceiver (VHF comm xcvr), M23203, and the left VHF communication antenna, M23204 (AMM TASK 20-10-32-210-801) (WDM 23-12-12):
- (2) If you find a problem with the coaxial cable, then do these steps:
 - (a) Replace or repair the coaxial cable (WDM 23-12-12).
 - (b) Do a transmit test with the right VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the right VHF comm xcvr, M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (4) Do a reception/transmission test of the right VHF system
- (5) If there is a right VHF system reception or transmission problem, then continue.
- (6) Replace the right RTP, M23006.

These are the tasks:

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Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,

Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

883. Center VHF Reception/Transmission Problems - Fault Isolation

A. Initial Evaluation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to a radio tuning panel (RTP) or a VHF communication transceiver (VHF comm xcvr) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the RTP or VHF comm xcvr does not show in Existing Faults, then continue.
- (2) Do these steps to do a reception/transmission test of the center VHF communication system:

NOTE: VHF COMMUNICATIONS MAY BE DEGRADED DUE TO EXTERNAL INTERFERENCE OR SIGNAL BLOCKAGE WHILE THE AIRPLANE IS ON THE GROUND. BEFORE YOU DECLARE A VHF SYSTEM FAULT, MAKE SURE YOU ATTEMPT TO TRANSMIT AND RECEIVE AT SEVERAL FREQUENCIES ACROSS THE VHF FREQUENCY BAND. MAKE SURE THE AIRCRAFT IS NOT IN OR NEAR ANY LARGE METAL STRUCTURES, IN SOME CASES, YOU CAN MOVE THE AIRCRAFT TO CORRECT THE DEFECTIVE CONDITION.

- (a) Do the center VHF test at center RTP with the captain's ACP and headset:
 - 1) On center RTP, push the VHF C switch.
 - 2) Do these steps at the ACP:
 - a) Push the VHF C receiver volume control.
 - b) Push the VHF C transmitter select switch.
 - c) Turn the VHF C receiver volume control to the middle position.
 - 3) Speak with the radio tower operator:
 - a) On the ACP, push and hold the Mic/Interphone switch in the MIC position while you speak.
 - b) Release the Mic/Interphone switch while you listen.
 - c) Make sure the quality of the transmitted and received voice is good.
 - 4) Slowly turn the VHF C receiver volume control on the ACP while you hear the received voice.
 - a) Make sure the audio level changes smoothly without a change in voice quality.
 - 5) On the ACP, push the VHF C receiver volume control.
- (3) If there is a center VHF system reception or transmission problem, then continue.

B. Fault Isolation Procedure

- (1) Do a check of the coaxial cable between the center VHF communication transceiver (VHF comm xcvr), M23303, and the center VHF communication antenna, M23304 (AMM TASK 20-10-32-210-801) (WDM 23-12-12):

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- (2) If you find a problem with the coaxial cable, then do these steps:
 - (a) Replace or repair the coaxial cable (WDM 23-12-12).
 - (b) Do a transmit test with the center VHF communication system.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the center VHF comm xcvr, M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
- (4) Do a reception/transmission test of the center VHF system
- (5) If there is a center VHF system reception or transmission problem, then continue.
- (6) Replace the center RTP, M23007.

These are the tasks:

Radio Tuning Panel (RTP) Removal, AMM TASK 23-12-02-000-801,
Radio Tuning Panel (RTP) Installation, AMM TASK 23-12-02-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

884. DCMF in Right AIMS has no input from VDR (R) on VDR Data Xfer Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71714.

B. Description

- (1) The right AIMS cabinet is not receiving ARINC 429 CMU (VDR Mode 2) from the right VHF Data Radio (VDR).

C. Possible Causes

- (1) Right VHF Data Radio (VDR-R), M23203
- (2) IOM (M004) module from the right AIMS cabinet, M31201
- (3) Wiring

D. Related Data

- (1) SSM 23-12-21
- (2) SSM 23-12-31
- (3) WDM 23-12-22
- (4) WDM 23-12-32

E. Initial Evaluation

- (1) On the MAT, look for this maintenance message: 23-71714
 - (a) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
 - (b) If you do not see maintenance message 23-71714, then there was an intermittent fault.

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F. Fault Isolation Procedure

- (1) Replace the right VHF communication transceiver (VHF-R), M23203.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

- (2) If the fault continues after VHF-R Transceiver replacement, replace the IOM (M004) module in the right AIMS cabinet, M31201.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (3) If the fault continues after VHF-R Transceiver and IOM (M004) module replacement, do a check of the wiring from pins C10 and D10 of VHF-R transceiver connector DM23203AB to pins 41 and 42 of the right AIMS cabinet connector D6718.

- (a) Repair the problems that you find.

————— END OF TASK —————

885. DCMF in Left AIMS has no input from VDR (C) on VDR Data Xfer Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71715.

B. Description

- (1) The left AIMS cabinet is not receiving ARINC 429 CMU (VDR Mode 2) from the center VHF Data Radio (VDR).

C. Possible Causes

- (1) Center VHF Data Radio (VDR-C), M23303
- (2) IOM (M004) module from the left AIMS cabinet, M31101
- (3) Wiring

D. Related Data

- (1) SSM 23-12-21
- (2) SSM 23-12-31
- (3) WDM 23-12-22
- (4) WDM 23-12-32

E. Initial Evaluation

- (1) On the MAT, look for this maintenance message: 23-71715
 - (a) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
 - (b) If you do not see maintenance message 23-71715, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Replace the center VHF communication transceiver (VHF-C), M23303.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,

VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

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- (2) If the fault continues after VHF-C Transceiver replacement, replace the IOM (M004) module in the left AIMS cabinet, M31101.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (3) If the fault continues after VHF-C Transceiver and IOM (M004) module replacement, do a check of the wiring from pins C10 and D10 of VHF-C transceiver connector DM23303AB to pins 37 and 38 of the left AIMS cabinet connector D6706.
- (a) Repair the problems that you find.

———— **END OF TASK** ————

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801. Satellite Data Unit (Left) Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60021.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

- (a) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) Keep the circuit breaker open for approximately 10 seconds.

- (c) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (d) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

- (e) If the MAT shows NOT ACTIVE for the maintenance message, then there was a nuisance fault.

- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the satellite data unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

803. HGA High Power Amplifier (Left) Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60041.

B. Initial Evaluation

- (1) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

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C. Fault Isolation Procedure

- (1) Replace the high power amplifier for the high gain antenna (HGA) (left), M23108.
These are the tasks:
High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the satellite data unit (SDU) (left), M23106.
These are the tasks:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of all TX RF coaxial cables between the SDU and the HPA for HGA:
 - (a) Remove the satellite data unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the high speed data unit, M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
 - (c) Remove the high power amplifier, M23108, To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (d) Do an inspection of all TX RF coaxial cables between the SDU (M23106), connector DM23106AA and the HPA for the HGA (M23108), connector DM23108AA at the E11 shelf (WDM 23-15-12). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.
 - (e) If you find a problem with the coaxial cable, then do these steps:
 - 1) Repair or replace the coaxial cable.
 - 2) Connect the TX RF coaxial cables back to their usual condition.
 - 3) Re-install the high power amplifier for the HGA, M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - 4) Re-install the high speed data unit, M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801.
 - 5) Re-install the satellite data unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (g) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of all coaxial cables between the HPA for the HGA and the high gain antenna (HGA):
 - (a) Remove the HPA for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.

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- (b) Disconnect the TX RF coaxial cables from related SATCOM components for the HGA subsystem:
 - 1) High gain antenna (left) (top), M23111.
 - 2) LNA/Diplexer (top), M23110.
- (c) Do an inspection of all TX RF coaxial cables between the HPA for the HGA (M23108), connector DM23108AB at the E11 shelf and the TMHGA (M23111), connector DM23111A (WDM 23-15-12). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.
- (d) If you find a problem with the coaxial cable, then do these steps:
 - 1) Repair or replace the coaxial cable.
 - 2) Connect the TX RF coaxial cables back to their usual condition.
 - 3) Re-install the HPA for the HGA, M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
- (e) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

824. HGA HPA (L) No Input from SDU (L) on Multi-Ctrl Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60451.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Look at the Extended Maintenance, Existing Faults display for 23 Satellite Communications (SATCOM) System on the MAT.
 - (a) If more than one maintenance message related to the multi-control bus from the satellite data unit (left) shows, then do these steps:
 - 1) Replace the satellite data unit (SDU) (left), M23106.
These are the tasks:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - b) If the MAT shows ACTIVE for the maintenance message, then continue.
 - 2) Do this check of the wiring:

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- a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- b) Remove the high power amplifier (HPA) for the high gain antenna (HGA) (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
- c) Do a wiring check between these pins of connector DM23106AB and connector DM23108AA at the E11-1 shelf (WDM 23-15-12):

DM23106AB	DM23108AA
pin G4	pin A1
pin H4	pin B1

- d) If you find a problem with the wiring, then repair the wiring.
 - e) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - f) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - g) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If 23-60451 is the only maintenance message for the multi-control bus from the satellite data unit (left), then continue.
- (2) Replace the high power amplifier (HPA) for the high gain antenna (HGA) (left), M23108. These are the tasks:
High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
- (a) Remove the HPA for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (b) Remove the satellite data unit (SDU) (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (c) Do a wiring check between these pins of connector DM23106AB and connector DM23108AA at the E11-1 shelf (WDM 23-15-12):

DM23106AB	DM23108AA
pin G4	pin A1
pin H4	pin B1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.

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- 3) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

825. Temperature Problem, HGA High Power Amplifier (L) or SDU (L) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60461.

B. Description

- (1) Use this task when the HGA High Power Amplifier (L) or Satellite Data Unit (L) is over temperature.

C. Possible Causes

- (1) Airplane Ambient temperature is high.
- (2) Lavatory Galley Vent System.
- (3) HGA High Power Amplifier. (M23108).

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message 23-60461, then do the Fault Isolation Procedure for HPA over temp below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

NOTE: If the air temperature is high in the area above the ceiling, this fault can occur temporarily.

E. Fault Isolation Procedure - HPA over Temp

- (1) If the air temperature is high in the area above the ceiling, then do these steps:
 - (a) When the air temperature is lower, look for the maintenance message on the MAT.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), the fault was temporary.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Hold a sheet of paper above the ventilation holes on top of the high power amplifier for the high gain antenna (HGA) (left), M23108 (at electronic equipment rack, E11).

NOTE: This step does a check of the equipment cooling system at the E11 rack.
- (3) If the air flow pulls the paper in the direction of the ventilation holes, then do these steps:
 - (a) Replace the high power amplifier for the HGA (left), M23108.

These are the tasks:
High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) If the air flow does not pull the paper in the direction of the ventilation holes, then do these steps to find a problem with the equipment cooling system:

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- (a) Do a visual inspection of the duct that connects the main lavatory/galley ventilation duct to the E11 rack.
 - 1) If you find a problem with the duct, then correct the problem.
 - 2) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (b) Do a visual inspection of the ventilation holes of the high power amplifier for the HGA (left), M23108.
 - 1) If the ventilation holes are clogged, clean the holes or replace the high power amplifier for the HGA (left), M23108. To replace it,
These are the tasks:
High Power Amplifier for High Gain Antenna Removal, AMM
TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM
TASK 23-15-12-400-801.
- (c) Do these steps to do a visual inspection of the metering plate in the tray assembly:
 - 1) Remove the high power amplifier for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM
TASK 23-15-12-000-801.
 - 2) Make sure the correct number of ventilation holes are open (refer to label on tray assembly for correct number).
 - 3) Make sure the metering plate and seal are installed correctly in the tray assembly.
 - 4) Make sure the seal is serviceable.
 - 5) Repair the problems that you find.
 - 6) Re-install the high power amplifier for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM
TASK 23-15-12-400-801.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (d) Do an inspection to make sure the flapper valves on the SATCOM backup cooling fan are not caught in the open position. To do the inspection, do this task: SATCOM Backup Cooling Fan Check - Electronic Equipment Rack, E11, AMM TASK 21-27-30-200-801 or SATCOM Backup Cooling Fan Check - Electronic Equipment Rack, E13, AMM TASK 21-27-30-200-802.
 - 1) If you find a problem, then correct the problem.
 - 2) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) Do the inspection of the SATCOM backup cooling check valve at the E11 rack. To do the inspection, do this task: SATCOM Backup Cooling Check Valve Removal - Electronic Equipment Rack, E11, AMM TASK 21-27-31-000-801 or SATCOM Backup Cooling Check Valve Removal - Electronic Equipment Rack, E13, AMM TASK 21-27-31-000-802.
 - 1) If you find a problem, then do these steps:



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- a) Install a new SATCOM backup cooling check valve. To install it, do this task:
SATCOM Backup Cooling Check Valve Installation - Electronic Equipment Rack, E11, AMM TASK 21-27-31-400-801 or SATCOM Backup Cooling Check Valve Installation - Electronic Equipment Rack, E13, AMM TASK 21-27-31-400-802.
- b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

830. Satellite Data Unit (Left) Comm Channel 1, 2, or 3 Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-60541, 23-60551, 23-60561.

B. Initial Evaluation

NOTE: The maintenance message may be ignored if intermittent or becomes not active when the SDU circuit breaker is cycled. This message occurs when the SDU sets an internal fault when a channel fault is detected.

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

- (a) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) Keep the circuit breaker open for approximately 10 seconds.

- (c) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (d) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

- (e) If the MAT shows NOT ACTIVE for the maintenance message, then there was a nuisance fault.

- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the satellite data unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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832. SDU (L) No Output on CFDS (CMCS) OUT 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-68891.

B. Initial Evaluation

NOTE: CFDS (centralized fault display system) is an ARINC 741 acronym for CMCS (central maintenance computing system).

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M003) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J240-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 23-15-15):

J240-A

pin A6 pin E4

pin B6 pin F4

DM23106AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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833. SDU (L) No Output on DATA TO CMU 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-68893.

B. Initial Evaluation

NOTE: The maintenance message may be ignored if intermittent or becomes not active when the SDU circuit breaker is cycled. This message occurs when the SDU sets an internal fault when a channel fault is detected.

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

- (a) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) Keep the circuit breaker open for approximately 10 seconds.

- (c) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (d) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

- (e) If the MAT shows NOT ACTIVE for the maintenance message, then there was a nuisance fault.

- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Do this check of the wiring:

- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.

- (b) Remove the IOM (M004) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

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- (c) Do a wiring check between these pins of connector J250-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 23-15-15):

J250-A	DM23106AB
pin A13	pin J1
pin B13	pin K1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

834. **SDU (L) No Input from AIMS (L) on CFDS (CMCS) IN 429 Bus - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69903.

B. Initial Evaluation

NOTE: CFDS (centralized fault display system) is an ARINC 741 acronym for CMCS (central maintenance computing system).

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.
These are the tasks:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

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- (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 45-45-11):

J420-A	DM23106AB
pin F11	pin C4
pin G12	pin D4

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

835. SDU-L No Input from AIMS-L on DATA FM CMU1 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69905.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Do this check of the wiring:
- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 23-27-11), (WDM 23-15-12):

J420-A	DM23106AB
pin F13	pin G1
pin G14	pin H1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

836. SDU-L No Input from AIMS-L on DATA FM IRS L 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69909.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106. These are the tasks:
 - Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
 - Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M008) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J410-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-31):

J410-A	DM23106AB
pin F13	pin A6
pin G14	pin B6
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the left electronics unit, N46102. These are the tasks:
 - Electronic Unit Removal, AMM TASK 46-11-03-000-801
 - Electronic Unit Installation, AMM TASK 46-11-03-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

——— END OF TASK ———

838. SDU-L No Input from AIMS-L on AIRFRAME ID 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69915.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M003) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J240-B at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-21):

J240-B		DM23106AB
pin F11	.....	pin A4
pin G12	.....	pin B4
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

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- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

840. SDU (L) Program Pins Incorrect Configuration - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60161.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Do a wiring check between pin K15 of DM23106AB and pins A10 through K13 of connector DM23106AA at the E11-1 shelf (WDM 23-15-15).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

842. SDU-L Invalid Input from AIMS-L on Gen Purp 1 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60511.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the air traffic control (ATC) / mode S transponder system, satellite data unit (left) or AIMS (left) shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the satellite data unit (left) or AIMS (left) does not show in Existing Faults, then continue.
- (2) Make sure that the air traffic control (ATC)/mode S transponder system is operational:
 - (a) Do this task: Air Traffic Control/Mode S Transponder System - Operational Test, AMM TASK 34-53-00-710-801.
 - (b) Do a check of the airplane identity (AMM PAGEBLOCK 34-53-00/501):
 - 1) Make sure that the ATC tester shows the airplane ID (ICAO address) correctly.
 - 2) If the airplane ID is not correct, then do these steps:
 - a) Set the ICAO 24 BIT address correctly at the program switch module (M34104 and M34204) (WDM 34-53-13 and WDM 34-53-23).
 - b) Repair the wiring.
 - c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - d) If the MAT shows ACTIVE for the maintenance message, then continue.
 - 3) If the airplane ID is correct, then continue.
- (3) Replace the IOM (M003) module in the left AIMS cabinet.

These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (4) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

————— **END OF TASK** —————

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843. SDU (L) No Output on Any Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-68801.

B. Initial Evaluation

- (1) Wait at least three minutes after power is applied to the SATCOM system before you make sure whether the message is ACTIVE or NOT ACTIVE.
NOTE: 777 Maintenance Tip 23-043 provides more information on this start-up error condition.
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Check for sufficient air cooling to the SDU. This is the task: SDU experiencing over temperature Cool it (left) - Fault Isolation, 23-15 TASK 956.
- (2) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check for 115 VAC power:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (c) Do a check for 115 VAC from pin 1 to pin 7 of connector DM23106AC at the E11-1 shelf (WDM 23-15-11).
- (d) If there is not 115 VAC from pin 1 to pin 7 of DM23106AC, then do these steps:
 - 1) Repair the wiring (WDM 23-15-11).
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

844. SDU-L No Input from AIMS-R on DATA FM CMU2 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69907.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106:

These are the Tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 23-27-12), (WDM 23-15-12):

J420-A

pin F13 pin G3
pin G14 pin H3

DM23106AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

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- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the left electronics unit, N46102:
- These are the tasks:
- Electronic Unit Removal, AMM TASK 46-11-03-000-801
- Electronic Unit Installation, AMM TASK 46-11-03-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

845. SDU-L No Input from AIMS-R on DATA FM IRS R 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69911.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106:

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M008) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J410-A at the right AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-32):

J410-A

pin F13

pin G14

DM23106AB

pin C6

pin D6

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M008) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new IOM (M008) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the right electronics unit, N46202:
- These are the tasks:
- Electronic Unit Removal, AMM TASK 46-11-03-000-801
- Electronic Unit Installation, AMM TASK 46-11-03-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

846. SDU-L No Input from CDU-L on CDU LEFT SDU 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69919.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the control display unit (CDU) (left), N34103. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34103C at P9 (WDM 23-27-71):

DM23106AB	DN34103C
pin C3	pin 23
pin D3	pin 24

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the control display unit (left), N34103. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new control display unit (left), N34103. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

847. SDU-L No Input from CDU-R on CDU RIGHT SDU 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69921.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

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Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the control display unit (CDU) (right), N34203. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34203C at P9 (WDM 23-27-71):

DM23106AB

pin E3 pin 23
pin F3 pin 24

DN34203C

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the control display unit (right), N34203. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new control display unit (right), N34203. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

848. SDU-L No Input fm CDU-C on CDU CTR SDU-PACI 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69925.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (b) Remove the control display unit (CDU) (center), N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
- (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34303C at P8 (WDM 23-27-72):
- | DM23106AB | DN34303C |
|------------------|----------|
| pin J8 | pin 23 |
| pin K8 | pin 24 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
- 3) Re-install the control display unit (center), N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new control display unit (center), N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
- 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

850. **SDU (L) No Output on DATA TO CDU 429 Bus - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-69951.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a Megohm meter, COM-6285 to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the line replaceable units (LRUs) that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the satellite data unit (SDU) (left), M23106. To replace it, do these tasks:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the control display unit (CDU) (center), N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34303C at P8 (WDM 23-15-15), (WDM 23-27-72):

DM23106AB

pin J3
pin K3
pin J8
pin K8

DN34303C

pin 41
pin 42
pin 23
pin 24

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the control display unit (center), N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 3) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the control display unit (center), N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the control display unit (CDU) (right), N34203. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34203C at P9 (WDM 23-27-71):

DM23106AB	DN34203C
pin E3	pin 23
pin F3	pin 24

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the control display unit (right), N34203. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new control display unit (right), N34203. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring:
- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the control display unit (CDU) (left), N34103. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DN34103C at P9 (WDM 23-27-71):

DM23106AB	DN34103C
pin C3	pin 23
pin D3	pin 24

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

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- 3) Re-install the control display unit (left), N34103. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new control display unit (left), N34103. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J420-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 45-45-11), (WDM 23-27-11), (WDM 23-15-12):

J420-A	DM23106AB
pin F11	pin C4
pin G12	pin D4
Pin F13	pin G1
pin G14	pin H1
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do this check of the wiring:

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- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (b) Remove the IOM (M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (c) Do a wiring check between these pins of connector J420-A at the right AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 23-27-12), (WDM 23-15-12):

J420-A	DM23106AB
pin F13	pin G3
pin G14	pin H3

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M008) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J410-A at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-31):

J410-A	DM23106AB
pin F13	pin A6
pin G14	pin B6

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new IOM (M008) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (8) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M008) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between these pins of connector J410-A at the right AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-32):

J410-A		DM23106AB
pin F13	.....	pin C6
pin G14	.....	pin D6
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M008) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then do these steps:
 - (f) Install a new IOM (M008) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (g) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (h) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (i) If the MAT shows ACTIVE for the maintenance message, then continue.
- (9) Do this check of the wiring:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the IOM (M003) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

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- (c) Do a wiring check between these pins of connector J240-B at the left AIMS cabinet and connector DM23106AB at the E11-1 shelf (WDM 31-41-21):

J240-B	DM23106AB
pin F11	pin A4
pin G12	pin B4

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the IOM (M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new IOM (M003) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.

- (10) Do this check of the wiring:

- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (c) Remove the rear fairing and rear cover from the top-mounted high gain antenna. To remove them, do this task: Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801.
- (d) Disconnect the connector, DM23111B at the TMHGA, M23111.
- (e) Do a wiring check between these pins of connector DM23111B and connector DM23106AC (WDM 23-15-12):

TMHGA, M23111	SDU, M23106
DM23111B	DM23106AC
pin 5	pin H7
pin 3	pin G7

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the connector, DM23111B to the TMHGA, M23111.

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- 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna
 - 4) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (11) Do this check of the wiring
- (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DM25800AA at the Video Control Center (VCC) (WDM 23-15-13):

DM23106AB	DM25800AA
Pin A9	Pin E7
Pin B9	Pin F7
 - (c) Do a wiring check between these pins of connector DM23106AB at the E11-1 shelf and connector DM25801AA at the VCC (WDM 23-15-13):

DM23106AB	DM25801AA
Pin A9	Pin E7
Pin B9	Pin F7
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

852. SDU (L) No Input from HGA HPA (L) on BITE Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60291.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the high power amplifier (HPA) for the high gain antenna (HGA) (left), M23108.

These are the tasks:

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High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check for 115 VAC power:
- (a) Remove the HPA for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (b) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (c) Do a check for 115 VAC from pin 1 to pin 7 of connector DM23108AC at the E11-1 shelf (WDM 23-15-11).
 - (d) If there is not 115 VAC from pin 1 to pin 7 of DM23108AC, then do these steps:
 - 1) Repair the wiring (WDM 23-15-11).
 - 2) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If there is 115 VAC from pin 1 to pin 7 of DM23108AC, then continue.
- (4) Do this check of the wiring:
- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (c) Do a wiring check between these pins of connector DM23106AB and connector DM23108AA at the E11-1 shelf (WDM 23-15-12):

DM23106AB	DM23108AA
pin E6	pin C1
pin F6	pin D1

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- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - 3) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

853. EICAS Message SATCOM MESSAGE - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when an internal related message for the SATCOM system is available for display on the SAT pages at the control display unit. No maintenance action is necessary.

————— END OF TASK —————

904. EICAS Message SATVOICE LOST - Fault Isolation

A. Initial Evaluation

NOTE: The SATCOM voice system temporarily lost the voice link capability due to SATCOM voice log-off. If the SATCOM system is in automatic mode, no maintenance action is necessary.

- (1) Do these steps at a control display unit (CDU) (P8 or P9), to make sure the SATCOM system is in automatic mode:
 - (a) Push the MENU key.
 - (b) Push the line select key (LSK) adjacent to <SAT.
 - (c) Push the LSK adjacent to <SUBMENU.
 - (d) Push the LSK adjacent to <LOG-ON.
 - (e) Make sure *AUTO LOG-ON does not show.

————— END OF TASK —————

905. EICAS Message SATVOICE AVAIL - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when SATCOM voice capability is available after a temporary SATVOICE LOST message. No maintenance action is necessary.

————— END OF TASK —————

908. LNA/Diplexer for HGA (Top, Left System) Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61071.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the low noise amplifier/diplexer (LNA/diplexer) for the top-mounted high gain antenna (left), M23110.

These are the tasks:

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-08-000-801,

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-08-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the top-mounted high gain antenna, M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801,

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check for 115 VAC power:

- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Disconnect connector DM23110A from the LNA/diplexer (left), M23110 (WDM 23-15-11).
 - (c) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (d) Do a check for 115 VAC from pin E to pin F of connector DM23110A.
 - (e) If there is not 115 VAC from pin E to pin F of DM22110A, then do these steps:
 - 1) Repair the wiring (WDM 23-15-11).
 - 2) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

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- 3) Re-connect connector DM23110A.
- 4) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (f) If there is 115 VAC from pin E to pin F of DM23110A, then continue.
- (4) Do this check of the wiring:
- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Remove the rear fairing and rear cover from the top-mounted high gain antenna (TMHGA) (AMM TASK 23-15-23-000-801).
- (c) Disconnect the connector DM23111B from the TMHGA.
- (d) Disconnect the connector DM23110A from the LNA/diplexer.
- (e) Do a wiring check between these pins of connector DM23110A and connector DM23111B (WDM 23-15-12):

DM23110A	DM23111B
pin B	pin 11
pin H	pin 9
pin J	pin 10

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector DM23110A to the LNA/diplexer.
 - 3) Re-connect the connector DM23111B to the TMHGA.
 - 4) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 5) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

909. Beam Steering Unit (for TMHGA, Left System) Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61101.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the top-mounted high gain antenna (left), M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801,

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Do these steps to disconnect connector DM23111B from the top-mounted high gain antenna, M23111.
 - 1) Remove the rear fairing and rear cover from the top-mounted high gain antenna (AMM TASK 23-15-23-000-801).
 - 2) Disconnect connector DM23111B from the TMHGA.
- (c) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (d) Do a wiring check between these pins of connector DM23111B and connector DM23106AB (WDM 23-15-12):

DM23111B		DM23106AB	
pin 8	.....	pin H4	
pin 6	.....	pin G4	
pin 5	.....	pin H7	
pin 3	.....	pin G7	

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM23111B to the TMHGA.
 - 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna.
 - a) For the correct torque sequence for the rear fairing, refer to the installation procedure for the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 4) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

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- 5) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

910. High Gain Antenna system (left) failure or coaxial cable open or shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61121.

B. Description

- (1) Use this task when the HGA HPA for TMHGA or satellite data unit (left) TX RF output circuit is open or shorted.

C. Possible Causes

- (1) Top-Mount High-Gain Antenna (left), M23111.
- (2) LNA/Diplexer for HGA (top, L sys), M23110.
- (3) HGA High Power Amplifier (L) (M23108).
- (4) Coaxial Cable.

D. Related Data

- (1) WDM 23-15-12

E. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure for HPA TX RF Output Open / Shorted below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

F. Fault Isolation Procedure - HPA TX RF Output Open / Shorted

- (1) Look at the Extended Maintenance, Existing Faults display for 23 Satellite Communications (SATCOM) System on the MAT.
 - (a) If maintenance message 23-61101 shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If maintenance message 23-61101 does not show in Existing Faults, then continue.
- (2) Replace the top-mounted high gain antenna (left), M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801,
Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:

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- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Do these steps to disconnect connector DM23111B from the top-mounted high gain antenna, M23111.
- 1) Remove the rear fairing and rear cover from the top-mounted high gain antenna (AMM TASK 23-15-23-000-801).
 - 2) Disconnect connector DM23111B.
- (c) Remove the SDU (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (d) Do a wiring check between these pins of connector DM23111B and connector DM23109AA at the E11-1 shelf (WDM 23-15-12):

DM23111B		DM23106AB	
pin 8	.....	pin H4	
pin 6	.....	pin G4	
pin 5	.....	pin H7	
pin 3	.....	pin G7	

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM23111B.
 - 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna.
 - a) For the correct torque sequence for the rear fairing, refer to the installation procedure for the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 4) Re-install the SDU (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 5) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

911. SDU (L) No Input from BSU (for TMHGA) on BITE Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61321.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the top-mounted high gain antenna (left), M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801,

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the satellite data unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check for 115 VAC power:
 - (a) Remove the rear fairing and rear cover from the top-mounted high gain antenna (AMM TASK 23-15-23-000-801).
 - (b) Disconnect the connector, DM23111B at the TMHGA, M23111.
 - (c) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (d) Do a check for 115 VAC from pin 18 to pin 19 of connector DM23111B. (WDM 23-15-11).
 - (e) If there is not 115 VAC from pin 18 to pin 19 of DM23111B, then do these steps:
 - 1) Repair the wiring (WDM 23-15-11).
 - 2) Re-connect the connector, DM23111B to the TMHGA, M23111.
 - 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (f) If there is 115 VAC from pin 18 to pin 19 of DM23111B, then continue.
- (4) Do this check of the wiring:

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- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (c) Remove the rear fairing and rear cover from the top-mounted high gain antenna (AMM TASK 23-15-23-000-801).
- (d) Disconnect the connector, DM23111B at the TMHGA, M23111.
- (e) Do a wiring check between these pins of connector DM23111B and connector DM23106AC (WDM 23-15-12):

TMHGA, M23111	SDU, M23106
DM23111B	DM23106AC
pin 5	pin H7
pin 3	pin G7

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the connector, DM23111B to the TMHGA, M23111.
 - 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 4) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

912. BSU (Top, L Sys) No Input from SDU (L) on Multi-Ctrl Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61481.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Look at the Extended Maintenance, Existing Faults display for 23 Satellite Communications (SATCOM) System on the MAT.
- (a) If maintenance message 23-60451 shows in Existing Faults, then do these steps:

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- 1) Find the message in the applicable FIM Maintenance Message Index.
- 2) Do the specified task for the maintenance message.
- (b) If maintenance message 23-60451 does not show in Existing Faults, then continue.
- (2) Replace the top-mounted high gain antenna (left), M23111.
These are the tasks:
Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801,
Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
 - (a) Remove the rear fairing and rear cover from the top-mounted high gain antenna (AMM TASK 23-15-23-000-801).
 - (b) Disconnect the connector, DM23111B at the TMHGA, M23111.
 - (c) Remove the high power amplifier, M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (d) Remove the satellite data unit (SDU) (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (e) Do a wiring check between these pins of connector DM23106AB and connector DM23111B (WDM 23-15-12):

SDU, M23106	TMHGA, M23111
DM23106AB	DM23111B
pin G4	pin 6
pin H4	pin 8
- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector, DM23111B to the TMHGA, M23111.
 - 3) Re-install the rear fairing and the rear cover on the top-mounted high gain antenna (AMM TASK 23-15-23-400-801).
 - 4) Re-install the high power amplifier, M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - 5) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

918. Satellite Data Unit (Left) Comm Channel 4, 5, or 6 Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-60571, 23-60581, 23-60591.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

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- (a) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) Keep the circuit breaker open for approximately 10 seconds.

- (c) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (d) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (e) If the MAT shows NOT ACTIVE for the maintenance message, then there was a nuisance fault.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the satellite data unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

920. HPA (L) No Input from SDU (L) on Transmit RF Cable - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60191.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the satellite data unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) Make sure the top-mounted high gain antenna has a clear view to an applicable satellite.
- (b) Do this task: Air Data Inertial Reference Unit - Alignment, AMM TASK 34-21-00-820-801.
- (c) Do these steps at a control display unit (CDU) (P8 or P9) to do the RF link test for the high gain antenna:

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- 1) Push the MENU key.
- 2) Push the line select key (LSK) adjacent to <SAT.
- 3) Push the LSK adjacent to <SUBMENU (SATCOM MAIN MENU page).
- 4) Push the LSK adjacent to <LOG-ON.
- 5) Look to see if the LOG-ON STATE goes to LOGGED-ON AUTO.

NOTE: When the SATCOM system is warm, LOGGED-ON AUTO usually shows in less than 2 minutes. If the SATCOM system is very cold, approximately 10 minutes can be necessary for the SATCOM system to become warm.

- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the high power amplifier (HPA) for the high gain antenna (HGA) (left), M23108.
These are the tasks:
High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801,
High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (a) Do the RF Link Test for the high gain antenna (AMM TASK 23-15-00-710-803).
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do these steps to replace the attenuator:
 - (a) Remove the high speed data unit, M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801.
 - (b) Remove the HPA for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (c) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (d) Remove the beam steering unit for the top-mounted high gain antenna (left), M23109. To remove it, do this task: Beam Steering Unit for Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-24-000-801.
 - (e) Remove electronic equipment rack, E11.
 - (f) Replace the attenuator, DM23995ABV at the HSDU connector, DM23995AB (WDM 23-15-12).
 - (g) Re-install electronic equipment rack, E11.
 - (h) Re-install the high speed data unit, M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801.
 - (i) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (j) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (k) Re-install the beam steering unit for the top-mounted high gain antenna (left), M23109. To install it, do this task: Beam Steering Unit for Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-24-400-801.
 - (l) Do the RF Link Test for the high gain antenna (AMM TASK 23-15-00-710-803).

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- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (n) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the coaxial cable:
 - (a) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - (b) Remove the HPA for the HGA (left), M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (c) Do an inspection of the RF transmit (TX) coaxial cable from connector DM23108AA to connector DM23106AB at the E11 shelf (WDM 23-15-12). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.
 - (d) If you find a problem with the coaxial cable, then do these steps:
 - 1) Replace the coaxial cable.
 - 2) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 3) Re-install the HPA for the HGA (left), M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - 4) Do the RF Link Test for the high gain antenna (AMM TASK 23-15-00-710-803).
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

921. SDU (L) No Input on Receive RF Cable - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60201.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the low noise amplifier (LNA)/diplexer for the top-mounted high gain antenna (left), M23110.

These are the tasks:

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-08-000-801,

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-08-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the satellite data unit (SDU) (left), M23106.

These are the tasks:

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Satellite Data Unit Removal, AMM TASK 23-15-10-000-801,

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the coaxial cable:
- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Disconnect connector DM23110D at the LNA/diplexer (left), M23110 (WDM 23-15-13).
- (c) Remove the satellite data unit (left), M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (d) Do an inspection of the RX coaxial cable from connector DM23110D to connector DM23106AC at the E11 shelf (WDM 23-15-13). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.
- (e) If you find a problem with the coaxial cable, then do these steps:
 - 1) Replace the coaxial cable.
 - 2) Re-connect connector DM23110D.
 - 3) Re-install the satellite data unit (left), M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 5) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804.
- 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

ARO 001, 002

946. Channel Module 1 HSDU (left 1) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60601.

B. Description

- (1) High Speed Data Unit (left 1) has an internal fault on communication channel 1.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995.

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

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- (a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

948. Channel Module 2 HSDU (left 1) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60611.

B. Description

- (1) High Speed Data Unit (left 1) has an internal fault on communication channel 2.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995.

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:
- (a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

950. Channel Module 3 HSDU (left 1) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60621.

B. Description

- (1) High Speed Data Unit (left 1) has an internal fault on communication channel 3.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995.

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:
- (a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

952. Channel Module 4 HSDU (left 1) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-60631.

B. Description

- (1) High Speed Data Unit (left 1) has an internal fault on communication channel 4.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995 (P110)

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:

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- (a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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954. Top High Gain Antenna To SDU Bus (left) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61491.

B. Description

- (1) Satellite Data Unit (left) has no input from Top-Mount High-Gain Antenna (left) on Input Bus.

C. Possible Causes

- (1) Top-Mount High-Gain Antenna (left), M23111
- (2) Satellite Data Unit (left), M23106
- (3) Wiring

D. Initial Evaluation

- (1) Open and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L
E	20	C23431	SAT HIGH L

- (2) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804
- (3) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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E. Fault Isolation Procedure

- (1) Replace the left Top-Mount High-Gain Antenna, M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801.

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left Satellite Data Unit, M23106.
- These are the tasks:
- Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
- (a) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
- (b) Disconnect the electrical connector, DM23111B at the left Top-Mount High-Gain Antenna, M23111 (WDM 23-15-12):
- (c) Do a wiring check between these pins of connector DM23106AB on the left SDU and connector DM23111B on the left TMHGA (WDM 23-15-12):

SDU, M23106
DM23106AB

pin G7 pin 3
pin H7 pin 5

TMHGA, M23111
DM23111B

- (d) If there is a wiring problem, do these steps:
- 1) Repair the problem that you find (WDM 23-15-12).
- 2) Connect the electrical connector DM23111B at the left Top-Mount High-Gain Antenna, M23111 (WDM 23-15-12).
- 3) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801).
- 4) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804
- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

956. SDU experiencing over temperature Cool it (left) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61501.

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B. Description

- (1) Satellite Data Unit (left) temperature is too high.

C. Possible Causes

- (1) Airplane ambient temperature high
- (2) Equipment cooling
- (3) Satellite Data Unit (left), M23106

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the Airplane ambient temperature is high in the passenger cabin area, then do these steps:
 - (a) When the airplane ambient temperature is lower, look for the maintenance message on the MAT.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), the fault was temporary.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the equipment cooling for the E11-1 rack:
 - (a) Hold a sheet of paper above the ventilation holes on top of the left Satellite Data Unit (SDU), M23106.

NOTE: This step does a check of the equipment cooling system at the E11-1 rack.
 - (b) Make sure that the air flow pulls the paper in the direction of the ventilation holes.
- (3) If the air flow does not pull the paper in the direction of the ventilation holes, then do these steps to find a problem with the equipment cooling system:
 - (a) Make sure that the Lavatory/Galley Ventilation System is serviceable. Do this task: Lavatory/Galley Ventilation Fan - System Test, AMM TASK 21-26-00-740-801.
 - 1) If the Lavatory/Galley Ventilation System is not serviceable, then do the fault isolation procedure for the Lavatory/Galley Ventilation System (21-26 TASKS, PAGEBLOCK 21-26-00/201).
 - 2) If the Lavatory/Galley Ventilation System is serviceable, then continue.

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- (b) Make sure that the SATCOM Backup Cooling System is serviceable. Do this task: SATCOM Backup Cooling Fan Check - Electronic Equipment Rack, E11, AMM TASK 21-27-30-200-801 or SATCOM Backup Cooling Fan Check - Electronic Equipment Rack, E13, AMM TASK 21-27-30-200-802.
 - 1) If the SATCOM Backup Cooling System is not serviceable, then do the fault isolation procedure for the SATCOM Backup Cooling System (SATCOM Backup Cooling Fan (Left) Problems - Fault Isolation, 21-27 TASK 869).
 - 2) If the SATCOM Backup Cooling System is serviceable, then continue.

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- (c) Do a visual inspection of the duct that connects to the E11-1 rack:
 - 1) If you find a problem with the duct, then correct the problem.
 - 2) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (d) Do a visual inspection of the ventilation holes on top of the left Satellite Data Unit, M23106:
 - 1) If the ventilation holes are clogged, then clean the ventilation holes for the left Satellite Data Unit, M23106.
 - 2) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) Do these steps to do a visual inspection of the metering plate in the tray assembly:
 - 1) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801.
 - 2) Make sure that the correct number of ventilation holes are open (refer to label on tray assembly for correct number).
 - 3) Make sure that the metering plate and seal are installed correctly in the tray assembly.
 - 4) Make sure that the seal is serviceable.
 - 5) Repair the problems that you find.
 - 6) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) If the air flow pulls the paper in the direction of the ventilation holes, then Continue.
- (5) Replace the left Satellite Data Unit, M23106.

These are the task:
Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
Satellite Data Unit Installation, AMM TASK 23-15-10-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

958. SDU To HGA Multi-Control Input Bus FAIL (left) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61503.

B. Description

- (1) Top-Mount High-Gain Antenna (left) has no input from Satellite Data Unit (left) on Multi-Control Bus.

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C. Possible Causes

- (1) Satellite Data Unit (left), M23106
- (2) Wiring
- (3) Top-Mount High-Gain Antenna (left), M23111

D. Initial Evaluation

- (1) Open and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L
E	20	C23431	SAT HIGH L

- (2) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804
- (3) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the left Satellite Data Unit, M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the wiring:

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

 - (a) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
 - (b) Remove the high power amplifier, M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (c) Disconnect the connector, DM23111B at the left Top-Mount High-Gain Antenna, M23111 (WDM 23-15-12).
 - (d) Do a wiring check between these pins of the connector DM23106AB at the E11 rack and the connector DM23111B at the left top mounted HGA (WDM 23-15-12):

SDU, M23106

DM23106AB

Pin G4		Pin 6
Pin H4		Pin 8

TMHGA, M23111

DM23111B

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- (3) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring (WDM 23-15-12).
 - (b) Connect the connector DM23111B at the left Top-Mount High-Gain Antenna, M23111 (WDM 23-15-12).
 - (c) Install the high power amplifier, M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (d) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (e) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (f) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) If you do not find a problem with the wiring, then do these steps:
 - (a) Install the high power amplifier, M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
 - (b) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801.
 - (c) Continue the procedure.
- (5) Replace the left Top-Mount High-Gain Antenna, M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

962. Top High Gain Antenna FAIL (left) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61631.

B. Description

- (1) Satellite Data Unit (left) output circuit is open or shorted.

C. Possible Causes

- (1) LNA/Diplexer for HGA (top, L sys), M23110
- (2) Satellite Data Unit (left), M23106
- (3) Coaxial Cable
- (4) Top-Mount High-Gain Antenna (left), M23111

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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E. Fault Isolation Procedure

- (1) Replace the LNA/Diplexer for HGA (top, L sys), M23110.

These are the tasks:

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-08-000-801

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-08-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left Satellite Data Unit, M23106.
- These are the tasks:
- Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
- Satellite Data Unit Installation, AMM TASK 23-15-10-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the Coaxial Cables between SDU, M23106 and the LNA/diplexer, M23110 (WDM 23-15-12):
- (a) Remove the left Satellite Data Unit, M23106 (Satellite Data Unit Removal, AMM TASK 23-15-10-000-801).
- (b) Remove the high speed data unit, M23995 (High Speed Data Unit Removal, AMM TASK 23-15-13-000-801).
- (c) Remove the high power amplifier, M23108 (High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801).
- (d) Disconnect the connector, DM23110C at the LNA/diplexer, M23110 .
- (e) Do an inspection of all the TX RF coaxial cables between the SDU (M23106), connector DM23106AA and the LNA/Diplexer (M23110), connector DM23110C (WDM 23-15-12). To do the inspection for the coaxial cables, do this task: (Coaxial Cable Inspection, AMM TASK 20-10-32-210-801).
- (f) If you find a problem for the coaxial cable, then do these steps:
- 1) Repair or replace the coaxial cable.
 - 2) Connect the coaxial connector, DM23110C to the LNA/diplexer, M23110.
 - 3) Install the high power amplifier, M23108 (High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801).
 - 4) Install the high speed data unit, M23995 (High Speed Data Unit Installation, AMM TASK 23-15-13-400-801).
 - 5) Install the satellite data unit, M23106 (Satellite Data Unit Installation, AMM TASK 23-15-10-400-801).
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 7) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (4) Do a check of the Coaxial Cables between the LNA/diplexer, M23110 and the TMHGA, M23111(WDM 23-15-12):

- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Disconnect the connector, DM23110B at the LNA/diplexer, M23110.
 (c) Disconnect the connector DM23111A at the TMHGA, M23111 .
 (d) Do a check of the coaxial cable between these pins of connectors DM23110B and DM23111A (Coaxial Cable Inspection, AMM TASK 20-10-32-210-801) (WDM 23-15-12).

LNA/diplexer,

M23110

DM23110B

pin A1 pin A1
 pin C1 pin C1

TMHGA, M23111

DM23111A

- (e) If you find a problem for the coaxial cable, then do these steps:
- 1) Repair or replace the coaxial cable.
 - 2) Connect the coaxial connector, DM23111A to the TMHGA, M23111.
 - 3) Connect the coaxial connector, DM23110B to the LNA/diplexer, M23110.
 - 4) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 5) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 7) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left Top-Mount High-Gain Antenna, M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

ARO 001, 002

964. SDU to HSDU (left 1) Disable Discrete FAIL - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61641.

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B. Description

- (1) High Speed Data Unit (left 1) Disable discrete from Satellite Data Unit (left) has a fault.

C. Possible Causes

- (1) Satellite Data Unit (left), M23106 (P110)
- (2) High Speed Data Unit (left 1), M23995 (P110)
- (3) Wiring

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the left Satellite Data Unit, M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the High Speed Data Unit (left 1), M23995.
These are the tasks:
High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the wiring:
 - (a) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
 - (b) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
 - (c) Do a wiring check between these pins of the connector DM23106AB and the connector DM23995AA(WDM 23-15-13):

DM23106AB

DM23995AA

Pin A13 Pin E5

- (d) Repair the wiring that shows a fault (WDM 23-15-13).
 - (e) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

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- (f) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
- (g) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

966. HSDU (left 1) Strapping Parity - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61651.

B. Description

- (1) High Speed Data Unit (left 1) program pins has incorrect configuration.

C. Possible Causes

- (1) DIP switch settings
- (2) High Speed Data Unit (left 1), M23995 (P110)
- (3) Wiring
- (4) Program Switch Module, M23996

D. Initial Evaluation

- (1) Do a check of the DIP switch settings at the program switch module, M23996:
 - (a) Make sure that the DIP switches are in the correct positions (SSM 23-15-17).
 - 1) If the DIP switches are not in the correct positions, then set the DIP switches to the correct positions.
- (2) Do these steps to do the HSDU Configuration test:
 - (a) Do these steps on the MCDU:
 - 1) Push the MENU key.
 - 2) Push the LSK adjacent to the <SAT.
 - 3) Push the LSK adjacent to the <SUBMENU.
 - 4) Push the LSK adjacent to the MAINTENANCE>.
 - 5) Push the LSK adjacent to the <DATA.
 - 6) Push the NEXT PAGE key until page 15 shows.
 - a) Make sure that Forward ID (FID) of CHANNEL 1 agree with the one that showed in SSM 23-15-17.
 - (b) Do these steps on the Maintenance Access Terminal (MAT):
 - 1) Set the Left CMCS to control the MAT.
 - 2) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804.
 - 3) Select GEN INPUT.
 - 4) Enter this Signal Name:
 - a) L/429/33/270/00
 - 5) Select RUN.

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- a) Make sure that the label 270 shows on the MAT Input Monitoring page.
- 6) Make sure that there is no 23-61651 fault.
- (3) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (4) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the wiring:
 - (a) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801.
 - (b) Examine the wiring between pin F3 of DM23995AB and pins that show Forward ID BIT 1 through Forward ID BIT 24 of DM23995AB. And examine the wiring between pin F3 and the applicable configuration pins (i.e. pins A1, A2, B1, B2, D3, E1, E3, F1) of connector DM23995AB. Use WDM 23-15-17, and SSM 23-15-17 to find the configuration for your airplane.
 - 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring fault that you find (SWPM 20-10-13).
 - b) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
 - c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - d) If the MAT shows ACTIVE for the maintenance message, then continue.
 - 2) If you do not find a problem with the wiring, then do these steps:
 - a) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
 - b) Continue the procedure.
- (3) Replace the Program Switch Module, M23996 (WDM 23-15-17, SSM 23-15-17).
 - (a) Do the HSDU Configuration test again from steps in the Initial Evaluation.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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968. HSDU (left 1) FAIL - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61661.

B. Description

- (1) High Speed Data Unit (left 1) has an internal fault.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995
(2) Satellite Data Unit (left), M23106

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:
(a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
(c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
(b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the Satellite Data Unit (left), M23106

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

970. External SDU To HSDU (left 1) Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61671.

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B. Description

- (1) High Speed Data Unit (left 1) has no input from Satellite Data Unit (left) on ARINC 429 Bus.

C. Possible Causes

- (1) Satellite Data Unit (left), M23106 (P110)
- (2) High Speed Data Unit (left 1), M23995 (P110)
- (3) Wiring

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:
 - (a) Open and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the left Satellite Data Unit, M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the wiring:

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (a) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

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- (b) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
- (c) Do a wiring check between these pins of the connector DM23106AB and the connector DM23995AA (WDM 23-15-12):

DM23106AB	DM23995AA
Pin G9	Pin C1
Pin H9	Pin D1

- (d) Repair the wiring that shows a fault (WDM 23-15-12).
- (e) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801
- (f) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
- (g) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

972. External HSDU (left 1) To SDU Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61681.

B. Description

- (1) Satellite Data Unit (left) has no input from High Speed Data Unit (left 1) on ARINC 429 Bus.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995 (P110)
- (2) Satellite Data Unit (left), M23106 (P110)
- (3) Wiring

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do these steps:
 - (a) Open and close this circuit breaker:

Left Power Management Panel, P110

Row	Col	Number	Name
E	17	C23427	SATL SDU L

- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.
These are the tasks:
High Speed Data Unit Removal, AMM TASK 23-15-13-000-801

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High Speed Data Unit Installation, AMM TASK 23-15-13-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Satellite Data Unit (left), M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the wiring:
NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.
- (a) Remove the left Satellite Data Unit, M23106. To remove it, do this task: Satellite Data Unit Removal, AMM TASK 23-15-10-000-801
- (b) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
- (c) Do a wiring check between these pins of the connector DM23106AB and the connector DM23995AA (WDM 23-15-12):

DM23106AB

Pin E9 Pin A1

Pin F9 Pin B1

DM23995AA

- (d) Repair the wiring that shows a fault (WDM 23-15-12).
- (e) Install the left Satellite Data Unit, M23106. To install it, do this task: Satellite Data Unit Installation, AMM TASK 23-15-10-400-801
- (f) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
- (g) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

974. LNA To External HSDU (left 1) RX Path - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61691.

B. Description

- (1) High Speed Data Unit (left 1) has no input from LNA/Diplexer for HGA (top, L sys) on receive RF cable.

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C. Possible Causes

- (1) LNA/Diplexer for HGA (top, L sys), M23110 (P110)
- (2) High Speed Data Unit (left 1), M23995 (P110)
- (3) Coaxial Cable

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the left LNA/Diplexer for HGA (top), M23110.

These are the tasks:

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-08-000-801,

Low Noise Amplifier/Diplexer for Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-08-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the High Speed Data Unit (left 1), M23995.
These are the tasks:
High Speed Data Unit Removal, AMM TASK 23-15-13-000-801
High Speed Data Unit Installation, AMM TASK 23-15-13-400-801
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the receive RF coaxial cable between the Left LNA/Diplexer for HGA (top), M23110 and the High Speed Data Unit (left 1), M23995:
 - (a) Disconnect the connector, DM23110D from the Left LNA/Diplexer for HGA (top), M23110 (WDM 23-15-13).
 - (b) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801.
 - (c) Do an inspection of the coaxial cable from connector DM23110D to connector DM23995AA (WDM 23-15-13). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.

DM23110D		DM23995AA
Pin A1		Pin 71
Pin C1		Pin C71
- (d) Replace the coaxial cable that shows a fault.

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- (e) Connect the connector, DM23110D to the Left LNA/Diplexer for HGA (top), M23110 (WDM 23-15-13).
- (f) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801.
- (g) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

976. External HSDU (left 1) To HPA for HGA TX Path - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61701.

B. Description

- (1) High Power Amplifier for HGA (left) has no input from High Speed Data Unit (left 1) on transmit RF cable.

C. Possible Causes

- (1) High Speed Data Unit (left 1), M23995 (P110)
- (2) High Power Amplifier for HGA (left), M23108 (P110)
- (3) Coaxial Cable

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Replace the High Speed Data Unit (left 1), M23995.

These are the tasks:

High Speed Data Unit Removal, AMM TASK 23-15-13-000-801.

High Speed Data Unit Installation, AMM TASK 23-15-13-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left High Power Amplifier for HGA, M23108.
- These are the tasks:
- High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
- High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Do a check of the transmit RF coaxial cable between the left High Power Amplifier for HGA, M23108 and the High Speed Data Unit (left 1), M23995:
 - (a) Remove the left High Power Amplifier for HGA, M23108. To remove it, do this task: High Power Amplifier for High Gain Antenna Removal, AMM TASK 23-15-12-000-801.
 - (b) Remove the High Speed Data Unit (left 1), M23995. To remove it, do this task: High Speed Data Unit Removal, AMM TASK 23-15-13-000-801.
 - (c) Do an inspection of the coaxial cable from connector DM23108AA to connector DM23995AB (WDM 23-15-12). To do the inspection, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.

DM23108AA

Pin 71

Pin C71

DM23995AB

Pin 71

Pin C71

- (d) Replace the coaxial cable that shows a fault.
- (e) Install the left High Power Amplifier for HGA, M23108. To install it, do this task: High Power Amplifier for High Gain Antenna Installation, AMM TASK 23-15-12-400-801.
- (f) Install the High Speed Data Unit (left 1), M23995. To install it, do this task: High Speed Data Unit Installation, AMM TASK 23-15-13-400-801.
- (g) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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988. HGA experiencing over temperature (left) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-61883.

B. Description

- (1) Top-Mount High-Gain Antenna (left) temperature is too high.

C. Possible Causes

- (1) Outside ambient temperature high
- (2) HGA (L), M23111, or SDU (L), M23106

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the outside ambient temperature is high, then do these steps:

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- (a) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- (b) Make sure that the airplane is in a shaded area or in a hangar.
(c) When the outside ambient temperature is lower, do these steps:
1) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	20	C23431	SAT HIGH L

- 2) Do this task: Satellite Communications (SATCOM) System - Ground Test, AMM TASK 23-15-00-740-804.
3) Look for the maintenance message on the MAT.
(d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), the fault was temporary.
(e) If the MAT shows ACTIVE for the maintenance message, then continue.
(2) Replace the left Satellite Data Unit, M23106.

These are the tasks:

Satellite Data Unit Removal, AMM TASK 23-15-10-000-801

Satellite Data Unit Installation, AMM TASK 23-15-10-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
(b) If the MAT shows ACTIVE for the maintenance message, then continue.
(3) Replace the left Top Mount High Gain Antenna, M23111.

These are the tasks:

Top-Mounted High Gain Antenna Removal, AMM TASK 23-15-23-000-801

Top-Mounted High Gain Antenna Installation, AMM TASK 23-15-23-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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801. SELCAL HF-L Call Reset Problems (PTT Reset OK) - Fault Isolation

A. Initial Evaluation

- (1) Push the HF-L microphone selector switch on the audio control panel (ACP).
 - (a) If the HF-L CALL light stays ON, then do the fault isolation procedure below.
 - (b) If the HF-L CALL light goes OFF, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) If the HF-L CALL light is not illuminated, then you have corrected the fault.
 - (b) If the HF-L CALL light is still illuminated, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

 - (a) If the HF-L CALL light is not illuminated, you have corrected the fault.

————— END OF TASK —————

802. SELCAL HF-R Call Reset Problems (PTT Reset OK) - Fault Isolation

A. Initial Evaluation

- (1) Push the HF-R microphone selector switch on the audio control panel (ACP).
 - (a) If the HF-R CALL light stays ON, then do the fault isolation procedure below.
 - (b) If the HF-R CALL light goes OFF, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

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These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,

Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

- (a) If the HF-R CALL light is not illuminated, then you have corrected the fault.
- (b) If the HF-R CALL light is still illuminated, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the HF-R CALL light is not illuminated, you have corrected the fault.

————— **END OF TASK** —————

803. SELCAL VHF-L Call Reset Problems (PTT Reset OK) - Fault Isolation

A. Initial Evaluation

- (1) Push the VHF-L microphone selector switch on the audio control panel (ACP).
 - (a) If the VHF-L CALL light stays ON, then do the fault isolation procedure below.
 - (b) If the VHF-L CALL light goes OFF, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,

Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

- (a) If the VHF-L CALL light is not illuminated, then you have corrected the fault.
- (b) If the VHF-L CALL light is still illuminated, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the VHF-L CALL light is not illuminated, you have corrected the fault.

————— **END OF TASK** —————

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804. SELCAL VHF-R Call Reset Problems (PTT Reset OK) - Fault Isolation

A. Initial Evaluation

- (1) Push the VHF-R microphone selector switch on the audio control panel (ACP).
 - (a) If the VHF-R CALL light stays ON, then do the fault isolation procedure below.
 - (b) If the VHF-R CALL light goes OFF, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) If the VHF-R CALL light is not illuminated, then you have corrected the fault.
 - (b) If the VHF-R CALL light is still illuminated, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

 - (a) If the VHF-R CALL light is not illuminated, you have corrected the fault.

————— **END OF TASK** —————

805. SELCAL VHF-C Call Reset Problems (PTT Reset OK) - Fault Isolation

A. Initial Evaluation

- (1) Push the VHF-C microphone selector switch on the audio control panel (ACP).
 - (a) If the VHF-C CALL light stays ON, then do the fault isolation procedure below.
 - (b) If the VHF-C CALL light goes OFF, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

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These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

- (a) If the VHF-C CALL light is not illuminated, then you have corrected the fault.
- (b) If the VHF-C CALL light is still illuminated, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the VHF-C CALL light is not illuminated, you have corrected the fault.

————— **END OF TASK** —————

806. SELCAL VHF-L Call Light Not On - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded VHF-L call to the airplane.
 - (a) If the VHF-L CALL light comes ON, then there was an intermittent fault.
 - (b) If the VHF-L CALL light stays OFF, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.

- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

- (a) Make a SELCAL coded VHF-L call to the airplane.
- (b) If the VHF-L CALL light comes ON, then you have corrected the fault.
- (c) If the VHF-L CALL light is not lit, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) Make a SELCAL coded VHF-L call to the airplane.
- (b) If the VHF-L CALL light comes ON, then you have corrected the fault.

————— **END OF TASK** —————

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807. SELCAL VHF-R Call Light Not On - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded VHF-R call to the airplane.
 - (a) If the VHF-R CALL light comes ON, then there was an intermittent fault.
 - (b) If the VHF-R CALL light stays OFF, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) Make a SELCAL coded VHF-R call to the airplane.
 - (b) If the VHF-R CALL light comes ON, then you have corrected the fault.
 - (c) If the VHF-R CALL light is not lit, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

 - (a) Make a SELCAL coded VHF-R call to the airplane.
 - (b) If the VHF-R CALL light comes ON, then you have corrected the fault.

————— **END OF TASK** —————

808. SELCAL VHF-C Call Light Not On - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded VHF-C call to the airplane.
 - (a) If the VHF-C CALL light comes ON, then there was an intermittent fault.
 - (b) If the VHF-C CALL light stays OFF, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the audio control panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.

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- (b) If a maintenance message related to the audio control panel does not show in Existing Faults, then continue.
- (2) Replace the audio control panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) Make a SELCAL coded VHF-C call to the airplane.
 - (b) If the VHF-C CALL light comes ON, then you have corrected the fault.
 - (c) If the VHF-L CALL light is not lit, then continue.
- (3) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

 - (a) If the VHF-C CALL light is not illuminated, you have corrected the fault.

————— END OF TASK —————

809. EICAS Message DATALINK LOST - Fault Isolation

A. Initial Evaluation

- (1) If this message shows and ACARS could not acquire a VHF datalink, then do this task: VHF Datalink Problems - Fault Isolation, 23-27 TASK 918.
- (2) This message also shows when no data links are established (HF, VHF, SATCOM, or Mode S). If there are no pilot write-ups, no maintenance action is necessary.

————— END OF TASK —————

810. EICAS Message SELCAL - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when there is a call from a ground station on the HF or VHF communication transceiver or a SATCOM voice line is available for access from the audio control panel. No maintenance action is necessary.

————— END OF TASK —————

811. SELCAL Call Lights Do Not Come on when Called, All Radios - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded VHF-L call to the airplane.
 - (a) If the VHF-L CALL light comes on, then there was an intermittent fault.
 - (b) If the VHF-L CALL light does not come on, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Replace the SELCAL decoder.

These are the tasks:

SELCAL Decoder Removal, AMM TASK 23-21-01-000-801,
SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.

 - (a) Make a SELCAL coded VHF-L call to the airplane.

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- (b) If the VHF-L CALL light comes on, then you have corrected the fault.
- (c) If the VHF-L CALL light does not come on, then continue.
- (2) Replace the audio management unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) Make a SELCAL coded VHF-L call to the airplane.
- (b) If the VHF-L CALL light comes on, then you have corrected the fault.
- (c) If the VHF-L CALL light does not come on, then continue.
- (3) Do this check for 28 VDC power:
 - (a) Do this task: SELCAL Decoder Removal, AMM TASK 23-21-01-000-801.
 - (b) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23607	SELCAL

- (c) Do a check for 28 VDC from pin 2 to pin 3 of connector DM23095AC.
- (d) If there is not 28 VDC from pin 2 to pin 3 of DM23095AC, then do these steps:
 - 1) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23607	SELCAL

- 2) Repair the wiring (WDM 23-21-11).
 - 3) Do this task: SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.
 - 4) Make a SELCAL coded VHF-L call to the airplane.
 - 5) If the VHF-L CALL light comes on, then you have corrected the fault.
- (e) If there is 28 VDC from pin 2 to pin 3 of DM23095AC, then continue.
- (4) Do this check of the wiring:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23607	SELCAL

- (b) Do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
- (c) Do a wiring check between these pins of connector DM23095AB and connector DM23008AC (WDM 23-21-11):

DM23095AB	DM23008AC
pin A7	pin K6
pin D7	pin H6

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- (d) Do a wiring check between these pins of connector DM23095AB and connector DM23008AB (WDM 23-21-11):

DM23095AB	DM23008AB
pin B7	pin K10

- (e) Do a wiring check between these pins of connector DM23095AB and connector DM23008AA (WDM 23-21-11):

DM23095AB	DM23008AA
pin D6	pin K5
pin C7	pin H5

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring (WDM 23-21-21).
 - 2) Do this task: SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.
 - 3) Do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) Make a SELCAL coded VHF-L call to the airplane.
 - 5) If the VHF-L CALL light comes on, then you have corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (5) Do these steps to do a check of the SELCAL code settings:
- (a) Make sure that the SELCAL code that shows on the Captain's or First Officer's main instrument panel placard agrees with the switch settings in the SELCAL Program Switch Module, M23121 (WDM 23-21-12).
- (b) If you find a problem with the Program Switch Module, then change the switch positions to the correct settings.
- 1) Do this task: SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.
 - 2) Make a SELCAL coded VHF-L call to the airplane.
 - 3) If the VHF-L CALL light comes on, then you have corrected the fault.
- (c) If you do not find a problem with the Program Switch Module, then continue.
- (6) Do a wiring check between these pins of connector DM23095AB and the SELCAL Program Switch Module M23121 (WDM 23-21-12):

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DM23095AB	M23121
pin D10	pin 1
pin C10	pin 2
pin B10	pin 3
pin A10	pin 4
pin D11	pin 5
pin C11	pin 6
pin B11	pin 7
pin A11	pin 8
pin D13	pin 13
pin C13	pin 14
pin B13	pin 15
pin A13	pin 16
pin D15	pin 17
pin C15	pin 18
pin B15	pin 19
pin A15	pin 20
pin B9	pin 25

- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring (WDM 23-21-11).
 - 2) Do this task: SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.
 - 3) Make a SELCAL coded VHF-L call to the airplane.
 - 4) If the VHF-L CALL light comes on, then you have corrected the fault.
- (b) If you do not find a problem with the wiring, then do these steps:
- 1) Replace the program module switch, M23121 (WDM 23-21-11).
 - 2) Set the switch settings on the program module switch for the correct SELCAL code (WDM 23-21-11).
 - 3) Do this task: SELCAL Decoder Installation, AMM TASK 23-21-01-400-801.
 - 4) Make a SELCAL coded VHF-L call to the airplane.
 - 5) If the VHF-L CALL light comes on, then you have corrected the fault.

————— **END OF TASK** —————

812. SELCAL HF-L Call Light Not On - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded HF-L call to the airplane.
- (a) On the Audio Control Panel, if the HF-L CALL light comes on, then there was an intermittent fault.
- (b) If the HF-L CALL light does not come on, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
- (a) If a maintenance message related to the Audio Control Panel shows in Existing Faults, then do these steps:

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- 1) Find the message in the applicable FIM Maintenance Message Index.
- 2) Do the specified task for the maintenance message.
- (b) If a maintenance message related to the Audio Control Panel does not show in Existing Faults, then continue.
- (2) Replace the Audio Control Panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) Make a SELCAL coded HF-L call to the airplane.
 - (b) If the HF-L CALL light comes on, then you corrected the fault.
 - (c) If the HF-L CALL light does not come on, then continue.
- (3) Replace the Audio Management Unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

 - (a) Make a SELCAL coded HF-L call to the airplane.
 - (b) If the HF-L CALL light comes on, then you corrected the fault.

————— **END OF TASK** —————

813. SELCAL HF-R Call Light Not On - Fault Isolation

A. Initial Evaluation

- (1) Make a SELCAL coded HF-R call to the airplane.
 - (a) On the Audio Control Panel, if the HF-R CALL light comes on, then there was an intermittent fault.
 - (b) If the HF-R CALL light does not come on, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the Audio Control Panel shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the Audio Control Panel does not show in Existing Faults, then continue.
- (2) Replace the Audio Control Panel (ACP).

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) Make a SELCAL coded HF-R call to the airplane.
 - (b) If the HF-R CALL light comes on, then you corrected the fault.
 - (c) If the HF-R CALL light does not come on, then continue.

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- (3) Replace the Audio Management Unit.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) Make a SELCAL coded HF-R call to the airplane.
(b) If the HF-R CALL light comes on, then you corrected the fault.

———— **END OF TASK** ————

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801. EICAS Message ELT ON - Fault Isolation

A. Initial Evaluation

- (1) If the emergency locator transmitter (ELT) is on, then do the step that follows, at the ELT control panel on the pilot overhead panel, P5:
 - (a) Push and hold the ELT RESET/ARMED/ON switch to the RESET position for approximately 1 second and release it.
 - 1) If the EICAS message ELT ON stays on, then do the Fault Isolation Procedure below.
 - 2) If the EICAS message ELT ON goes off, then do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006, to make sure that the ELT system operates correctly:
 - a) If the ELT system test shows no fault, then no maintenance action is necessary.
 - b) If the ELT system test shows a fault, then go to the Fault Isolation Procedure that corresponds to the fault indication.
- (2) If the ELT ON message does not operate correctly during an operational test of the ELT system, then do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006:
 - (a) If the ELT system test shows no fault and the ELT ON message operates correctly, then no maintenance action is necessary.
 - (b) If the ELT system test shows a fault, then go to the Fault Isolation Procedure that corresponds to the fault indication.
 - (c) If the ELT system test shows no fault, but the ELT ON message does not operate correctly, then do the fault isolation procedure below.

B. Fault Isolation Procedure

- (1) Disconnect connector DM23575A from the ELT, M23575.
 - (a) If the EICAS message ELT ON goes off, then do the steps that follow:
 - 1) Replace the ELT, M23575.

These are the tasks:
Emergency Locator Transmitter Removal, AMM TASK 23-24-01-000-804-003,
Emergency Locator Transmitter Installation, AMM TASK 23-24-01-400-804-003.

 - a) Make sure that connector DM23575A is connected to the ELT, M23575.
 - b) If the EICAS message ELT ON goes off, then you corrected the fault.
 - c) If the EICAS message ELT ON stays on, then continue the procedure.
 - 2) Do a wiring check of the ELT RESET/ARM/ON switch on the ELT control panel, M23574 (P5) (WDM 23-24-11).
 - a) If you find a problem with the switch, then replace the switch.
 - b) Do the repair confirmation at the end of the task.
 - c) If the EICAS message ELT ON goes off, then you corrected the fault.
 - d) If the EICAS message ELT ON stays on, then continue the procedure.
 - 3) Do a wiring check between the ELT RESET/ARM/ON switch on the ELT control panel, M23574 (P5) and the ELT, M23575 (WDM 23-24-11).
 - a) Repair the problems that you find.

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- b) Do the repair confirmation at the end of the task.
- c) If the EICAS message ELT ON goes off, then you corrected the fault.
- (b) If the EICAS message ELT ON stays on, then do the steps that follow:
- (c) Remove the IOM(M009) module from the left AIMS cabinet, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- 1) Do a wiring check between these pins of connector DM23575A at the ELT and connector J420-A at the left AIMS Cabinet (WDM 23-24-11):

DM23575A	J420-A
pin 8	pin D12

- a) Remove the IOM(M008) module from the right AIMS cabinet, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- 2) Do a wiring check between these pins of connector DM23575A at the ELT and connector J410-A at the right AIMS Cabinet (WDM 23-24-11):

DM23575A	J410-A
pin 8	pin D12

- 3) Repair the problems that you find.
- a) Install the IOM(M009) into the left AIMS cabinet and install the IOM(M008) into the right AIMS cabinet (Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801).
- b) Do the repair confirmation at the end of the task.
- c) If the EICAS message ELT ON goes off, then you corrected the fault.

C. Repair Confirmation

- (1) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
- (a) If the ELT system test shows no fault, then you corrected the fault.

————— **END OF TASK** —————

803. Emergency Locator Transmitter (ELT) has a fault in the BITE test - Fault Isolation

A. Initial Evaluation

ARO 014-999

- (1) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
- (a) Make sure that the light-emitting diode (LED) on the ELT flashes three times.
NOTE: There should be a delay of approximately 3-4 seconds from the time when the switch is set to "ARMED" and the blinking of the LED on the ELT front panel.
- (b) If the LED does not flash three times, then continue the Fault Isolation Procedure.

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ARO 001-013

- (2) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
- (a) Make sure that the light-emitting diode (LED) on the ELT flashes One time.
- NOTE: If the Aircraft Identification Module (AIM) is encoded in the NULL protocol, then the 24-bit Programmable Switch Module (PSM) is disabled. The ELT front-panel LED flashes one time to show the ELT self-test passes.
- NOTE: There should be a delay of approximately 3-4 seconds from the time when the switch is set to "ARMED" and the blinking of the LED on the ELT front panel.
- (b) If the LED does not flash one time, then continue the Fault Isolation Procedure.

ARO ALL

B. Fault Isolation Procedure

- (1) If the LED does not flash, there is a malfunction with the emergency locator transmitter (ELT), M23575. Do the steps that follow:
- (a) Do a check for loose or damaged connectors at the front panel of the emergency locator transmitter (ELT), M23575:
- 1) Repair the problems that you find.
 - 2) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.

ARO 014-999

- 3) If the LED flashes three times, then you corrected the fault.

ARO 001-013

- 4) If the LED flashes one time, then you corrected the fault.

ARO 014-999

- 5) If the LED does not flash three times, then continue the procedure.

ARO 001-013

- 6) If the LED does not flash one time, then continue the procedure.

ARO ALL

- (b) Do a check for loose or damaged connectors at the ELT antenna, M23642:
- 1) Repair the problems that you find.
 - 2) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.

ARO 014-999

- 3) If the LED flashes three times, then you corrected the fault.

ARO 001-013

- 4) If the LED flashes one time, then you corrected the fault.



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- 5) If the LED does not flash three times, then continue the procedure.

ARO 001-013

- 6) If the LED does not flash one time, then continue the procedure.

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- (c) Replace the ELT, M23575.

These are the tasks:

Emergency Locator Transmitter Removal, AMM TASK 23-24-01-000-804-003,

Emergency Locator Transmitter Installation, AMM TASK 23-24-01-400-804-003.

ARO 014-999

- 1) If the LED flashes three times, then you corrected the fault.

ARO 001-013

- 2) If the LED flashes one time, then you corrected the fault.

ARO 014-999

- (2) If the LED flashes one time, there is a malfunction with the Aircraft Identification Module (AIM), M23643. Do the steps that follow:

- (a) Replace the Aircraft Identification Module (AIM), M23643.

These are the tasks:

Aircraft Identification Module Removal, AMM TASK 23-24-01-000-805-003,

Aircraft Identification Module Installation, AMM TASK 23-24-01-400-805-003.

- (b) If the LED flashes three times, then you corrected the fault.

- (3) If the LED flashes two times, do these steps:

- (a) Examine the HEX identification label on the AIM to make sure that it has a valid NULL message installed:

NOTE: A null AIM that is compatible with the ELT will be identified as protocol "NULL-M1". A non-compatible AIM will be marked protocol "NULL".

- 1) Make sure that it shows PROTOCOL: NULL-M1

- 2) If you do not find PROTOCOL: NULL-M1 on the label, do the steps that follow:

- a) Replace the AIM, M23643 with the one that has a valid NULL message or the HEX identification label that shows PROTOCOL: NULL-M1.

These are the tasks:

Aircraft Identification Module Removal, AMM TASK 23-24-01-000-805-003,

Aircraft Identification Module Installation, AMM TASK 23-24-01-400-805-003.

- b) If the LED flashes three times, then you corrected the fault.

- c) If the LED does not flash three times, then continue the procedure.

- (b) Do a check of the programmable switch module, M23566:

- 1) Disconnect the connector, DM23643 at the Aircraft Identification Module, M23643.

- 2) Do a check of the wiring for the correct aircraft 24-bit identification (WDM 23-24-11).

- 3) If you find a wiring problem, then do these steps:

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ARO 014-999 (Continued)

- a) Repair the wiring problem that you find.
 - b) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
 - c) If the LED flashes three times, then you corrected the fault.
 - d) If the LED does not flash three times, then continue the procedure.
- 4) If you do not find a problem with the wiring, there is a malfunction with the programmable switch module, M23566. Do the steps that follow:
- a) Replace the programmable switch module, M23566.
 - b) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
 - c) If the LED flashes three times, then you corrected the fault.

————— **END OF TASK** —————

ARO ALL

804. No ELT Signal on VHF when ELT ARM/ON Switch is set to ON - Fault Isolation

A. Initial Evaluation

- (1) Do this task: Emergency Locator Transmitter (ELT) System - Operational Test, AMM TASK 23-24-00-710-803-003.
 - (a) If you do not hear the ELT signal on VHF-R COMM, then do the Fault Isolation Procedure below.

B. Fault Isolation Procedure

- (1) Replace the ELT, M23575.

These are the tasks:
Emergency Locator Transmitter Removal, AMM TASK 23-24-01-000-804-003,
Emergency Locator Transmitter Installation, AMM TASK 23-24-01-400-804-003.

 - (a) If you hear the ELT signal on VHF-R COMM, then you corrected the fault.
 - (b) If you do not hear the ELT signal on VHF-R COMM, then continue the procedure.
- (2) Do this check of the wiring:
 - (a) Disconnect connector DM23575B from the ELT, M23575.
 - (b) Do a check of the coaxial cable from connector DM23575 to ELT antenna. To do the check, do this task: Coaxial Cable Inspection, AMM TASK 20-10-32-210-801.
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector DM23575B.
 - 3) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
 - 4) If you hear the ELT signal on VHF-R COMM, then you corrected the fault.
 - (d) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-connect the connector DM23575B.

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- 2) Do this task: Emergency Locator Transmitter (ELT) System - System Test, AMM TASK 23-24-00-730-804-006.
 - 3) If you hear the ELT signal on VHF-R COMM, then you corrected the fault.
 - 4) If you do not hear the ELT signal on VHF-R COMM, then continue the procedure.
- (3) Replace the ELT antenna.
- These are the tasks:
- ELT Antenna Removal, AMM TASK 23-24-02-000-801,
ELT Antenna Installation, AMM TASK 23-24-02-400-801.
- (a) If you hear the ELT signal on VHF-R COMM, then you corrected the fault.

———— **END OF TASK** ————

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801. DCMF Internal Fault in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71011, 31-51121.

B. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

802. DCMF Internal Fault in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71012, 31-51122.

B. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

803. DCMF in AIMS-L and AIMS-R Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71040, 23-71050.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.

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- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (d) If the maintenance message shows on the ground test display, then continue.
- (3) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (4) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

804. DCMF in AIMS-L Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71051.

B. Initial Evaluation

- (1) If this message is correlated to a flight deck effect or occurred during a flight with reported ACARS difficulties, then do these steps:
 - (a) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- 2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If this message is not correlated to any flight deck effect or report of loss of ACARS functionality, then there was a nuisance fault. No corrective action is necessary.

C. Fault Isolation Procedure

- (1) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If the maintenance message shows on the ground test display, then continue.
- (2) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (3) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

805. DCMF in AIMS-R Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71052.

B. Initial Evaluation

- (1) If this message is correlated to a flight deck effect or occurred during a flight with reported ACARS difficulties, then do these steps:
 - (a) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If this message is not correlated to any flight deck effect or report of loss of ACARS functionality, then there was a nuisance fault. No corrective action is necessary.

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C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (3) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

806. DCMF in AIMS-L Modem Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71071.

B. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Left AIMS, Operational Test, Left DCMF - Modem Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.

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- (a) Do this ground test on the MAT: 23 AIMS - Left AIMS, Operational Test, Left DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the C VHF Transceiver.
These are the tasks:
VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - (a) Do this ground test on the MAT: 23 AIMS - Left AIMS, Operational Test, Left DCMF - Modem Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring:
 - (a) Remove the center VHF Transceiver, M23303. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the CPM/Comm module, M001, from the left AIMS cabinet, M31101. To remove it, do this task: Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
 - (c) Do a wiring check between these pins of connector J220-B at the left AIMS cabinet, M31101, in the E3-1 shelf and connector DM23303AB at the center VHF Transceiver, M23303 (WDM 23-27-23)

AIMS-L J220-B

pin E10
pin E11

VHF-C DM23303AB

pin D8
pin D7

- (d) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center VHF Transceiver, M23303. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the CPM/Comm module, M001, in the left AIMS cabinet, M31101. To install it, do this task: Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

807. DCMF in AIMS-R Modem Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71072.

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B. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Right AIMS, Operational Test, Right DCMF - Modem Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the R VHF Transceiver.

These are the tasks:

VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801,
VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.

 - (a) Do this ground test on the MAT: 23 AIMS - Right AIMS, Operational Test, Right DCMF - Modem Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring:
 - (a) Remove the R VHF Transceiver, M23203. To remove it, do this task: VHF Communication Transceiver Removal, AMM TASK 23-12-01-000-801.
 - (b) Remove the CPM/Comm module, M001, from the right AIMS cabinet, M31201. To remove it, do this task: Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
 - (c) Do a wiring check between these pins of connector J220-B at the right AIMS cabinet, M31201, in the E2-1 shelf and connector DM23203AB at the R VHF Transceiver, M23203 (WDM 23-27-22)

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AIMS-R

J220-B

pin E10

pin E11

VHF-R

DM23203AB

pin D8

pin D7

- (d) If you find a problem in the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the R VHF Transceiver, M23203. To install it, do this task: VHF Communication Transceiver Installation, AMM TASK 23-12-01-400-801.
 - 3) Re-install the CPM/Comm module, M001, in the right AIMS cabinet, M31201. To install it, do this task: Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.

END OF TASK

808. DCMF in AIMS-L RTP Tuning Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71081.

B. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then check for AIMS IOM faults or Radio Tuning Panel faults.

END OF TASK

809. DCMF in AIMS-R RTP Tuning Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71082.

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B. Initial Evaluation

- (1) Open and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then check for AIMS IOM faults or Radio Tuning Panel faults.

————— END OF TASK —————

810. DCMF in AIMS-L Incorrect Hardware - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71091, 23-71093.

B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the hardware part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, replace the LRM in the left AIMS cabinet:
 - (a) These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

811. DCMF in AIMS-R Incorrect Hardware - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71092, 23-71094.

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B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the hardware part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, replace the LRM in the right AIMS cabinet:
 - (a) These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

812. DCMF AMI in AIMS-L Incorrect Data - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71103.

B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM
TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the left AIMS.

NOTE: The new DCMF AMI is not valid or is not compatible with the current system.

 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM
TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

813. DCMF AMI in AIMS-R Incorrect Data - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71104.

B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the right AIMS.

NOTE: The new DCMF AMI is not valid or is not compatible with the current system.

 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

814. DCMF AMI in AIMS-L Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71111.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the left AIMS.

NOTE: The new DCMF AMI is not valid or is not compatible with the current system.

 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

815. DCMF AMI in AIMS-R Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71112.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:

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- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the right AIMS.
NOTE: The new DCMF AMI is not valid or is not compatible with the current system.
- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

816. DCMF in AIMS-L Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71021.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.

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- (b) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the left AIMS.
NOTE: The new DCMF AMI is not valid or is not compatible with the current system.
- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

817. DCMF in AIMS-R Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71022.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:

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- 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old DCMF AMI software in the CPM/Comm (M001) in the right AIMS.

NOTE: The new DCMF AMI is not valid or is not compatible with the current system.

 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

818. CDU-L ACARS Menu Not Displayed When Selected - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.

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- (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the left control display unit.
These are the tasks:
Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.
 - (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.
NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.
 - (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.
 - (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.

————— **END OF TASK** —————

819. CDU-R ACARS Menu Not Displayed When Selected - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the right control display unit.

These are the tasks:

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Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,

Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.
 - (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.
- NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.
- (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.
 - (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
- (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.

————— **END OF TASK** —————

820. CDU-C ACARS Menu Not Displayed When Selected - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the center control display unit.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,

Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.

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- (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.
NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.
 - (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.
 - (b) If the ACARS menu page does not show when the line select key (LSK) adjacent to ACARS is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the ACARS menu page shows when the line select key (LSK) adjacent to ACARS is pushed, then you corrected the fault.

— END OF TASK —

821. Selected CDU-L ACARS Menu Items Do Not Respond - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the left control display unit.
These are the tasks:
Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

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- (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
- (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.

————— **END OF TASK** —————

822. Selected CDU-R ACARS Menu Items Do Not Respond - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the right control display unit.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.

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- (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.

————— END OF TASK —————

823. Selected CDU-C ACARS Menu Items Do Not Respond - Fault Isolation

A. Initial Evaluation

- (1) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then do the Fault Isolation Procedure below.
- (2) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Replace the center control display unit.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If the ACARS menu item does not show when the line select key (LSK) adjacent to it is pushed, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the ACARS menu item shows when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.

————— END OF TASK —————

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824. CDU-L Can Not Link VHF-C - Fault Isolation

A. Initial Evaluation

- (1) If VHF-C is not selected when the line select key (LSK) adjacent to it is pushed, then do the Fault Isolation Procedure below.
- (2) If VHF-C is selected when the line select key (LSK) adjacent to it is pushed, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System shows in Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message related to the SATCOM system, Flight Management Computing system, Electronic Flight Instrument System, or Data Communication Management System does not show in Existing Faults, then continue.
- (2) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

- (a) If VHF-C is selected when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If VHF-C is not selected when the line select key (LSK) adjacent to it is pushed, then continue.
- (3) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If VHF-C is selected when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If VHF-C is not selected when the line select key (LSK) adjacent to it is pushed, then continue.
- (4) Replace the left control display unit.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

 - (a) If VHF-C is selected when the line select key (LSK) adjacent to it is pushed, then you corrected the fault.
 - (b) If VHF-C is not selected when the line select key (LSK) adjacent to it is pushed, then continue.

————— **END OF TASK** —————

827. DCGF-1 AIMS-L No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-61201.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/GG module, M010, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the CPM/GG module, M011, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left AIMS cabinet, M31101.

These are the tasks:

AIMS Cabinet Removal, AMM TASK 31-41-21-000-802,

AIMS Cabinet Installation, AMM TASK 31-41-21-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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828. DCGF-1 AIMS-R No Input from CMCF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-61204.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the right AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/GG module, M010, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the CPM/GG module, M011, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right AIMS cabinet, M31201.

These are the tasks:

AIMS Cabinet Removal, AMM TASK 31-41-21-000-802,

AIMS Cabinet Installation, AMM TASK 31-41-21-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

829. DCGF-2 AIMS-L No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-62201.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/STD module, M002, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the left AIMS cabinet, M31101.

These are the tasks:

AIMS Cabinet Removal, AMM TASK 31-41-21-000-802,

AIMS Cabinet Installation, AMM TASK 31-41-21-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

830. DCGF-2 AIMS-R No Input from CMCF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-62204.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/STD module, M002, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the right AIMS cabinet, M31101.

These are the tasks:

AIMS Cabinet Removal, AMM TASK 31-41-21-000-802,

AIMS Cabinet Installation, AMM TASK 31-41-21-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

831. DCMF AIMS-L No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71501.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.

NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

832. DCMF AIMS-R No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71502.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (2) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

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Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

833. DCMF AIMS-L No Input from CMCf AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71503.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (2) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

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Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

834. DCMF AIMS-R No Input from CMCF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71504.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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835. DCMF AIMS-L No Input from DCMF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71511.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (2) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

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836. DCMF AIMS-R No Input from DCMF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71512.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (2) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - FDDI LAN Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - FDDI LAN Reset.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

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837. FDCF in AIMS-L Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51181, 31-51191.

B. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

838. FDCF in AIMS-R Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51182, 31-51192.

B. Fault Isolation Procedure

- (1) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

839. FDCF AMI in AIMS-L Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75041.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:

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- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old FDCF AMI software in the CPM/Comm (M001) in the left AIMS.
NOTE: The new FDCF AMI is not valid or is not compatible with the current system.
- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

840. FDCF AMI in AIMS-R Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75042.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Install the old FDCF AMI software in the CPM/Comm (M001) in the right AIMS.

NOTE: The new FDCF AMI is not valid or is not compatible with the current system.

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- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm, M001 in the right AIMS, M31201.
These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

841. FDCF AIMS-L No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75501.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

842. FDCF AIMS-R No Input from CMCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75502.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or in Existing Faults, then continue.
- (2) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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843. FDCF AIMS-L No Input from CMCf AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75503.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Right in Existing Faults, then continue.
- (2) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

844. FDCF AIMS-R No Input from CMCF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75504.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/Comm module, M001, in the right AIMS, M31201.
- These are the tasks:
- Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,
- Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

845. FDCF AIMS-L No Input from FDCF AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75511.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, right DCMF - FDDI LAN Reset.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, left DCMF - FDDI LAN Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (4) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

846. FDCF AIMS-R No Input from FDCF AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75512.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, left DCMF - FDDI LAN Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, right DCMF - FDDI LAN Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If a maintenance message shows for AIMS Left or Right in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If no maintenance message shows for AIMS Left or Right in Existing Faults, then continue.
- (4) Replace the CPM/Comm module, M001, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm module, M001, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,

Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

847. FDCF in AIMS-L Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-75001, 31-51183, 31-51193.

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B. Fault Isolation Procedure

- (1) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

848. FDCF in AIMS-L Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51383, 31-51393.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/STD (M002) in Left AIMS Module Reset.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

849. FDCF in AIMS-L Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51583, 31-51593.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/GG (M010) in Left AIMS Module Reset.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

850. FDCF in AIMS-L Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51783, 31-51793.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/GG (M011) in Left AIMS Module Reset.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

851. FDCF in AIMS-R Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-75002, 31-51184, 31-51194.

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B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

852. FDCF in AIMS-R Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51384, 31-51394.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/STD (M002) in Right AIMS Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

853. FDCF in AIMS-R Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51584, 31-51594.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/GG (M010) in Right AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

854. FDCF in AIMS-R Internal Software Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51784, 31-51794.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/GG (M011) in Right AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

855. DCGF-1 AIMS-R No Input from CMCF in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-61202.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
 - (a) If maintenance message 31-50191 shows in the Existing Faults, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If a maintenance message 31-50191 does not show in Existing Faults, then continue.
- (2) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm(M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, IOM(M004) in Left AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, IOM(M008) in Left AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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856. DCGF-1 AIMS-L No Input from CMCF in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-61203.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm(M001) in Right AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Make these selections on the MAT to put the right CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, IOM(M003) in Right AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Make these selections on the MAT to put the right CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, IOM(M004) in Right AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.

NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.

 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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857. DCGF-2 AIMS-R No Input from CMCF in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-62202.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/Comm(M001) in Left AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, IOM(M004) in Left AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, IOM(M008) in Left AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.
NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

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858. DCGF-2 AIMS-L No Input from CMCF in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-62203.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm(M001) in Right AIMS Module Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Make these selections on the MAT to put the right CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, IOM(M003) in Right AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Make these selections on the MAT to put the right CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO RIGHT.
 - (a) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, IOM(M004) in Right AIMS Module Reset.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 2) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, Right AIMS Cabinet Reset.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Make these selections on the MAT to put the left CMCF in control: OTHER FUNCTIONS, CENTRAL MAINTENANCE COMPUTER SWITCH CONTROL, SWITCH TO LEFT.
 - (a) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, Left AIMS Cabinet Reset.

NOTE: The Left AIMS Cabinet Reset ground test must be started by the PMAT.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

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859. FDCF in AIMS-L Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51381, 31-51391.

B. Fault Isolation Procedure

- (1) Replace the CPM/STD module, M002, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

860. FDCF in AIMS-R Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51382, 31-51392.

B. Fault Isolation Procedure

- (1) Replace the CPM/STD module, M002, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

861. FDCF in AIMS-L Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51581, 31-51591.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M010, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

862. FDCF in AIMS-R Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51582, 31-51592.

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B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M010, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

863. FDCF in AIMS-L Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51781, 31-51791.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M011, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

864. FDCF in AIMS-R Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 31-51782, 31-51792.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M011, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

865. DCMF Internal Fault in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51321.

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B. Fault Isolation Procedure

- (1) Replace the CPM/STD module, M002, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

866. DCMF Internal Fault in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51322.

B. Fault Isolation Procedure

- (1) Replace the CPM/STD module, M002, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/STD Removal, AMM TASK 31-41-05-000-801,

Core Processor Module/STD Installation, AMM TASK 31-41-05-400-801.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

867. DCMF in AIMS-L Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51323.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/STD (M002) in Left AIMS Module Reset.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

868. DCMF in AIMS-R Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51324.

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B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/STD (M002) in Right AIMS Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

869. DCMF Internal Fault in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51521.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M010, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

870. DCMF Internal Fault in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51522.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M010, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

871. DCMF in AIMS-L Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51523.

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B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/GG (M010) in Left AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

872. DCMF in AIMS-R Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51524.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/GG (M010) in Right AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

873. DCMF Internal Fault in AIMS-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51721.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M011, in the left AIMS, M31101.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

874. DCMF Internal Fault in AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51722.

B. Fault Isolation Procedure

- (1) Replace the CPM/GG module, M011, in the right AIMS, M31201.

These are the tasks:

Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM
TASK 31-41-02-000-801,

Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM
TASK 31-41-02-400-801.

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- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Right DCMF - Modem Reset.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

875. DCMF in AIMS-L Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51723.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Left AIMS, System Test, CPM/GG (M011) in Left AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

876. DCMF in AIMS-R Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51724.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/GG (M011) in Right AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

885. CMCF Airplane Type Signal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71073, 23-71074.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do these ground tests on the MAT to make sure the air traffic control system is operational:
 - (a) 34 Air Traffic Control (ATC) Mode S System, System Test, Left ATC System.
 - (b) 34 Air Traffic Control (ATC) Mode S System, System Test, Right ATC System.
 - (c) After each test, if a maintenance message shows on the ground test display, then do these steps:
 - 1) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - 3) Look again at the maintenance message that this procedure is for.

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- a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - b) If the MAT shows ACTIVE for the maintenance message, then continue.
 - d) If a maintenance message does not show on the ground test display, then continue.
- (2) Make sure the correct CMCF AMI is installed:
 - (a) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - 1) Find CPM/Comm (M001) in Left AIMS on the display and make sure that the part number of the CMCF AMI is correct.
 - 2) If the CMCF AIM part number is incorrect, install the correct CMCF AMI in the CPM/Comm (M001) in the left AIMS. To install it, do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804
 - (b) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - 1) Find CPM/Comm (M001) in Right AIMS on the display and make sure that the part number of the CMCF AMI is correct.
 - 2) If the CMCF AIM part number is incorrect, install the correct CMCF AMI in the CPM/Comm (M001) in the right AIMS. To install it, do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (3) AIMS CPM/COMM OPS S/W -04 AND -05;
Do these steps to do a check of the airline identification for ACARS messages:
 - (a) Push the COMM switch on the display select panel (P55).
 - (b) Select MANAGER on a multifunction display (MFD).
 - (c) Select SYSTEM INFORMATION on the MFD.
 - (d) If the tail number is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the cursor control device (CCD) over the tail number on the MFD.
 - 4) Select the CCD cursor selection switch to delete the tail number.
 - 5) Enter the correct tail number.
 - (e) If the airline identification is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the CCD over the airline identification on the MFD.
 - 4) Select the CCD cursor selection switch to delete the airline identification.
 - 5) Enter the correct airline identification.
 - (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (4) AIMS CPM/COMM OPS S/W -07 THRU -99;
Do these steps to do a check of the airline identification for ACARS messages:
 - (a) Push the COMM switch on the display select panel (P55).
 - (b) Select ATC on a multifunction display (MFD).



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- (c) Select LOGON/STATUS on the MFD.
- (d) If the tail number is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the cursor control device (CCD) over the tail number on the MFD.
 - 4) Select the CCD cursor selection switch to delete the tail number.
 - 5) Enter the correct tail number.
- (e) If the airline identification is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the CCD over the airline identification on the MFD.
 - 4) Select the CCD cursor selection switch to delete the airline identification.
 - 5) Enter the correct airline identification.
- (f) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

886. FDCF in AIMS-L, AIMS-R Incorrect Software Config - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-75000, 23-75100.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (4) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:

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- (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/Comm, M001 in the left AIMS, M31101.
These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the MAT shows ACTIVE for the maintenance message, then continue.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (6) Replace the CPM/Comm, M001 in the right AIMS, M31201.
These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

887. EICAS Message COMM - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a new datalink message has been received for display on the multi-function display. No maintenance action is necessary.

————— END OF TASK —————

888. EICAS Message COMM BUSY - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a new datalink message has been received and the database that keeps the messages is full. It is possible that you will not find the new message.

————— END OF TASK —————

889. EICAS Message FMC - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a new uplink message has been received for display on the multi-function display. No maintenance action is necessary.

————— END OF TASK —————

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912. EICAS Message HF DATALINK OFF - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the HF communication transceiver that is used for datalink communication is in the voice mode. No maintenance action is necessary.

————— **END OF TASK** —————

890. EICAS Message VHF DATALINK OFF - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the VHF communication transceiver that is used for datalink communication is in the voice mode. No maintenance action is necessary.

————— **END OF TASK** —————

891. EICAS Message SATCOM DATALINK OFF - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the SATCOM system is in the voice mode. No maintenance action is necessary.

————— **END OF TASK** —————

892. FDCF in AIMS-L Incorrect Software Config - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75011.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (2) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

893. FDCF in AIMS-R Incorrect Software Config - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75012.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (2) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

894. FDCF AMI in AIMS-L(R) Has Incorrect Data - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-75021, 23-75022.

B. Fault Isolation Procedure

- (1) Re-install the AMI software in the CPM/COMM(M001) in the left(right) AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

895. EICAS Message PRINTER - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the flight compartment printer receives a new datalink message. The message will show until the flight compartment printer prints the datalink message or for ten seconds. No maintenance action is necessary.

————— END OF TASK —————

896. EICAS Message DATALINK AVAIL - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the advisory DATALINK LOST message goes away. No maintenance action is necessary.

————— END OF TASK —————

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897. ACARS Transmission/Reception Problem - Fault Isolation

A. Initial Evaluation

- (1) Use a maintenance access terminal (MAT) to look for maintenance messages for ACARS:

- (a) Make these selections on the MAT:

- 1) ONBOARD MAINTENANCE
- 2) EXTENDED MAINTENANCE
- 3) EXISTING FAULTS

- (b) Look for 23 AIMS - Data Communication Management.

NOTE: If 23 AIMS - Data Communication Management does not show, then there are no maintenance messages in existing faults for ACARS.

- (c) If 23 AIMS - Data Communication Management shows, then do this:

- 1) Select 23 AIMS - Data Communication Management.
- 2) Select CONTINUE.
- 3) Look at the maintenance messages that show.
- 4) If a maintenance message for ACARS shows, refer to the applicable Maintenance Message Index in the FIM or select the maintenance message and select MAINTENANCE MESSAGE DATA.

- (2) If there are no existing faults for ACARS, then do the Fault Isolation Procedure below to make sure that ACARS uses the correct tail number (airplane registration number) and airline identification.

NOTE: The tail number and airline identification are part of the Central Maintenance Computing Function (CMCF) Airline Modifiable Information (AMI) software. The tail number and airline identification can also be manually entered. A manual entry takes priority over the CMCF AMI. If the tail number or airline identification is not correct, then ACARS messages are not transmitted or received correctly.

B. Fault Isolation Procedure

- (1) Use a maintenance access terminal (MAT) to make sure the correct Central Maintenance Computing Function (CMCF) Airline Modifiable Information (AMI) software part is installed in each AIMS CPM/COMM module:

NOTE: Make sure you know the correct software part numbers for the CMCF AMI when you look at the software part numbers on the display.

- (a) Make these selections on the MAT:

- 1) ONBOARD MAINTENANCE
- 2) LINE MAINTENANCE
- 3) SYSTEM CONFIGURATION
- 4) 31 AIMS - Left (Right) AIMS
- 5) CONTINUE

- (b) Find the CPM/COMM on the display and make sure that the software part numbers are correct.

- (c) Select GO BACK.

- (d) If the software part numbers are not correct, do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.

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- 1) Send an ACARS message to make sure that ACARS transmits and receives correctly.
 - a) If ACARS operates correctly, then you corrected the fault.
- (e) If the software part numbers are correct, then continue the procedure.
- (2) AIMS CPM/COMM OPS S/W -04 AND -05;
Do these steps to do a check of the tail number and airline identification for ACARS messages:
 - (a) Push the COMM switch on the display select panel (P55).
 - (b) Select MANAGER on a multifunction display (MFD).
 - (c) Select SYSTEM INFORMATION on the MFD.
 - (d) If the tail number is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the cursor control device (CCD) over the tail number on the MFD.
 - 4) Select the CCD cursor selection switch to delete the tail number.
 - 5) Enter the correct tail number.
 - (e) If the airline identification is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the CCD over the airline identification on the MFD.
 - 4) Select the CCD cursor selection switch to delete the airline identification.
 - 5) Enter the correct airline identification.
 - (f) Send an ACARS message to make sure that ACARS transmits and receives correctly.
 - 1) If ACARS operates correctly, then you corrected the fault.
- (3) AIMS CPM/COMM OPS S/W -07 THRU -99;
Do these steps to do a check of the tail number and airline identification for ACARS messages:
 - (a) Push the COMM switch on the display select panel (P55).
 - (b) Select ATC on a multifunction display (MFD).
 - (c) Select LOGON/STATUS on the MFD.
 - (d) If the tail number is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the cursor control device (CCD) over the tail number on the MFD.
 - 4) Select the CCD cursor selection switch to delete the tail number.
 - 5) Enter the correct tail number.
 - (e) If the airline identification is not correct, then do these steps to change it:
 - 1) Push the DEL key on the control display unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the CCD over the airline identification on the MFD.
 - 4) Select the CCD cursor selection switch to delete the airline identification.



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- 5) Enter the correct airline identification.
- (f) Send an ACARS message to make sure that ACARS transmits and receives correctly.
 - 1) If ACARS operates correctly, then you corrected the fault.

————— **END OF TASK** —————

898. DCMF in AIMS-L Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51123.

B. Fault Isolation Procedure

- (1) Do this ground test on the PMAT: 31 AIMS - Left AIMS, System Test, CPM/Comm (M001) in Left AIMS Module Reset.

NOTE: The CPM/Comm (M001) in Left AIMS Module Reset ground test must be started by the PMAT.

 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Do a check of the system configuration for this system on the MAT: 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in left AIMS
- (3) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

899. DCMF in AIMS-R Software Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 31-51124.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 31 AIMS - Right AIMS, System Test, CPM/Comm (M001) in Right AIMS Module Reset.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Do a check of the system configuration for this system on the MAT: 31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/Comm, M001, in right AIMS
- (3) If the part number is incorrect, install software in the LRM in the right AIMS cabinet:
 - (a) Do this task: Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.

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- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

900. Node Processor in AIMS-L Hardware Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71606.

B. Fault Isolation Procedure

- (1) Do this ground test on the maintenance device, SPL-5704:
23 AIMS - Data Communication Management, Operational Tests, Left DCMF - Ethernet LAN Reset test.
- (a) If the GSE-Laptop shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the GSE-Laptop shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/COMM module, M001, in the left AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

901. Node Processor in AIMS-R Hardware Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71607.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT:
23 AIMS - Data Communication Management, Operational Tests, Right DCMF - Ethernet LAN Reset test.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the CPM/COMM module, M001, in the right AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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902. Node Processor or DCMF in AIMS-L Is Not Functioning - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71608.

B. Fault Isolation Procedure

- (1) Do this ground test on the maintenance device, SPL-5704:
23 AIMS - Data Communication Management, Operational Tests, Left DCMF - Ethernet LAN Reset test.
 - (a) If the GSE-Laptop shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the GSE-Laptop shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the system configuration for this system on the GSE-Laptop:
- (3) 31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the node processor (NP) software part number is correct:
 - 1) CPM/COMM, M001, in left AIMS.
- (4) If the NP software part number is incorrect, install NP software in the CPM/COMM, M001, in the left AIMS cabinet:
 - (a) Do this task:
Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the GSE-Laptop shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault
 - (c) If the GSE-Laptop shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/COMM module, M001, in the left AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the GSE-Laptop shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

903. Node Processor or DCMF in AIMS-R Is Not Functioning - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71609.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT:
23 AIMS - Data Communication Management, Operational Tests, Right DCMF - Ethernet LAN Reset test.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the system configuration for this system on the MAT:

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31 AIMS - Right AIMS.

- (a) Find this line replaceable module (LRM) on the display and make sure that the node processor (NP) software part number is correct:
 - 1) CPM/COMM, M001, in right AIMS.
- (3) If the NP software part number is incorrect, install NP software in the CPM/COMM, M001, in the right AIMS cabinet:
 - (a) Do this task:
Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the CPM/COMM module, M001, in the right AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

904. Network Transfer Faults Between AIMS-L and AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71604, 23-71605.

B. Fault Isolation Procedure

- (1) Remove the CPM/COMM module, M001, in the right AIMS cabinet. To do that, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (2) Remove the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (3) Do this check of the wiring between the left AIMS cabinet and the right AIMS cabinet:
 - (a) Do a check for continuity between these pins of the CPM/COMM rack connector J220-A at the left AIMS cabinet, M31101, and these pins of the CPM/COMM rack connector J220-A at the right AIMS cabinet, M31201 (SSM 31-41-01)(WDM 31-41-27):

J220-A (L) AIMS	J220-A (R) AIMS
pin E1	pin G1
pin E2	pin G2
pin G1	pin E1
pin G2	pin E2
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Install the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- 3) Install the CPM/COMM module, M001, in the right AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If you do not find a problem with the wiring, then continue.
- (4) Replace the CPM/COMM module, M001, in the right AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/COMM module, M001, in the left AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

905. DCMF or NODE Processor in AIMS-L Has Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71610.

B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT:
31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/COMM, M001, in left AIMS.
- (2) Do a check of the system configuration for this system on the MAT:
31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/COMM, M001, in right AIMS.

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- (3) If the part numbers are incorrect, install software in the CPM/COMM, M001, in the left AIMS cabinet, and if necessary, install software in the CPM/COMM, M001, in the right AIMS cabinet:
 - (a) Do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

906. DCMF or NODE Processor in AIMS-R Has Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71611.

B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT:
31 AIMS - Right AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/COMM, M001, in right AIMS.
- (2) Do a check of the system configuration for this system on the MAT:
31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/COMM, M001, in Left AIMS.
- (3) If the part numbers are incorrect, install software in the CPM/COMM, M001, in the right AIMS cabinet, and if necessary, install software in the CPM/COMM, M001, in the left AIMS cabinet:
 - (a) Do this task:
Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

907. Network Transfer Faults Between AIMS-L and the MAT - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71603.

B. Fault Isolation Procedure

- (1) Remove the MAT. To do this, do this task:
MAT Electronic Display Unit - Removal, AMM TASK 45-11-05-000-802 or MAT Enhanced Electronic Modular Unit - Removal, AMM TASK 45-11-05-000-803.
- (2) Remove the CPM/COMM, M001, from the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (3) Do this check of the wiring from the left AIMS cabinet to the MAT:

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- (a) Do a check for continuity between these pins of the CPM/COMM rack connector J220-A at the left AIMS cabinet, M31101, and these pins of connector DM15671(J3) at the EEMU (WDM 46-21-11, WDM 46-13-12, and SSM 31-41-01):

J220-A (L) AIMS	DM15671 (EEMU)
pin E10	pin 1
pin E11	pin 2
pin G10	pin 6
pin G11	pin 3

- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Install the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - 3) Install the MAT, M46002. To do this, do this task:
MAT Electronic Display Unit - Installation, AMM TASK 45-11-05-400-802 or MAT Enhanced Electronic Modular Unit - Installation, AMM TASK 45-11-05-400-803.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If you do not find a problem with the wiring, then continue.
- (4) Replace the MAT, M46002. These are the tasks:
MAT Electronic Display Unit - Removal, AMM TASK 45-11-05-000-802 or MAT Enhanced Electronic Modular Unit - Removal, AMM TASK 45-11-05-000-803,
MAT Electronic Display Unit - Installation, AMM TASK 45-11-05-400-802 or MAT Enhanced Electronic Modular Unit - Installation, AMM TASK 45-11-05-400-803.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the CPM/COMM module, M001, in the left AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

908. AIMS-L Linking Fault with the MAT - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71600.

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B. Fault Isolation Procedure

- (1) Do a check of the system configuration for this system on the MAT:
45 MAT.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) MAT, M46002.
- (2) If the part number is incorrect, install software in the MAT:
 - (a) Do this task:
MAT – Software Installation, AMM TASK 45-11-05-470-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do a check of the system configuration for this system on the MAT:
31 AIMS - Left AIMS.
 - (a) Find this line replaceable module (LRM) on the display and make sure that the software part number is correct:
 - 1) CPM/COMM, M001, in left AIMS.
- (4) If the part number is incorrect, install software in the LRM in the left AIMS cabinet:
 - (a) Do this task:
Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Remove the MAT. To do this, do this task:
MAT Electronic Display Unit - Removal, AMM TASK 45-11-05-000-802 or MAT Enhanced Electronic Modular Unit - Removal, AMM TASK 45-11-05-000-803.
- (6) Remove the CPM/COMM, M001, from the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (7) Do this check of the wiring from the left AIMS cabinet to the MAT:
 - (a) Do a check for continuity between these pins of the CPM/COMM rack connector J220-A at the left AIMS cabinet, M31101, and these pins of connector DM15671(J3) at the EEMU (WDM 46-21-11, WDM 46-13-12, and SSM 31-41-01):

J220-A (L) AIMS	DM15671 (EEMU)
pin E10	pin 1
pin E11	pin 2
pin G11	pin 3
pin G10	pin 6

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Install the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- 3) Install the MAT, M46002. To do this, do this task:
MAT Electronic Display Unit - Installation, AMM TASK 45-11-05-400-802 or MAT Enhanced Electronic Modular Unit - Installation, AMM TASK 45-11-05-400-803.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

909. Ethernet Link Faults Between AIMS-L and AIMS-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-71601, 23-71602.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT:
23 AIMS - Data Communication Management, Operational Tests, Right DCMF - Ethernet LAN Reset test.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this ground test on the MAT:
23 AIMS - Data Communication Management, Operational Tests, Left DCMF - Ethernet LAN Reset test.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Remove the CPM/COMM module, M001, in the right AIMS cabinet. To do that, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (4) Remove the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (5) Do this check of the wiring between the left AIMS cabinet and the right AIMS cabinet:
 - (a) Do a check for continuity between these pins of the CPM/COMM rack connector J220-A at the left AIMS cabinet, M31101, and these pins of the CPM/COMM rack connector J220-A at the right AIMS cabinet, M31201 (SSM 31-41-01)(WDM 31-41-27):

J220-A (L) AIMS

pin E1	.....	pin G1
pin E2	.....	pin G2
pin G1	.....	pin E1
pin G2		pin E2

J220-A (R) AIMS

- (b) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
- 2) Install the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
- 3) Install the CPM/COMM module, M001, in the right AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If you do not find a problem with the wiring, then continue.
- (6) Replace the CPM/COMM module, M001, in the right AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the CPM/COMM module, M001, in the left AIMS. These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM
TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM
TASK 31-41-04-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

911. Plane Net Network Error Fault to MAT Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-94978.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT:
31 AIMS - Left AIMS Configuration.
 - (a) Find this line replaceable module (LRM) on the display and make sure that a software part number is displayed:
 - 1) CPM/Comm, M001, in left AIMS.
 - (b) If the part number is missing, install software in the LRM in the left AIMS cabinet:
 - 1) Do this task:
Core Processor Module/COMM Software Installation, AMM
TASK 31-41-04-420-804.
 - 2) Do this ground test on the MAT:

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23 AIMS - Data Communication Management, Operations Test, LEFT DCMF - Modem Reset.

- (c) If the maintenance message does not show on the ground display, you corrected the fault.
- (d) If the maintenance message shows on the ground test display, then continue.
- (2) Remove the MAT. To do this, do this task:
MAT Electronic Display Unit - Removal, AMM TASK 45-11-05-000-802 or MAT Enhanced Electronic Modular Unit - Removal, AMM TASK 45-11-05-000-803.
- (3) Remove the CPM/COMM, M001, from the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802.
- (4) Do this check of the wiring from the left AIMS cabinet to the MAT:
 - (a) Do a check for continuity between these pins of the CPM/COMM rack connector J220-A at the left AIMS cabinet, M31101, and these pins of connector DM15671(J3) at the EEMU (WDM 46-21-11, WDM 46-13-12, and SSM 31-41-01):

J220-A (L) AIMS	DM15671 (EEMU)
pin E10	pin 1
pin E11	pin 2
pin G10	pin 3
pin G11	pin 6

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the CPM/COMM module, M001, in the left AIMS cabinet. To do this, do this task:
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
 - 3) Install the MAT, M46002. To do this, do this task:
MAT Electronic Display Unit - Installation, AMM TASK 45-11-05-400-802 or MAT Enhanced Electronic Modular Unit - Installation, AMM TASK 45-11-05-400-803.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

913. DCMF in Right AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71710.

B. Description

- (1) The data communication management function (DCMF) in the right AIMS cabinet has detected no ARINC 429 bus activity from the Electronic Flight Bag (EFB) Left Electronics Unit.

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C. Possible Causes

- (1) Comm software not installed in the EU
- (2) Electronic Flight Bag Electronics Unit (Left), N46102
- (3) IOM (M008) in Right AIMS (P11)
- (4) Wiring

D. Initial Evaluation

- (1) Wait at least five minutes after the EFB is operational. If the MAT still shows ACTIVE for the maintenance message after the five minutes, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the "DCMF in Left AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus" message also shows on the MAT, do these steps:
 - (a) Replace the EFB Left Electronics Unit. These are the tasks:
Electronic Unit Removal, AMM TASK 46-11-03-000-801
Electronic Unit Installation, AMM TASK 46-11-03-400-801
 - (b) If the fault continues, do this wiring check (WDM 31-41-21):

E1-3 Shelf

EFB EU L	Mod Block
DN46102AB	TB1301
D4	QA67
E4	QB67

- (c) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (2) If the "DCMF in Left AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus" message does not show on the MAT, do these steps:
 - (a) Replace the IOM(M008) module in the Right AIMS cabinet. These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - (b) If the fault continues, do this wiring check (WDM 31-41-21):

Mod Block	AIMS R Cabinet
TB1301	D6717
QA67	42
QB67	43

- (c) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.

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- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

914. DCMF in Left AIMS has no input from Electronic Flight Bag (L) on EFB Datalink bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71711.

B. Description

- (1) The data communication management function (DCMF) in the left AIMS cabinet has detected no ARINC 429 bus activity from the Electronic Flight Bag (EFB) Left Electronics Unit.

C. Possible Causes

- (1) Electronic Flight Bag Electronics Unit (Left), N46102
- (2) Comm software not installed in the EU.
- (3) IOM(M008) in Left AIMS (P11)
- (4) Wiring

D. Initial Evaluation

- (1) Wait at least five minutes after the EFB is operational. If the MAT still shows ACTIVE for the maintenance message after the five minutes, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the "DCMF in Right AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus" message also shows on the MAT, do these steps:
 - (a) Replace the EFB Left Electronics Unit. These are the tasks:
Electronic Unit Removal, AMM TASK 46-11-03-000-801
Electronic Unit Installation, AMM TASK 46-11-03-400-801
 - (b) If the fault continues, do this wiring check (WDM 31-41-21):

E1-3 Shelf

EFB EU L	Mod Block
DN46102AB	TB1301
D4	QA67
E4	QB67

- (c) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (2) If the "DCMF in Right AIMS has no input from Electronic Flight Bag (L) on EFB Datalink Bus" message does not show on the MAT, do these steps:
 - (a) Replace the IOM(M008) module in the Left AIMS cabinet. These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801

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Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- (b) If the fault continues, do this wiring check (WDM 31-41-21):

Mod Block	AIMS L Cabinet
TB1301	D6618
QA67	27
QB67	28

- (c) If you find a problem in the wiring, then do these steps:
- 1) Repair the wiring.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

915. DCMF in Right AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71712.

B. Description

- (1) The data communication management function (DCMF) in the right AIMS cabinet has detected no ARINC 429 bus activity from the Electronic Flight Bag (EFB) Right Electronics Unit.

C. Possible Causes

- (1) Electronic Flight Bag Electronics Unit (Right), N46202
- (2) Comm software not installed in the EU.
- (3) IOM(M003) in Right AIMS (P11)
- (4) Wiring

D. Initial Evaluation

- (1) Wait at least five minutes after the EFB is operational. If the MAT still shows ACTIVE for the maintenance message after the five minutes, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the "DCMF in Left AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus" message also shows on the MAT, do these steps:
 - (a) Replace the EFB Right Electronics Unit. These are the tasks:
Electronic Unit Removal, AMM TASK 46-11-03-000-801
Electronic Unit Installation, AMM TASK 46-11-03-400-801
 - (b) If the fault continues, do this wiring check (WDM 46-11-21):

EFB EU R	Mod Block
DN46202AB	TB3005
D4	QA11
E4	QB11

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- (c) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (2) If the “DCMF in Left AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus” message does not show on the MAT, do these steps:
 - (a) Replace the IOM(M003) module in the Right AIMS cabinet. These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
 - (b) If the fault continues, do this wiring check (WDM 46-11-21):

Mod Block	AIMS R Cabinet
TB3005	D6717
QA11	8
QB11	9

- (c) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

916. DCMF in Left AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-71713.

B. Description

- (1) The data communication management function (DCMF) in the left AIMS cabinet has detected no ARINC 429 bus activity from the Electronic Flight Bag (EFB) Right Electronics Unit.

C. Possible Causes

- (1) Electronic Flight Bag Electronics Unit (Right), N46202
- (2) Comm software not installed in the EU.
- (3) IOM(M003) in Left AIMS (P11)
- (4) Wiring

D. Initial Evaluation

- (1) Wait at least five minutes after the EFB is operational. If the MAT still shows ACTIVE for the maintenance message after the five minutes, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) If the “DCMF in Right AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus” message also shows on the MAT, do these steps:
 - (a) Replace the EFB Right Electronics Unit. These are the tasks:

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Electronic Unit Removal, AMM TASK 46-11-03-000-801

Electronic Unit Installation, AMM TASK 46-11-03-400-801

- (b) If the fault continues, do this wiring check (WDM 46-11-21):

EFB EU R	Mod Block
DN46202AB	TB3005
D4	QA11
E4	QB11

- (c) If you find a problem in the wiring, then do these steps:
- 1) Repair the wiring.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (2) If the "DCMF in Right AIMS has no input from Electronic Flight Bag (R) on EFB Datalink Bus" message does not show on the MAT, do these steps:
- (a) Replace the IOM(M003) module in the Left AIMS cabinet. These are the tasks:
- Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
- Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801
- (b) If the fault continues, do this wiring check (WDM 46-11-21):

Mod Block	AIMS L Cabinet
TB3005	D6618
QA11	8
QB11	9

- (c) If you find a problem in the wiring, then do these steps:
- 1) Repair the wiring.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

917. Unable to cancel CPDLC COMM messages in the New Message list - Fault Isolation

A. Initial Evaluation

NOTE: All messages automatically clear 10 minutes after the doors are opened on the ground. To do an Initial Evaluation, you must try this in less than 10 minutes of the airplane on ground while messages continue to show on the MFD or Engine display. There are two procedures to cancel messages in the New Message list. The primary procedure is to push the CAPT (or F/O) cancel (CANC) switch on the Glareshield Panel (P7). The alternative procedure is to push the CANCEL switch on the MFD (CANCEL is shown if a message does not require a response, or after the received message has been accepted or rejected).

- (1) Push the DSPL CTRL switch on the Instrument Source Select Panel - Capt (F/O), M31106 (M31206) (P1-1, P3-1), to AUTO.
- (2) Set the INBOARD DSPL switch on the Display Switching Module - Capt (F/O), M31001 (M31002) (P1-2, P3-2), to MFD.
- (3) Push the LWR CTR switch on the Display Select Panel, M31038 (P55), to on.
- (4) Push the COMM switch on the Display Select Panel, to on.

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- (5) Make sure that the FDCF main menu shows on the Lower Center Display (MFD), N31302 (P9).
- (6) Push the INBD switch on the Cursor Control Device (CCD) - Left (Right), M31103 (M31203) (P10).
- (7) Move your finger on the touch pad of the CCD and set the NEW MESSAGE switch on the FDCF main menu.
- (8) Make sure that message(s) show on the NEW MESSAGE menu.
 - (a) If the messages do not show during the Initial Evaluation, then do the Fault Isolation Procedure - Glareshield Capt (F/O) Cancel Switch Does Not Cancel Messages for the two Capt and F/O cancel switches.
- (9) Push the Capt cancel switch (CANC) on the glareshield panel (P7) to remove the messages.
 - (a) If the New Message list does not show, then do the Fault Isolation Procedure - Glareshield Capt (F/O) Cancel Switch Does Not Cancel Messages for the F/O cancel switch.
 - (b) If the New Message list shows, then continue.
- (10) Push the F/O cancel switch (CANC) on the glareshield panel (P7) to remove the messages.
 - (a) If the New Message list does not show, then do the Fault Isolation Procedure - Glareshield Capt (F/O) Cancel Switch Does Not Cancel Messages for the Capt cancel switch.
 - (b) If the New Message list shows, then do the Fault Isolation Procedure - Glareshield Cancel Switches Do Not Cancel Messages.

B. Fault Isolation Procedure - Glareshield Capt (F/O) Cancel Switch Does Not Cancel Messages

- (1) Do this check of the wiring between the Capt (F/O) cancel (CANC) switch, S31105 (S31204), on the glareshield panel (P7) and the two L and R Panel Data Concentrator Units (PDCUs), M23197 and M23297 (WDM 31-41-55).

NOTE: Two persons are necessary to do this wiring check.

 - (a) Remove the L and R Panel Data Concentrator Units (PDCUs), M23197 and M23297. This is the task: Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801.
 - (b) Push and hold the applicable Capt (F/O) cancel (CANC) switch, S31105 (S31204), on the glareshield panel (P7).
 - (c) Do this check of the wiring between these pins of each connector at the L and R Panel Data Concentrator Units (PDCUs), M23197 and M23297 (WDM 31-41-55):
 - 1) For the Capt cancel (CANC) switch, S31105, do a wiring check between pins 29 and 50 on each connector, DM23197C and DM23297C.
 - 2) For the F/O cancel (CANC) switch, S31204, do a wiring check between pins 49 and 50 on each connector, DM23197D and DM23297D.
 - 3) If you find a problem with the wiring, repair the wiring.
 - 4) If you find a problem with the switch, then replace the Capt (F/O) cancel (CANC) switch, S31105 (S31204).
 - 5) If you do not find a problem with the wiring, then continue.
 - (d) Release the applicable Capt (F/O) cancel (CANC) switch, S31105 (S31204), on the glareshield panel (P7).

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- (e) Install the L and R Panel Data Concentrator Units (PDCUs), M23197 and M23297. This is the task: Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
- (2) Replace the CPM/Comm module, M001, in the left AIMS, M31101.
These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.

C. Fault Isolation Procedure - Glareshield Cancel Switches Do Not Cancel Messages

- (1) Replace the CPM/Comm module, M001, in the left AIMS, M31101.
These are the tasks:
Core Processor Module/Communication (CPM/Comm) Removal, AMM TASK 31-41-04-000-802,
Core Processor Module/Communication (CPM/Comm) Installation, AMM TASK 31-41-04-400-802.
- (a) Do this ground test on the MAT: 23 AIMS - Data Communication Management, Operations Test, Left DCMF - Modem Reset.

————— END OF TASK —————

918. VHF Datalink Problems - Fault Isolation

A. Description

- (1) Use this task if the airplane cannot make a VHF datalink when it operates in a VDLM2 (VHF Datalink Mode 2) region. This fault condition occurs when the VHF radio is not in voice mode but is data mode. The airplane enters an area with VDLM2 coverage but the system cannot acquire VDLM2 VHF datalink. This condition stays in effect, and the latched fault is active until the AIMS power is reset.
- (2) There are two different airplane effects dependant on airplane configuration.
 - (a) For airplanes that do not have SATCOM or HF Datalink (HFDL), the condition will show a "No Datalink Communications" condition on the airplane while in a VDLM2 region. The Flight Deck effect is the EICAS "DATALINK LOST" advisory message shows.
 - (b) For airplanes with SATCOM or HF Datalink, the data messaging is re-routed to SATCOM or HFDL and no data messaging is lost. In this configuration, there is no flight deck effect as the airplane remains in datalink communications with the ground.

B. Possible Causes

- (1) Software

C. Initial Evaluation

- (1) On the ACARS Menu, look for this VDLM2 condition. It shows on the MFD Communication Function under the Manager/ACARS Menu Page 1. The following data will show:
 - MODE 2 DATALINK SERVICE PROVIDER: NONE
 - MODE 2 FREQUENCY: (blank or 136.975)

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- (a) If you see the data above, do the fault isolation procedure below.

NOTE: When you do the fault isolation procedure below and cycle the AIMS circuit breakers, this deletes all of the COMM BITE and COMM Memory data. This includes all flight plan data, FMS data uplinked or entered by the crew, and CMCF fault history. Boeing recommends that you download the data now before you cycle the circuit breakers. If you have questions, ask your engineering department.

- (b) If you do not see the data above, there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (2) Open these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	6	C31651	AIMS L
J	7	C31650	AIMS R

- (3) Wait for thirty (30) seconds and then close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	6	C31651	AIMS L
J	7	C31650	AIMS R

- (a) If necessary, enter the airplane tail number on the System Information page to establish Controller-Pilot Data Link Communications (CPDLC).
- 1) Make these selections on the MFD to access the System Information page.
 - a) Press COMM on the DSP to display the FDCF MAIN MENU on the Multi-Function Display (MFD)
 - b) Press MANAGER on the FDCF MAIN MENU to display the FDCF MANAGER MENU.
 - c) Press SYSTEM INFORMATION on the FDCF MANAGER MENU to display the SYSTEM INFORMATION Sub-menu.



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- 2) Enter the airplane tail number.

NOTE: The tail number is lost and needs to be re-entered to re-establish CPDLC if the AIMS L or AIMS R circuit breakers are cycled, the AIMS CPM/COMM module is re-racked, new CMCF AMI software is loaded, or new COMM software is loaded. The Tail Number must be entered before engine start, since the field is inhibited after engine start.

- (4) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (a) Make sure that the tail number is correct. If the tail number is not correct, then do these steps to change it:
 - 1) Push the DEL key on the Control Display Unit (CDU).
 - 2) Make sure that DELETE shows in the CDU scratch pad.
 - 3) Move the Cursor Control Device (CCD) over the tail number on the MFD.
 - 4) Select the CCD cursor selection switch to delete the tail number.
 - 5) Enter the correct tail number.

E. Repair Confirmation

- (1) After AIMS power is reset and VHF Center is selected for DATA, make sure that the Manager/ACARS Menu Page 1 shows the following:
 - MODE 2 DATALINK SERVICE PROVIDER: (this now shows the applicable service provider for your airline)
 - MODE 2 FREQUENCY: (136.975)

————— **END OF TASK** —————

919. FDCF in AIMS-L ATC Database Invalid Parameter - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75013.

B. Description

- (1) This maintenance message shows when the Flight Deck Communication Function (FDCF) Air Traffic Control (ATC) database in Left AIMS has incorrect data.
 - (a) There are two ATC database software locations. One is in AIMS-L and one is in AIMS-R.
 - (b) The maintenance message shows when you try to install the ATC database software. When you see this maintenance message, it indicates that the two ATC Databases are not the same. It also shows when one of the ATC databases failed the CRC (Cyclic Redundancy Check) validation.

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(c) The corrective action is to install the ATC database software into AIMS-L and AIMS-R.

C. Possible Causes

- (1) Software

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Install the ATC Database software into AIMS-L and AIMS-R. This is the task: (Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804).

F. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, or if the maintenance message does not show, then you corrected the fault.

————— END OF TASK —————

920. FDCF in AIMS-R ATC Database Invalid Parameter - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75014.

B. Description

- (1) This maintenance message shows when the Flight Deck Communication Function (FDCF) Air Traffic Control (ATC) database in Right AIMS has incorrect data.
 - (a) There are two ATC database software locations. One is in AIMS-L and one is in AIMS-R.
 - (b) The maintenance message shows when you try to install the ATC database software. When you see this maintenance message, it indicates that the two ATC Databases are not the same. It also shows when one of the ATC databases failed the CRC (Cyclic Redundancy Check) validation.
- (c) The corrective action is to install the ATC database software into AIMS-L and AIMS-R.

C. Possible Causes

- (1) Software

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Install the ATC Database software into AIMS-L and AIMS-R. This is the task: (Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804).

F. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, or if the maintenance message does not show, then you corrected the fault.

————— END OF TASK —————

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921. AIMS-L ATC Database Corrupt - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75015.

B. Description

- (1) This maintenance message shows when the Air Traffic Control (ATC) database in Left AIMS is corrupted.
 - (a) There are two ATC database software locations. One is in AIMS-L and one is in AIMS-R.
 - (b) The maintenance message shows when you try to install the ATC database software. When you see this maintenance message, it indicates that the ATC Database in AIMS-L is not serviceable.
 - (c) The corrective action is to install the ATC database software into AIMS-L and AIMS-R.

C. Possible Causes

- (1) Software

D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Install the ATC Database software into AIMS-L and AIMS-R. This is the task: (Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804).

F. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, or if the maintenance message does not show, then you corrected the fault.

————— END OF TASK —————

922. AIMS-R ATC Database Corrupt - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-75016.

B. Description

- (1) This maintenance message shows when the Air Traffic Control (ATC) database in Right AIMS is corrupted.
 - (a) There are two ATC database software locations. One is in AIMS-L and one is in AIMS-R.
 - (b) The maintenance message shows when you try to install the ATC database software. When you see this maintenance message, it indicates that the ATC Database in AIMS-R is not serviceable.
 - (c) The corrective action is to install the ATC database software into AIMS-L and AIMS-R.

C. Possible Causes

- (1) Software

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D. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Install the ATC Database software into AIMS-L and AIMS-R. This is the task: (Core Processor Module/COMM Software Installation, AMM TASK 31-41-04-420-804).

F. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, or if the maintenance message does not show, then you corrected the fault.

———— **END OF TASK** ————

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801. Cabin Management System General Problems (Quick Test) - Fault Isolation

A. Fault Isolation Procedure

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to do the QUICK TEST:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START QUICK TEST
 - (d) CONTINUE
- (2) If the QUICK TEST FAULTS REVIEW screen shows, touch these selections on the CSCP to show the maintenance messages:
 - (a) ALL UNITS
 - (b) CONTINUE
- (3) For each maintenance message that shows in the Quick Test Fault Results, then do these steps:
 - (a) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.

————— END OF TASK —————

802. Cabin Management System General Problems (All Test) - Fault Isolation

A. Fault Isolation Procedure

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to do the ALL TEST:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) CONTINUE
- (2) If the ALL TEST FAULTS REVIEW screen shows, touch these selections on the CSCP to show the maintenance messages:
 - (a) ALL UNITS
 - (b) CONTINUE

NOTE: Wait 3 minutes after the test is complete before you do any other maintenance action. Most of the line replaceable units (LRUs) in the Cabin Services System (CSS) and Mood Lighting System (MLS) will go through rebooting or re-initializing process, which takes approximately 3 minutes to complete.
- (3) For each maintenance message that shows in the All Test Fault Results, then do these steps:
 - (a) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.

————— END OF TASK —————

807. CACP Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03001.

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B. Fault Isolation Procedure

- (1) Replace the Cabin Area Control Panel (CACP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:

- (a) Replace the Zone Management Unit (ZMU).

These are the tasks:

Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,

Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (c) If the maintenance message shows in the All Test Fault Results, then continue.

- (4) Do this voltage check:

- (a) Disconnect the connector from J1 on the CACP.

- (b) Do a check for 115 VAC from pin 8 of the CACP cable connector to structure ground (WDM 23-33-12) (WDM 23-33-13) (WDM 23-33-14).

- (c) If there is not 115 VAC at pin 8 of the CACP cable connector, then do these steps:

- 1) (WDM 23-33-12):

Replace this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	9	C23444	AREA CONTROL PANELS

- 2) Re-connect the CACP connector.

- 3) Do the QUICK TEST on the CSCP.

- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (d) If there is 115 VAC at pin 8 of the CACP cable connector, then do these steps:

- 1) Disconnect connector DM2307XD (X is different for each ZMU) from the ZMU.

- 2) Do a wiring check between these pins of the CACP cable connector and connector DM2307XD at the ZMU (WDM 23-33-12) (WDM 23-33-13) (WDM 23-33-14). The first set applies to all except CACP 2 at door 2 right. The second set applies to CACP 2 at door right.

- 3) If you find a problem with the wiring, then do these steps:

- a) Repair the wiring.

- b) Re-connect the CACP connector.

- c) Re-connect DM2307XD.

- d) Do the QUICK TEST on the CSCP.

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- e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

808. CACP Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03010.

B. Fault Isolation Procedure

- (1) Replace the Cabin Area Control Panel (CACP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).

- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

809. CACP Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03017.

B. Fault Isolation Procedure

- (1) Replace the Cabin Area Control Panel (CACP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).

- (3) If the maintenance message does not show in the Quick Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

810. CACP Shop Mode Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03034.

B. Fault Isolation Procedure

- (1) Disconnect the connector from J1 on the Cabin Area Control Panel (CACP).

- (2) Do a check for a short to ground at the shop mode pins 4 and 12 of the CACP connector.

- (3) If there is a short to ground, then do these steps:

(a) Repair the wiring.

(b) Re-connect the CACP connector.

(c) Do the ALL TEST on the Cabin System Control Panel (CSCP).

(d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

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- (4) If there is not a short to ground, then do these steps:
 - (a) Replace the CACP.

These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

811. CACP Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03018.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Cabin Area Control Panel (CACP). To install the software, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the CACP.

These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

812. CACP Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03019.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Cabin Area Control Panel (CACP).

These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

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- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

814. CIC Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01601.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
- (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
- (a) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (c) If the maintenance message shows in the Installation Fault Results, then continue.
- (5) Do this voltage check:
- (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (b) Do a check for 28 VDC from pins 111 and 114 of connector DM23016AD to structure ground (WDM 23-42-13).
- (c) If there is not 28 VDC at pins 111 and 114 of DM23016AD, then do these steps:
- 1) (WDM 23-42-13):
Replace the applicable circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
F	12	C23638	CAB INTPH PRI
F	13	C23639	CAB INTPH SEC

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- 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If there is 28 VDC at pins 111 and 114 of DM23016AD, then do these steps:
- 1) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - 2) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-42-13):

DM23016AD	DM23061AA
pin C5	pin A2
pin C6	pin B2

- 3) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 4) If you do not find a problem with the wiring, then do these steps:
 - a) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - b) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

815. CIC Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01602.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

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These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.

- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Push the PA NORM/ALT switch on the ASP.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - 1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.
 - 2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-42-13):

DM23016AD

pin C5

pin C6

DM23061AA

pin A2

pin B2

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:

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- 1) Do a check for 28 VDC from pins 111 and 114 of connector DM23016AD to structure ground (WDM 23-42-13).
- 2) If there is not 28 VDC at pins 111 and 114 of DM23016AD, then do these steps:
 - a) (WDM 23-42-13):
Replace the applicable circuit breakers:
Standby Power Management Panel, P310

Row	Col	Number	Name
F	12	C23638	CAB INTPH PRI
F	13	C23639	CAB INTPH SEC
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - d) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- 3) If there is 28 VDC at pins 111 and 114, then do these steps:
 - a) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - c) If the maintenance message does not show in Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

816. PA/CI Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01410, 23-01610.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the problems still exist, replace the Flight Deck Handset:
 - (a) Do these tasks: Flight Deck Handset Removal, AMM TASK 23-42-02-000-801, Flight Deck Handset Installation, AMM TASK 23-42-02-400-801.
- (4) Do the ALL TEST on the Cabin System Control Panel (CSCP).

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- (5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

817. CIC Discrete Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01613.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
- (a) Replace the Passenger Address/Cabin Interphone controller (PA/CI), M23016.
- These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
- Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) If the CSCP shows that the unit connected to PA/CI pin D-C1, D-E1, or D-F1 is the possible cause, then do these steps:
- (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (b) Remove the Audio Management Unit (AMU), M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
- (c) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connector DM23008AB at the E1-4 shelf (WDM 23-51-64):

DM23016AD

pin C1

pin E1

pin F1

DM23008AB

pin D7

pin D9

pin D8

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- 4) Do the QUICK TEST on the CSCP.

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- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Install a new AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (6) If the CSCP shows that the unit connected to PA/CI pin D-J5 is the possible cause, then do these steps:
 - (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Disconnect connector DM24513C from the signal interface unit 2, M24513 in the P310 panel.
 - (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM24513C at the signal interface unit 2, M24513 (WDM 23-43-11):

DM23016AD	DM24513C
pin J5	pin 24
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-connect connector DM24513C to the signal interface unit 2.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Do a check of the signal interface unit 2, M24513.

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This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (7) If the CSCP shows that the unit connected to PA/CI pin D-H2, D-J2, D-J3, or D-K2 is the possible cause, then do these steps:
 - (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (c) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connectors J240A and J250A at the AIMS Cabinet - Left (WDM 23-42-11) (WDM 23-43-11):

DM23016AD	J240A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

DM23016AD	J250A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- 3) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Remove the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - 3) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connectors J240A and J250A at the AIMS Cabinet - Right (WDM 23-42-11) (WDM 23-43-11):

DM23016AD	J240A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

DM23016AD	J250A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - d) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If you do not find a problem with the wiring, then continue.
- (f) Install a new IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (g) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (h) Do the QUICK TEST on the CSCP.

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- (i) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (j) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - 1) Install a new IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (8) If the CSCP shows that the unit connected to PA/CI pin D-C5 or D-C6 is the possible cause, then do these steps:
 - (a) Remove the Passenger Address/Cabin Interphone Controller, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (c) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-42-13):

DM23016AD	DM23061AA
pin C5	pin A2
pin C6	pin B2
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CSMU, M23061. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:

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- 1) Install a new CSMU, M23061. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

818. CIC Discrete Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01614, 23-01615.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the attendant switch panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) If the CSCP shows that the unit connected to PA/CI pin D-C1, D-E1, or D-F1 is the possible cause, then do these steps:
 - (a) Replace the Audio Management Unit (AMU), M23008.
These are the tasks:
Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

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Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (e) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (f) Remove the AMU, M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
- (g) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connector DM23008AB at the E1-4 shelf (WDM 23-51-64):

DM23016AD

pin C1
pin E1
pin F1

DM23008AB

pin D7
pin D9
pin D8

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 2) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (6) If the CSCP shows that the unit connected to PA/CI pin D-J5 is the possible cause, then do these steps:
 - (a) Do a check of the signal interface unit 2 (SIU 2), M24513, in the P310 panel.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.

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- (e) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (f) Disconnect connector DM24513C from the signal interface unit, M24513.
- (g) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM24513C at the P310 panel (WDM 23-43-11):

DM23016AD

pin J5

DM24513C

pin 24

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-connect connector DM24513C to the signal interface unit.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-connect connector DM24513C to the signal interface unit.
 - 2) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (7) If the CSCP shows that the unit connected to PA/CI pin D-H2, D-J2, D-J3, or D-K2 is the possible cause, then do these steps:
 - (a) Replace IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101.
These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - 1) Replace the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201.
These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
These are the tasks:
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

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- 4) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (e) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (f) Remove the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (g) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connectors J240A and J250A at the AIMS Cabinet - Left (WDM 23-42-11) (WDM 23-43-11):

DM23016AD	J240A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

DM23016AD	J250A
pin H2	pin C18
pin J2	pin E7
pin J3	pin E18
pin K2	pin C11

- (h) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
- 1) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Left, M31101. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 2) Remove the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - 3) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connectors J240A and J250A at the AIMS Cabinet -Right (WDM 23-42-11) (WDM 23-43-11):

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DM23016AD

pin H2		pin C18
pin J2		pin E7
pin J3		pin E18
pin K2		pin C11

J240A

DM23016AD

pin H2	.....	pin C18
pin J2	.....	pin E7
pin J3	.....	pin E18
pin K2	.....	pin C11

J250A

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - d) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then continue.
 - a) Re-install the IOM(M003) and IOM(M004) in the AIMS Cabinet - Right, M31201. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - b) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (8) If the CSCP shows that the unit connected to PA/CI pin D-C5 or D-C6 is the possible cause, then do these steps:
 - (a) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.

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- (e) Remove the Passenger Address/Cabin Interphone Controller, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (f) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (g) Do a wiring check between the applicable pins of connector DM23016AD at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-42-13):

DM23016AD

pin C5
pin C6

DM23061AA

pin A2
pin B2

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 2) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

819. PA/CI Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01417, 23-01617.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).

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- (3) If the maintenance message does not show in the Quick Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

820. CIC Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01618.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Cabin Interphone Controller (CIC). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

821. PA/CI Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01419, 23-01619.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

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822. CIC Shop Mode Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01634.

B. Fault Isolation Procedure

- (1) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (2) Do a check for a short to ground at the shop mode pins F3 and F5 of connector DM23016AB.
- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
 - (a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

823. CIC Audio Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01674.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the Audio Management Unit (AMU), M23008.
These are the tasks:

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Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the AMU, M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
 - (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM23008AB at the E1-4 shelf (WDM 23-51-64):

DM23016AD

pin A4 pin J12

pin A5 pin J13

DM23008AB

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 6) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - a) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - b) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Do the ALL TEST on the CSCP.
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

824. CIC Input from CDU (Center) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01710.

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B. Initial Evaluation

- (1) If maintenance message 23-01711 also shows on the Cabin System Control Panel (CSCP), then do the Fault Isolation Procedure - Multiple Maintenance Messages.
- (2) If maintenance message 23-01711 does not show on the CSCP, then do the Fault Isolation Procedure - Single Maintenance Message.

C. Fault Isolation Procedure - Multiple Maintenance Messages

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the Center CDU, N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DN34303C at the P8 panel (WDM 23-42-11):

DM23016AD

pin D8
pin E8

DN34303C

pin 21
pin 22

- (d) If you do find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center CDU, N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

D. Fault Isolation Procedure - Single Maintenance Message

- (1) Replace the center Control Display Unit (CDU), N34303.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,

Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).

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- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Remove the Center CDU, N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - 3) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DN34303C at the P8 panel (WDM 23-42-11):

DM23016AD	DN34303C
pin D8	pin 21
pin E8	pin 22

- 4) If you do find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the center CDU, N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - c) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - d) Do the ALL TEST on the CSCP.
 - e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

825. CIC ARINC 429 Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01711.

B. Initial Evaluation

- (1) If maintenance message 23-01710 also shows on the Cabin System Control Panel (CSCP), then do the Fault Isolation Procedure - Multiple Maintenance Messages.
- (2) If maintenance message 23-01710 does not show on the CSCP, then do the Fault Isolation Procedure - Single Maintenance Message.

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C. Fault Isolation Procedure - Multiple Maintenance Messages

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the Center CDU, N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DN34303C at the P8 panel (WDM 23-42-11):

DM23016AD

DN34303C

pin D8	.....	pin 21
pin E8	.....	pin 22

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center CDU, N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

D. Fault Isolation Procedure - Single Maintenance Message

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the center Control Display Unit (CDU), N34303.

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These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Remove the Center CDU, N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - 3) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DN34303C at the P8 panel (WDM 23-42-11):

DM23016AD	DN34303C
pin D8	pin 21
pin E8	pin 22

- 4) If you do find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the center CDU, N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - c) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - d) Do the ALL TEST on the CSCP.
 - e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

827. FDH Hook Status Circuitry Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01713.

B. Fault Isolation Procedure

- (1) Put the Flight Deck Handset (FDH), B23004 back in its cradle.
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the FDH, B23004.

These are the tasks:

Flight Deck Handset Removal, AMM TASK 23-42-02-000-801,
Flight Deck Handset Installation, AMM TASK 23-42-02-400-801.

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- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 1) Make sure the handset magnet is installed in the correct location. To find the correct location, these are the tasks:
Flight Deck Handset Cradle Magnet Removal, AMM TASK 23-42-02-000-804,
Flight Deck Handset Cradle Magnet Installation, AMM TASK 23-42-02-400-804.
 - 2) Replace the handset magnet or replace the holder (as applicable). These are the tasks:
Flight Deck Handset Cradle Magnet Removal, AMM TASK 23-42-02-000-804,
Flight Deck Handset Cradle Magnet Installation, AMM TASK 23-42-02-400-804.
Flight Deck Handset Cradle Removal, AMM TASK 23-42-02-000-803,
Flight Deck Handset Cradle Installation, AMM TASK 23-42-02-400-803.
 - 3) Do the ALL TEST on the CSCP.
 - 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.
- (6) Do the ALL TEST on the CSCP.
- (7) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (8) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Disconnect connector DB23004 from the Aft Aisle Stand Panel, P8.
 - (c) Do a wiring check between the pins of connector DM23016AD at the E1-4 shelf and connector DB23004 at the Aft Aisle Stand Panel, P8 (WDM 23-42-11):

DM23016AD		DB23004	
pin A7	.....	pin 1	
pin A8	.....	pin 2	
pin A9	.....	pin 3	
pin B8	.....	pin 5	
pin B9	.....	pin 4	

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Re-connect DB23004.
- 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 4) Do the ALL TEST on the CSCP.
- 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

828. CAH Hook Status Circuitry Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01861, 23-01915.

B. Fault Isolation Procedure

- (1) Put the Cabin Attendant Handset (CAH) back in its cradle.
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the CAH.
These are the tasks:
Cabin Attendant Handset Removal, AMM TASK 23-42-03-000-801,
Cabin Attendant Handset Installation, AMM TASK 23-42-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 1) Replace the CAH holder.
 - 2) Do the ALL TEST on the CSCP.
 - 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 4) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Replace the Zone Management Unit (ZMU).
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (6) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (7) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Disconnect connector DM2307XB (X is different for each ZMU) from the ZMU.
 - (b) Disconnect connector DB230XX (XX is different for each CAH) from the CAH.

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- (c) Do a wiring check between the applicable pins of connector DM2307XB at the ZMU and connector DB230XX at the applicable CAH (WDM 23-42-21) (WDM 23-42-22) (WDM 23-42-23).
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect DB230XX.
 - 3) Re-connect DM2307XB.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

829. CIC Data/Audio Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01907.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Zone Management Unit (ZMU).
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) If the CSCP shows that the ZMU 1 is the possible cause, then do these steps:
 - 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.

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- 2) Disconnect connector DM23071H from the ZMU 1, M23071.
- 3) Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23071H at the ZMU 1, M23071 (WDM 23-42-12):

DM23016AE	DM23071H
pin A7	pin 10
pin A8	pin 11
pin C7	pin 13
pin C8	pin 14

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-connect DM23071H.
 - d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If you do not find a problem with the wiring, then do these steps:
 - a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Re-connect DM23071H.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (b) If the CSCP shows that the ZMU 2 is the possible cause, then do these steps:
- 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Disconnect connector DM23072H from the ZMU 2, M23072.
 - 3) Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23072H at the ZMU 2, M23072 (WDM 23-42-12):

DM23016AE	DM23072H
pin E11	pin 10
pin F11	pin 11
pin E9	pin 13
pin F9	pin 14

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-connect DM23072H.

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- d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then do these steps:
- a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Re-connect DM23072H.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (c) If the CSCP shows that the ZMU 3 is the one of the possible cause, then do these steps:
- 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Disconnect connector DM23073H from the ZMU 3, M23073.
 - 3) Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23073H at the ZMU 3, M23073 (WDM 23-42-12):

DM23016AE		DM23073H	
pin H7	.....	pin 10	
pin H8	.....	pin 11	
pin K7	.....	pin 13	
pin K8	.....	pin 14	

- 4) If you find a problem with the wiring, then do these steps:
- a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-connect DM23073H.
 - d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then do these steps:
- a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Re-connect DM23073H.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

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830. CIZ Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01810.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit.

These are the tasks:

Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,

Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- (2) Do the ALL TEST on the CSCP.

- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

831. ZMU Discrete Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01867, 23-02467.

B. Fault Isolation Procedure

- (1) Disconnect connector DM2307XA (X is different for each ZMU) from the Zone Management Unit (ZMU).
- (2) Disconnect connector DM3343X (X is different for each master call light module) from the applicable master call light module (SSM 33-25-11) (SSM 33-28-21).
- (3) Do a wiring check between the applicable pin of connector DM2307XA at the ZMU and the pin of connector DM3343X at the applicable master call light module.

NOTE: The applicable pin number of the connector at the ZMU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable master call light module.

- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM2307XA.
 - (c) Re-connect DM3343X.
 - (d) Push the attendant call button on a passenger control unit in the applicable zone.
 - (e) Push the attendant call reset button on the passenger control unit.
 - (f) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - (g) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect DM2307XA.
 - (b) Replace the applicable lamp in the master call light module. To replace it, do this task: Master Call Light Module - Lamp Replacement, AMM TASK 33-25-02-960-801.
 - (c) Push the attendant call button on a passenger control unit in the applicable zone.
 - (d) Push the attendant call reset button on the passenger control unit.
 - (e) Do the QUICK TEST on the CSCP.

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- (f) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (g) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - 1) Replace the ZMU.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (h) Push the attendant call button on a passenger control unit in the applicable zone.
- (i) Push the attendant call reset button on the passenger control unit.
- (j) Do the ALL TEST on the CSCP.
 - 1) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

832. ZMU Discrete Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01868, 23-01869, 23-02468, 23-02469.

B. Fault Isolation Procedure

- (1) Replace the applicable lamp in the master call light module. To replace it, do this task: Master Call Light Module - Lamp Replacement, AMM TASK 33-25-02-960-801.
 - (a) Make sure that you do the steps to turn the lamp on.
 - (b) Make sure that you do the steps to turn the lamp off.
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Disconnect connector DM2307XA (X is different for each ZMU) from the Zone Management Unit (ZMU).
 - (b) Disconnect connector DM3343X (X is different for each master call light module) from the applicable master call light module.
 - (c) Do a wiring check between the pin of connector DM2307XA at the ZMU and the pin of connector DM3343X at the applicable master call light module (SSM 33-25-11) (SSM 33-28-21).
NOTE: The applicable pin number of the connector at the ZMU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable master call light module.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect DM2307XA.
 - 3) Re-connect DM3343X.
 - 4) Do the steps on the CSCP to turn the lamp on.
 - 5) Do the steps on the CSCP to turn the lamp off.

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- 6) Do the QUICK TEST on the CSCP.
- 7) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-connect DM3343X.
 - 2) Replace the ZMU.

These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 3) Do the steps on the CSCP to turn the lamp on.
 - 4) Do the steps on the CSCP to turn the lamp off.
 - 5) Do the QUICK TEST on the CSCP.
 - 6) If the maintenance message does not show in the Quick Test Fault Results, you correct the fault.

————— END OF TASK —————

833. CSCP Intersystem Bus Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02803.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU), M23071.

These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Cabin System Control Panel (CSCP), M23554.

These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the Installation Fault Results, then continue.
- (4) Do this check of the wiring:
 - (a) Remove the CSCP, M23554. To remove it, do this task: Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805.
 - (b) Remove the ZMU, M23071. To remove it, do this task: Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801.
 - (c) Do a wiring check between these pins of connector D11485P at the CSCP and connector DM23071D at the ZMU (WDM 23-33-12):

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D11485P

pin 9 pin 3
pin 1 pin 4
pin 10 pin 5
pin 2 pin 6

DM23071D

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the CSCP, M23554. To install it, do this task: Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - 3) Re-install the ZMU, M23071. To install it, do this task: Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

834. CSCP Intersystem Bus Response Problems (CSMU response OK) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02802.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
- (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
- These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
- Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
- (a) Install a termination connector at pin A4 of connector DM23073K (WDM 23-33-11).
- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
- 1) Remove the termination connector at pin A4 of connector DM23073K (WDM 23-33-11).
 - 2) Replace the ZMU 4.
- These are the tasks:
- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,

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Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- 3) Do the ALL TEST on the CSCP.
- 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Install a termination connector at pin A4 of connector DM23072K (WDM 23-33-11).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - 1) Remove the termination connector at pin A4 of connector DM23072K (WDM 23-33-11).
 - 2) Replace the ZMU 3.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 3) Do the ALL TEST on the CSCP.
 - 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (6) Do these steps:
 - (a) Remove the termination connector at pin A4 of connector DM23072K (WDM 23-33-11):
 - (b) Install a termination connector at pin A4 of connector DM23071K (WDM 23-33-11).
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - 1) Remove the termination connector at pin A4 of connector DM23071K (WDM 23-33-11).
 - 2) Replace the ZMU 2.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 3) Do the ALL TEST on the CSCP.
 - 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (e) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (7) Do these steps:
 - (a) Replace the ZMU 1.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

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- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.
 - 2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - 3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - a) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM
TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM
TASK 23-39-11-400-801.
 - b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

END OF TASK

835. CSCP Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02801.

B. Description

- (1) The Cabin System Control Panel (CSCP) does not respond. Detected by: CSMU.

C. Possible Causes

- (1) Cabin System Control Panel (CSCP), M23554
- (2) Zone Management Unit (ZMU), M23071
- (3) Wiring

D. Related Data

- (1) WDM 23-33-12

E. Initial Evaluation

- (1) Do the QUICK TEST on the CSCP
 - (a) If the maintenance message does not show in the Quick Test Fault Results, you corrected the problem.
 - (b) If the maintenance message still shows in the Quick Test Fault Results, then do the Fault Isolation Procedure below.

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F. Fault Isolation Procedure

- (1) Replace the Cabin System Control Panel (CSCP), M23554. These are the tasks:
 - Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805
 - Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804
 - (a) Do the Repair Confirmation at the end of this task.
- (2) Replace the Zone Management Unit (ZMU), M23071. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
 - (a) Do the Repair Confirmation at the end of this task.
- (3) Do this check of the wiring:
 - (a) Remove the CSCP, M23554. To remove it, do this task: Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805.
 - (b) Remove the ZMU, M23071. To remove it, do this task: Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801.
 - (c) Do a wiring check between the CSCP and ZMU as follows (WDM 23-33-12):

CSCP	ZMU
Receptacle	DM23071D
pin 9	pin 3
pin 1	pin 4
pin 10	pin 5
pin 2	pin 6

- 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the CSCP, M23554. This is the task: Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - c) Re-install ZMU, M23071. This is the task: Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - d) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Do the QUICK TEST on the CSCP.
 - (a) If the maintenance message does not show in the Quick Test Fault Results, you corrected the problem.
 - (b) If the maintenance message still shows in the Quick Test Fault Results, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

836. CSCP Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-02810, 23-02938, 23-02940.

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B. Initial Evaluation

- (1) For maintenance message 23-02810, do these steps to check for a nuisance fault:
 - (a) Touch these selections from the MAIN MENU on the Cabin System Control Panel (CSCP) to find shop faults for the CSCP:
 - 1) CABIN MAINTENANCE
 - 2) CABIN TESTS
 - 3) ENGINEERING TESTS
 - 4) SHOP FAULTS
 - 5) CABIN SYSTEM CONTROL PANEL (CSCP)
 - (b) Look for an active DP NVM shop fault.
 - (c) If you don't see an active DP NVM shop fault, then do the Fault Isolation Procedure below.
 - (d) If you see an active DP NVM fault, and the CSCP operates normally, then there is a nuisance fault. No maintenance action is required.

C. Fault Isolation Procedure

- (1) Replace the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

837. CSCP Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02817.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
- (2) Do the QUICK TEST on the CSCP.
- (3) If the maintenance message does not show in the Quick Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

838. CSCP Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02818.

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B. Fault Isolation Procedure

- (1) Install the operational program software for the Cabin System Control Panel (CSCP), M23554. To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the CSCP, M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

839. CSCP Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02819.

B. Fault Isolation Procedure

- (1) Install the configuration Database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

840. CSCP Intersystem Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02842.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

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- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
- (a) Replace the Zone Management Unit (ZMU), M23071.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the Installation Fault Results, then continue.
- (4) Do this check of the wiring:
- (a) Remove the CSCP, M23554. To remove it, do this task: Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805.
 - (b) Remove the ZMU, M23071. To remove it, do this task: Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801.
 - (c) Do a wiring check between these pins of connector D11485P at the CSCP and connector DM23071D at the ZMU (WDM 23-33-12):

D11485P	DM23071D
pin 9	pin 3
pin 1	pin 4
pin 10	pin 5
pin 2	pin 6

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install CSCP, M23554. To install it, do this task: Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - 3) Re-install ZMU, M23071. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

841. CSCP Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02834.

B. Fault Isolation Procedure

- (1) Remove the Cabin System Control Panel (CSCP), M23554. To remove it, do this task: Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805.
- (2) Do a check for a short to ground at shop mode pins J1-4 and J1-12 of connector D11485P.
- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the CSCP. To install it, do this task: Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

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- (c) Do the ALL TEST on the CSCP.
- (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
 - (a) Replace the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

842. CSCP Mass Storage Card Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02857.

B. Fault Isolation Procedure

- (1) Replace the mass storage circuit card in the Cabin System Control Panel (CSCP), M23554.
These are the tasks:
Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the CSCP, M23554.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

843. CSCP Touchscreen Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02939.

B. Initial Evaluation

- (1) The Cabin System Control Panel (CSCP) performs a touchscreen test while the CSCP powers up. If an object (like your finger) touches the touchscreen, the test may fail and this maintenance message will show. If an object touched the touchscreen while the CSCP powered up, then do these steps:
 - (a) Reset the CSCP:
 - 1) Push the reset switch on the front of the CSCP.

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- 2) Make sure you do not touch the touchscreen while the CSCP resets.
- (b) Do the QUICK TEST on the CSCP.
 - 1) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 2) If the maintenance message shows in the Quick Test Fault Results, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Replace the Cabin System Control Panel (CSCP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
- (2) Do the QUICK TEST on the CSCP.
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

844. CSCP Data Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02950.

B. Fault Isolation Procedure

- (1) Install the specified software part number from the Cabin System Control Panel (CSCP) disk drive. To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

845. CSMU Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01001.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do this voltage check:
 - (a) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Do a check for 115 VAC from pin 119 of connector DM23061AA to structure ground (WDM 23-33-11).

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(c) If there is not 115 VAC at pin 119 of DM23061AA, then do these steps:

- 1) (WDM 23-33-11):

Replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT

- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 3) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

846. CSMU Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01010.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

847. CSMU NORM/ALT Switching Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01145, 23-01146.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

848. CSMU Discrete Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01013.

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B. Fault Isolation Procedure

- (1) If the Cabin System Control Panel (CSCP) shows that the unit connected to CSMU pin A-C7 is the possible cause, then do these steps:
 - (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Remove the SEU Zone 1 Relay, K23015 from the P110 panel (WDM 23-34-11).
 - (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23015 at the P110 panel (WDM 23-34-11):

DM23061AA	DK23015
pin C7	pin X2

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SEU Zone 1 Relay, K23015 on the P110 panel (WDM 23-34-31).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new SEU Zone 1 Relay, K23015 on the P110 panel (WDM 23-34-11).
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (2) If the CSCP shows that the unit connected to CSMU pin A-D11 is the possible cause, then do these steps:
 - (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Remove the SEU Zone 2 Relay, K23016 from the P110 panel (WDM 23-34-12).

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- (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23016 at the P110 panel (WDM 23-34-12):

DM23061AA	DK23016
pin D11	pin X2

- (d) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 3) Re-install the SEU Zone 2 relay, K23016 on the P110 panel (WDM 23-34-12).
- 4) Do the QUICK TEST on the CSCP.
- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (e) If you do not find a problem with the wiring, then do these steps:

- 1) Install a new SEU Zone 2 Relay, K23016 on the P110 panel (WDM 23-34-12).
- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (3) If the CSCP shows that the unit connected to CSMU pin A-C11 is the possible cause, then do these steps:

- (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (b) Remove the SEU Zone 3 Relay, K23017 from the P110 panel (WDM 23-34-13).
- (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23017 at the P110 panel (WDM 23-34-13):

DM23061AA	DK23017
pin C11	pin X2

- (d) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.

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- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SEU Zone 3 relay, K23017 on the P110 panel (WDM 23-34-13).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new SEU Zone 3 Relay, K23017 on the P110 panel (WDM 23-34-13).
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the CSCP shows that the unit connected to CSMU pin A-D7 is the possible cause, then do these steps:
- (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Remove the SVU Zone 1 Relay, K23009 from the P210 panel (WDM 23-32-31).
 - (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23009 at the P210 panel (WDM 23-32-31):

DM23061AA	DK23009
pin D7	pin X2

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SVU Zone 1 relay, K23009 on the P210 panel (WDM 23-32-31).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:

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- 1) Install a new SVU Zone 1 Relay, K23009 on the P210 panel (WDM 23-32-31).
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (5) If the CSCP shows that the unit connected to CSMU pin A-E8 is the possible cause, then do these steps:
- (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Remove the SVU Zone 2 Relay, K23013 from the P110 panel (WDM 23-32-32).
 - (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23013 at the P110 panel (WDM 23-32-32):
- | | |
|------------------|----------------|
| DM23061AA | DK23013 |
| pin E8 | pin X2 |
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SVU Zone 2 relay, K23013 on the P110 panel (WDM 23-32-32).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new SVU Zone 2 Relay, K23013 on the P110 (WDM 23-32-32).
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

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- 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
- Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - Do the QUICK TEST on the CSCP.
 - If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (6) If the CSCP shows that the unit connected to CSMU pin A-E9 is the possible cause, then do these steps:
- Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - Remove the SVU Zone 3-L Relay, K23020 from the P210 panel (WDM 23-32-33).
 - Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23020 at the P210 panel (WDM 23-32-33):

DM23061AA	DK23020
pin E9	pin X2
- (d) If you find a problem with the wiring, then do these steps:
- Repair the wiring.
 - Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - Re-install the SVU Zone 3-L relay, K23020 on the P210 panel (WDM 23-32-33).
 - Do the QUICK TEST on the CSCP.
 - If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- Install a new SVU Zone 3-L Relay, K23020 on the P210 panel (WDM 23-32-33).
 - Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - Do the QUICK TEST on the CSCP.
 - If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

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Cabin System Management Unit (CSMU) Installation, AMM
TASK 23-39-11-400-801.

- b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (7) If the CSCP shows that the unit connected to CSMU pin A-B7 is the possible cause, then do these steps:
- (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Remove the AEP Relay, K23021 from the P110 panel (WDM 23-34-11).
 - (c) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23021 at the P110 panel (WDM 23-34-11):

DM23061AA	DK23021
pin B7	pin X2
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the AEP Relay, K23021 on the P110 panel (WDM 23-34-11).
 - 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Install a new AEP relay, K23021 on the P110 panel (WDM 23-34-11).
 - 2) Re-Install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM
TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM
TASK 23-39-11-400-801.
 - b) Do the QUICK TEST on the CSCP.
 - c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (8) If the CSCP shows that the unit connected to CSMU pin A-E2 or A-E4 is the possible cause, then do these steps:

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- (a) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (b) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (c) If the CSCP shows that the unit connected to CSMU pin A-E2 is the possible cause, then do this check of the wiring:
 - 1) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DM23016AA at the shelf E1-4 (WDM 23-31-11):

DM23061AA	DM23016AA
pin E2	pin K11

- (d) If the CSCP shows that the unit connected to CSMU pin A-E4 is the possible cause, then do this check of the wiring:
 - 1) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DM23016AD at the E1-4 shelf (WDM 23-42-13):

DM23061AA	DM23016AD
pin E4	pin B1

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (f) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 5) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - a) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

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- b) Do the QUICK TEST on the CSCP.
- c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

849. CSMU Discrete Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01014, 23-01015.

B. Fault Isolation Procedure

- (1) If the Cabin System Control Panel (CSCP) shows that the unit connected to CSMU pin A-C7 is the possible cause, then do these steps:
 - (a) Replace the SEU Zone 1 Relay, K23015, on the P110 panel (WDM 23-34-11).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the SEU Zone 1 Relay, K23015, from the P110 panel (WDM 23-34-11).
 - (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23015 at the P110 panel (WDM 23-34-11).

DM23061AA

DK23015

pin C7 pin X2

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SEU Zone 1 Relay, K23015 on the P110 panel (WDM 23-34-11).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install SEU Zone 1 Relay, K23015 on the P110 panel (WDM 23-34-11).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (2) If the CSCP shows that the unit connected to CSMU pin A-D11 is the possible cause, then do these steps:
 - (a) Replace the SEU Zone 2 Relay, K23016 on the P110 panel (WDM 23-34-12).
 - (b) Do the QUICK TEST on the CSCP.

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- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (f) Remove the SEU Zone 2 Relay, K23016 from the P110 panel (WDM 23-34-12).
- (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23016 at the P110 panel (WDM 23-34-12):

DM23061AA	DK23016
pin D11	pin X2

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SEU Zone 2 relay, K23016 on the P110 panel (WDM 23-34-12).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the SEU Zone 2 Relay, K23016 on the P110 panel (WDM 23-34-12).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (3) If the CSCP shows that the unit connected to CSMU pin A-C11 is the possible cause, then do these steps:
 - (a) Replace the SEU Zone 3 Relay, K23017 on the P110 panel (WDM 23-34-13).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the SEU Zone 3 Relay, K23017 from the P110 panel (WDM 23-34-13).
 - (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23017 at the P110 panel (WDM 23-34-13):

DM23061AA	DK23017
pin C11	pin X2

- (h) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SEU Zone 3 relay, K23017 on the P110 panel (WDM 23-34-13).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
- 1) Re-install the SEU Zone 3 Relay, K23017 on the P110 panel (WDM 23-34-13).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the CSCP shows that the unit connected to CSMU pin A-D7 is the possible cause, then do these steps:
- (a) Replace the SVU Zone 1 Relay, K23009 on the P210 panel (WDM 23-32-31).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the SVU Zone 1 Relay, K23009 from the P210 panel (WDM 23-32-31).
 - (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23009 at the P210 panel (WDM 23-32-31):

DM23061AA	DK23009
pin D7	pin X2

- (h) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SVU Zone 1 relay, K23009 on the P210 panel (WDM 23-32-31).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
- 1) Re-install the SVU Zone 1 Relay, K23009 on the P210 panel (WDM 23-32-31).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.

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- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (5) If the CSCP shows that the unit connected to CSMU pin A-E8 is the possible cause, then do these steps:
- (a) Replace the SVU Zone 2 Relay, K23013 on the P110 panel (WDM 23-32-32).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the SVU Zone 2 Relay, K23013 from the P110 panel (WDM 23-32-32).
 - (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23013 at the P110 panel (WDM 23-32-32):
- | | |
|------------------|----------------|
| DM23061AA | DK23013 |
| pin E8 | pin X2 |
- (h) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-install the SVU Zone 2 relay, K23013 on the P110 panel (WDM 23-32-32).
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (i) If you do not find a problem with the wiring, then do these steps:
- 1) Re-install the SVU Zone 2 Relay, K23013 on the P110 (WDM 23-32-32).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (6) If the CSCP shows that the unit connected to CSMU pin A-E9 is the possible cause, then do these steps:
- (a) Replace the SVU Zone 3-L Relay, K23020 on the P210 panel (WDM 23-32-33).
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the SVU Zone 3-L Relay, K23020 from the P210 panel (WDM 23-32-33).

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- (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23020 at the P210 panel (WDM 23-32-33):

DM23061AA	DK23020
pin E9	pin X2

- (h) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 3) Re-install the SVU Zone 3-L relay, K23020 on the P210 panel (WDM 23-32-33).
- 4) Do the QUICK TEST on the CSCP.
- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (i) If you do not find a problem with the wiring, then do these steps:

- 1) Replace the SVU Zone 3-L Relay, K23020 on the P210 panel (WDM 23-32-33).
- 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (7) If the CSCP shows that the unit connected to CSMU pin A-B7 is the possible cause, then do these steps:

- (a) Replace the AEP Relay, K23021 on the P110 panel (WDM 23-34-11).
- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (f) Remove the AEP Relay, K23021 from the P110 panel (WDM 23-34-11).
- (g) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DK23021 at the P110 panel (WDM 23-34-11):

DM23061AA	DK23021
pin B7	pin X2

- (h) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the AEP Relay, K23021 on the P110 panel (WDM 23-34-11).
- 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 4) Do the QUICK TEST on the CSCP.
- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

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- (i) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the AEP relay, K23021 on the P110 panel (WDM 23-34-11).
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (8) If the CSCP shows that the unit connected to CSMU pin A-E2 or A-E4 is the possible cause, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (e) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (f) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (g) If the CSCP shows that the unit connected to CSMU pin A-E2 is the possible cause, then do this check of the wiring:
 - 1) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DM23016AA at the shelf E1-4 (WDM 23-31-11):

DM23061AA	DM23016AA
pin E2	pin K11
 - (h) If the CSCP shows that the unit connected to CSMU pin A-E4 is the possible cause, then do this check of the wiring:
 - 1) Do a wiring check between these pins of connector DM23061AA at the E1-4 shelf and connector DM23016AD at the E1-4 shelf (WDM 23-42-13):

DM23061AA	DM23016AD
pin E4	pin B1
 - (i) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

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- 4) Do the QUICK TEST on the CSCP.
- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (j) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

850. CSMU Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01017.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

851. CSMU Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01018.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Cabin System Management Unit (CSMU), M23061. To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the CSMU, M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

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- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

852. CSMU Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01019.

B. Fault Isolation Procedure

- (1) Install the Configuration Database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
- (a) Replace the Cabin System Management Unit (CSMU), M23061.
- These are the tasks:
- Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

853. CSMU Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01034.

B. Fault Isolation Procedure

- (1) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (2) Do a check for a short to ground at shop mode pins A1 and A3 of connector DM23061AA.
- (3) If there is a short to ground, then do these steps:
- (a) Repair the wiring.
- (b) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
- (a) Install a new CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

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856. CSMU to System 629 Bus-R Communication Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01037, 23-01038.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:

- (a) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the System 629 Bus-R.

- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Disconnect connector DB23228 from the coupler, B23228.
 - (c) Do a wiring check between these pins of connector DM23601AC at the E1-4 shelf and connector DB23228 at the P211 panel (WDM 23-33-11):

DM23061AC	DB23228
pin 5T	pin 5
pin 5TR	pin 4
pin 6T	pin 2
pin 6TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

- 1) Repair the ARINC 629 wiring (SWPM 20-11-11).
- 2) Re-connect DB23228.
- 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
- 4) Do the QUICK TEST on the CSCP.

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- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

857. CSMU Right System ARINC 629 Coupler Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01039.

B. Fault Isolation Procedure

- (1) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the Cabin System Management Unit (CSMU) to the Systems 629 Bus-R.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the CSMU, M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the Quick Test Fault Results, then do this check of the wiring:
 - 1) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - 2) Disconnect connector DB23228 from the coupler, B23228.
 - 3) Do a wiring check between these pins of connector DM23061AC at the E1-4 shelf and connector DB23228 at the P211 panel (WDM 23-33-11):

DM23061AC

pin 5T	.....	pin 5
pin 5TR	.....	pin 4
pin 6T	.....	pin 2
pin 6TR	.....	pin 1

DB23228

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - b) Install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

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- c) Re-connect DB23228.
- d) Do the QUICK TEST on the CSCP.
- e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

868. PAC Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01401.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do this voltage check:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Do a check of 28 VDC from pins 112 and 115 of connector DM23016AA to structure ground (WDM 23-31-11).
 - (c) If there is not 28 VDC at pins 112 and 115 of DM23016AA, then do these steps:
 - 1) Repair the circuit between connector DM23061AA and these circuit breakers:
(WDM 23-31-11)

Standby Power Management Panel, P310

Row	Col	Number	Name
F	6	C23632	PAX ADRS CTRL PRI
F	7	C23633	PAX ADRS CTRL SEC

- 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If there is 28 VDC at pins 112 and 115 of DM23016AA, then do these steps:

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- 1) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 2) Do the QUICK TEST on the CSCP.
- 3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

869. PAC Response Problems from all SDMs in a Zone - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01403.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Disconnect connector DM230XXA (XX is different for each SDM) from the Speaker Drive Module (SDM) that shows in the Possible Causes list.
 - (c) Do a wiring check between these pins of connector DM23016AA or DM23016AB at the E1-4 shelf and connector DM230XXA at the SDM:

SDM in zone 1 (WDM 23-31-22)

DM23016AA	DM230XXA
pin J6	pin 4
pin K6	pin 5

SDM in zone 1 (WDM 23-31-22)

DM23016AB	DM230XXA
pin J1	pin 9
pin K1	pin 10
pin J3	pin 6
pin K3	pin 7

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SDM in zone 2 (WDM 23-31-32)

DM23016AA	DM230XXA
pin J7	pin 4
pin K7	pin 5

SDM in zone 2 (WDM 23-31-32)

DM23016AB	DM230XXA
pin A6	pin 9
pin B6	pin 10
pin D6	pin 6
pin E6	pin 7

SDM in zone 3 (WDM 23-31-42)

DM23016AA	DM230XXA
pin J8	pin 4
pin K8	pin 5

SDM in zone 3 (WDM 23-31-42)

DM23016AB	DM230XXA
pin G6	pin 6
pin H6	pin 7
pin J5	pin 9
pin K5	pin 10

SDM in zone 4 (WDM 23-31-62)

E1-4	M230XX
DM23016AA	DM230XXA
pin J10	pin 4
pin K10	pin 5

SDM in zone 4 (WDM 23-31-62)

E1-4	M230XX
DM23016AB	DM230XXA
pin A9	pin 9
pin B9	pin 10
pin D9	pin 6
pin E9	pin 7

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the PA/CI. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- 3) Re-connect DM230XXA.
- 4) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-install the PA/CI. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Replace the SDM shown in the Possible Causes list.

These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 4) If the maintenance message shows in the All Test Fault Results, then continue.
- (4) Do these steps to find which SDM in the zone caused the problem:

NOTE: The objective is to divide the column of SDMs in half and find which group of SDMs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the SDM that caused the problem.

 - (a) Go to the SDM that is in the middle between the first and last SDM in the zone.
 - (b) Disconnect connector DM23XXA (XX is different for each SDM).
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault Results, then a SDM between the disconnected connector and the last SDM caused the problem.

NOTE: If the maintenance message shows in the Quick Test Fault Results, then an SDM between the first SDM and the disconnected connector caused the problem.
- (e) Re-connect DM230XXA.
- (f) Continue to divide the problem group in half until you find the SDM that caused the problem (use the steps above to disconnect the connector, do the QUICK TEST, and re-connect the connector).
- (g) Do this check of the wiring:
 - 1) Disconnect connector DM230XXA from the SDM that caused the problem.
 - 2) Disconnect connector DM230XXA from the next SDM in the zone (the "next" SDM is one position closer to the PA/CI than the SDM that caused the problem).
 - 3) Do a wiring check between these pins of the specified connectors (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42). The left column applies to the SDM that caused the problem. The right column applies to the next SDM.



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DM230XXA	DM230XXA
pin 4	pin 15
pin 5	pin 16
pin 6	pin 18
pin 7	pin 19
pin 9	pin 21
pin 10	pin 22

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-connect DM230XXA.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then do these steps:
 - a) Re-connect DM230XXA.
 - b) Replace the SDM that caused the problem.

These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

870. OEU Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03401.

B. Fault Isolation Procedure

- (1) Replace the Overhead Electronics Unit (OEU).

These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- (2) Do the QUICK TEST on the CSCP.
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Disconnect the connector from J1 on the OEU.
 - (b) Do a check for 115 VAC from pins 6 and 15 of the OEU connector to structure ground (WDM 23-33-31 thru 23-33-53).
 - (c) If there is not 115 VAC at pins 6 or 15 of the OEU cable connector, then do these steps:

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- 1) For the OEU in zone 1, replace the circuit breaker for the applicable pin:
(WDM 23-33-31)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	15	C23437	OEU ZONE1 MAIN BUS
F	2	C23439	OEU ZONE1 XFER BUS

- 2) For the OEU in zone 2-left, replace the circuit breaker for the applicable pin:
(WDM 23-33-41)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	10	C23414	OEU ZONE2 LEFT MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 3) For the OEU in zone 2-right, replace the circuit breaker for the applicable pin:
(WDM 23-33-42)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	10	C23418	OEU ZONE2 RIGHT MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 4) For the OEU in zone 2-center, replace the circuit breaker for the applicable pin:
(WDM 23-33-43)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	10	C23416	OEU ZONE2 CENTER MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 5) For the OEU in zone 3-left, replace the circuit breaker for the applicable pin:
(WDM 23-33-51)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	16	C23441	OEU ZONE3 LEFT MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 6) For the OEU in zone 3-right, replace the circuit breaker for the applicable pin:
(WDM 23-33-52)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	15	C23445	OEU ZONE3 RIGHT MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 7) For the OEU in zone 3-center, replace the circuit breaker for the applicable pin:
(WDM 23-33-53)

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Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	16	C23443	OEU ZONE3 CENTER MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 8) For the OEU in zone 4-left, replace the circuit breaker for the applicable pin:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C23466	OEU ZONE 4 L MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

- 9) For the OEU in zone 4-right, replace the circuit breaker for the applicable pin:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C23464	OEU ZONE 4 R MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

- 10) For the OEU in zone 4-center, replace the circuit breaker for the applicable pin:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	22	C23465	OEU ZONE 4 CTR MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

- 11) Re-connect the connector to J1 on the OEU.
12) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
13) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

871. OEU Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03410.

B. Initial Evaluation

- (1) Touch UNIT USAGE on the ALL TEST or QUICK TEST faults review screen on the Cabin System Control Panel (CSCP).
(2) If the CSCP shows that the Overhead Electronics Unit (OEU) does not control light ballasts, then do the Fault Isolation Procedure below.
(3) If the CSCP shows that the Overhead Electronics Unit (OEU) controls light ballasts, then do these steps:
(a) Touch CABIN LIGHTING on the CSCP or the Cabin Area Control Panel (CACP).
(b) Touch the selections on the CSCP or CACP to turn on the lights controlled by the applicable OEU.
(c) If the lights do not turn on, then do the Fault Isolation Procedure below.

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- (d) If the lights turn on, then no maintenance action is required.

NOTE: This is a nuisance fault.

C. Fault Isolation Procedure

- (1) Replace the Overhead Electronics Unit (OEU).

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).

- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

872. Response Problems from all Subsequent OEUs - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03402.

B. Fault Isolation Procedure

- (1) Disconnect connectors DM234XXA or D5XXXP (XX or XXX is different for each OEU) from the two Overhead Electronics Units (OEUs) shown in the Possible Causes list.
- (2) Do a wiring check between these pins of the two connectors at the OEUs. (WDM 23-33-34) (WDM 23-33-35) (WDM 23-33-36) (WDM 23-33-44) (WDM 23-33-45) (WDM 23-33-46) (WDM 23-33-54) (WDM 23-33-55) (WDM 23-33-56) The left column applies to the DM234XXA or D5XXXP for the first OEU. The right column applies to the DM234XXA or D5XXXP for the second OEU.

**DM234XXA or
D5XXXP**

pin 9
pin 10

**DM234XXA or
D5XXXP**

pin 11
pin 12

- (3) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
- (b) Re-connect the two connectors DM234XXA or D5XXXP.
- (c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If you do not find a problem with the wiring, then do this check:
- (a) Do a check for 115 VAC between these pins of the same connector of the OEU. (WDM 23-33-31 thru 23-33-53).

**DM234XXA or
D5XXXP**

15
6

**DM234XXA or
D5XXXP**

14
13

- (b) If 115 VAC is not found on either or both measurements, then continue.

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- (c) Do a check for 115 VAC at pins 6 and 15 of connector DM234XXA or D5XXXP of the OEU to structure ground. (WDM 23-33-31 thru 23-33-53).
- (d) If 115 VAC is found at pins 6 and 15 of connector DM234XXA or D5XXXP of the OEU to structure ground, the power is good and the return is bad, then do the following steps:



WARNING

REMOVE POWER FROM THE POWER SUPPLY. THIS IS A HIGH VOLTAGE SYSTEM. INJURIES TO PERSONNEL CAN OCCUR.

- 1) Repair the wiring.
 - 2) Re-connect the DM234XXA or D5XXXP connector.
 - 3) Turn on the power.
 - 4) Do the quick test on the Cabin System Control Panel (CSCP).
 - 5) If the maintenance message does not show in the Quick Test fault Results, you corrected the fault.
- (e) If 115 VAC is not found at pins 6 or 15 of DM234XXA or D5XXXP of the OEU to structure ground, then do these steps:

- 1) For the OEU in zone 1, :

Replace the circuit breaker for the applicable pin:

(WDM 23-33-31)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	15	C23437	OEU ZONE1 MAIN BUS
F	2	C23439	OEU ZONE1 XFER BUS

- 2) For the OEU in zone 2-left, :

Replace the circuit breaker for the applicable pin:

(WDM 23-33-41)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	10	C23414	OEU ZONE2 LEFT MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 3) For the OEU in zone 2-right, :

Replace the circuit breaker for the applicable pin:

(WDM 23-33-42)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	10	C23418	OEU ZONE2 RIGHT MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 4) For the OEU in zone 2-center, :

Replace the circuit breaker for the applicable pin:

(WDM 23-33-43)

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	10	C23416	OEU ZONE2 CENTER MAIN BUS
E	24	C23420	OEU ZONE2 XFER BUS

- 5) For the OEU in zone 3-left, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-51)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	16	C23441	OEU ZONE3 LEFT MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 6) For the OEU in zone 3-right, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-52)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	15	C23445	OEU ZONE3 RIGHT MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 7) For the OEU in zone 3-center, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-53)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	16	C23443	OEU ZONE3 CENTER MAIN BUS
H	7	C23447	OEU ZONE3 XFER BUS

- 8) For the OEU in zone 4-left, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-71)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C23466	OEU ZONE 4 L MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

- 9) For the OEU in zone 4-right, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-71)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C23464	OEU ZONE 4 R MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

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- 10) For the OEU in zone 4-center, :
- Replace the circuit breaker for the applicable pin:
(WDM 23-33-71)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	22	C23465	OEU ZONE 4 CTR MAIN BUS
G	6	C23467	OEU ZONE 4 XFER BUS

- 11) Re-connect the two DM234XXA or D5XXXP.
- 12) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- 13) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 14) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) Do these steps:
- (a) Replace the first OEU shown in the Possible Causes list.
- These are the tasks:
- Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- (b) Make sure you install a shorting receptacle if the first OEU shown in the Possible Causes list is not used.
- (c) Re-connect DM234XXA or D5XXXP.
- (d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (e) If the maintenance message shows in the All Test Fault Results, then do these steps:
- 1) Replace the second OEU shown in the Possible Causes list.
- These are the tasks:
- Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- 2) Make sure you install a shorting receptacle if the second OEU shown in the Possible Causes list is not used.
- 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

873. OEU Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03417.

B. Fault Isolation Procedure

- (1) Replace the Overhead Electronics Unit (OEU).

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

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Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

- (2) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

874. OEU Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03418.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Overhead Electronics Unit (OEU). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the OEU.
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

875. OEU Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03419.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Overhead Electronics Unit (OEU).
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

876. OEU Program Line Input Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03427.

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B. Fault Isolation Procedure

- (1) Replace the first Overhead Electronics Unit (OEU) shown in the Possible Causes list.

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (3) If the maintenance message shows in the All Test Fault Results, then do these steps:

- (a) Replace the second OEU shown in the Possible Causes list.

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:

- 1) Disconnect connectors DM234XXA or D5XXXP (XX or XXX is different for each OEU) from the two OEUs shown in the Possible Causes list.
- 2) Do a wiring check between these pins of the two connectors at the OEUs (WDM 23-33-34) (WDM 23-33-35) (WDM 23-33-36) (WDM 23-33-44) (WDM 23-33-45) (WDM 23-33-46) (WDM 23-33-54) (WDM 23-33-55) (WDM 23-33-56). The left column applies to DM234XXA or D5XXXP for the first OEU. The right column applies to DM234XXA or D5XXXP for the second OEU.

**DM234XXA or
D5XXXP**

pin 1
pin 5

**DM234XXA or
D5XXXP**

pin 2
pin 8

- 3) If you find a problem with the wiring, then do these steps:

- a) Repair the wiring.
- b) Re-connect the two connectors DM234XXA or D5XXXP.
- c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

877. OEU Program Line Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03428, 23-03429, 23-03430.

B. Fault Isolation Procedure

- (1) Replace the first Overhead Electronics Unit (OEU) shown in the Possible Causes list.

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

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Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the second OEU shown in the Possible Causes list.

These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - 1) Disconnect connectors DM234XXA or D5XXXP (XX or XXX is different for each OEU) from the two OEUs shown in the Possible Causes list.
 - 2) Do a wiring check between these pins of the two connectors at the OEUs(WDM 23-33-34) (WDM 23-33-35) (WDM 23-33-36) (WDM 23-33-44) (WDM 23-33-45) (WDM 23-33-46) (WDM 23-33-54) (WDM 23-33-55) (WDM 23-33-56) :

DM234XXA or D5XXXP for the first OEU	DM234XXA or D5XXXP for the second OEU
pin 2	pin 1
pin 8	pin 5
 - 3) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-connect the two connectors DM234XXA or D5XXXP.
 - c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

878. OEU Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03434.

B. Fault Isolation Procedure

- (1) Disconnect connector DM234XXC (XX is different for each OEU) from the Overhead Electronics Unit (OEU).
- (2) Do a check for a short to ground at shop mode pins 20 and 37 of connector DM234XXC.
- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM234XX.
 - (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).

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- (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
 - (a) Replace the OEU.
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

———— **END OF TASK** ————

879. OEU Ballast Discrete Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03481.

B. Fault Isolation Procedure

- (1) Disconnect connector DM234XXC (XX is different for each OEU) from the Overhead Electronics Unit (OEU).
- (2) Disconnect connector DMYYYY (YYYY is different for each ballast) from the ballast.
- (3) Do a wiring check between the applicable pin of connector DM234XXC at the OEU and the pin of connector DMYYYY at the applicable ballast.

NOTE: The applicable pin number of the connector at the OEU shows with the maintenance message on the Cabin System Control Panel (CSCP). Use the referenced schematic to find the pin number for the applicable ballast.

- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM234XXC.
 - (c) Re-connect DMYYYY.
 - (d) Do the QUICK TEST on the CSCP.
 - (e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect DM234XXC.
 - (b) Replace the applicable ballast (AMM TASK 33-20-00-970-801).
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (e) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - 1) Replace the OEU.
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

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- 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

880. OEU Ballast Discrete Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03482, 23-03483.

B. Fault Isolation Procedure

- (1) Replace the applicable ballast (AMM TASK 33-20-00-970-801).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Overhead Electronics Unit (OEU).
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Disconnect connector DM234XXC (XX is different for each OEU) from the OEU.
 - (b) Disconnect connector DMYYYY (YYYY is different for each ballast) from the applicable ballast.
 - (c) Do a wiring check between the applicable pin of connector DM234XXC at the OEU and the pin of connector DMYYYY at the applicable ballast.
NOTE: The applicable pin number of the connector at the OEU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable ballast.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect DM234XXC.
 - 3) Re-connect DMYYYY.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

881. OEU AC Lamp Control Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03485.

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B. Fault Isolation Procedure

- (1) Disconnect connector DM234XXB (XX is different for each OEU) from the Overhead Electronics Unit (OEU).
- (2) Disconnect connector DMYYYY (YYYY is different for each light) from the applicable light.
- (3) Do a wiring check between the applicable pin of connector DM234XXB at the OEU and the pin of connector DMYYYY at the applicable light.

NOTE: The applicable pin number of the connector at the OEU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable light.

- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM234XXB.
 - (c) Re-connect DMYYYY.
 - (d) Do the QUICK TEST on the CSCP.
 - (e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect DM234XXB.
 - (b) Replace the applicable light (AMM TASK 33-20-00-970-801).
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault results, you corrected the fault.
 - (e) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - 1) Replace the OEU.
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

882. OEU AC Lamp Control Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03468, 23-03469, 23-03479, 23-03486, 23-03487, 23-03488.

B. Fault Isolation Procedure

- (1) Replace the applicable light (AMM TASK 33-20-00-970-801).
 - (a) At the applicable passenger control unit (PCU) or at the cabin system control panel (CSCP), set the light to the on mode.
 - 1) Make sure the lamp comes on.
 - (b) Set the light to the off mode.
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).

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- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Overhead Electronics Unit (OEU).

These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Disconnect the connector from the OEU from the wire bundle that goes to the applicable light.
 - (b) Disconnect the connector from the applicable light.
 - (c) Do a wiring check between the applicable pin of the connector at the OEU and the pin of the connector at the applicable light (SSM 33-XX-XX).

NOTE: The applicable pin number of the connector at the OEU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable light.
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector to the OEU.
 - 3) Re-connect the connector to the applicable light.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

883. OEU Lamp Voltage Converter Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03489, 23-03490, 23-03491, 23-03519.

B. Fault Isolation Procedure

- (1) Disconnect connector DM234XXB or DM234XXC (XX is different for each OEU) from the Overhead Electronics Unit (OEU).
- (2) Disconnect connector DMYYYY (YYYY is different for each light) from the applicable light.
- (3) Do a wiring check between the applicable pin of connector DM234XXB or DM234XXC at the OEU and the pin of connector DMYYYY at the applicable light (SSM 33-YY-YY).

NOTE: The applicable pin number shows with the maintenance message on the Cabin System Control Panel (CSCP). Use the referenced schematic to find the pin number for the applicable light.

- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.

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- (b) Re-connect DMYYYY.
- (c) Re-connect DM234XXB or DM234XXC.
- (d) Do the QUICK TEST on the CSCP.
- (e) If the maintenance message does not show in the Quick Test Fault, you corrected the fault.

————— **END OF TASK** —————

884. PAC Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01418.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Passenger Address System (PAC). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

885. PAC Program Line Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01428, 23-01429, 23-01430.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:

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- (a) Replace the Speaker Drive Module (SDM).

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,

Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:

- 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.

- 2) Disconnect connector DM230XXA (XX is different for each SDM) from the SDM.

- 3) For the SDM in column 1;

Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM230XXA at the SDM (WDM 23-31-22):

DM23016AA	DM230XXA
pin J6	pin 4
pin K6	pin 5

- 4) For the SDM in column 2;

Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM230XXA at the SDM (WDM 23-31-32):

DM23016AA	DM230XXA
pin J7	pin 4
pin K7	pin 5

- 5) For the SDM in column 3;

Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM230XXA at the SDM (WDM 23-31-42):

DM23016AA	DM230XXA
pin J8	pin 4
pin K8	pin 5

- 6) For the SDM in column 4;

Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM230XXA at the SDM (WDM 23-31-62):

DM23016AA	DM230XXA
pin J10	pin 4
pin K10	pin 5

- 7) If you find a problem with the wiring, then do these steps:

- a) Repair the wiring.

- b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- c) Re-connect DM230XXA.
 - d) Do the ALL TEST on the CSCP.
 - e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- 8) If you do not find a problem with the wiring, then do these steps:
- a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Re-connect DM230XXA.
 - c) Do the ALL TEST on the CSCP.
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

886. PAC Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01434.

B. Fault Isolation Procedure

- (1) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (2) Do a check for a short to ground at shop mode pins F3 and F5 of connector DM23016AB.
- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
 - (a) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

887. PAC Audio Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01474.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).

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- (3) If the maintenance message does not show in the All Test Fault Results, then do these steps:
- (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) If the CSCP shows that the unit connected to PA/CI pins A-A1, A2 is the possible cause, then do these steps:
- (a) Replace the Audio Management Unit (AMU), M23008.
These are the tasks:
Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (d) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 1) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Remove the AMU, M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
 - 3) Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM23008AB at the E1-4 shelf (WDM 23-51-64):

DM23016AA	DM23008AB
pin A1	pin K13
pin A2	pin K12
- 4) If you find a problem with the wiring, then do these steps:
- a) Repair the wiring.
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - d) Do the ALL TEST on the CSCP.
 - e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then do these steps:

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- a) Install a new PA/CI, M230166. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - b) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - c) Do the ALL TEST on the CSCP.
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (6) If the CSCP shows that the unit connected to PA/CI pins A-A6, B6, A-A7, B7, A-A8, B8, A-A9, B9, A-D6, E6, or A-D7, E7 is the possible cause, then do these steps:
- (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 1) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (d) Do a wiring check between these pins of the PA/CI connector DM23016AA at the E1-4 shelf and the EPESC connector DM23667AB at the E2-4 shelf (WDM 23-32-18):

DM23016AA

pin A6	.....	pin G1
pin B6	.....	pin H1
pin A7	.....	pin G2
pin B7	.....	pin H2
pin A8	.....	pin G3
pin B8	.....	pin H3
pin A9	.....	pin G4
pin B9	.....	pin H4
pin D6	.....	pin G5
pin E6	.....	pin H5
pin D7	.....	pin G9
pin E7	.....	pin H9

DM23667AB

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the ALL TEST on the CSCP.
 - 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (f) If you do not find a problem with the wiring, then do these steps:
 - 1) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

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Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- 2) Do the ALL TEST on the CSCP.
- 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

889. SDM Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03201.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,

Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Quick Test Fault Results, then do this voltage check:
 - (a) Disconnect connector DM230XXA (XX is different for each SDM) from the SDM.
 - (b) Do a check for 28 VDC from pin A2 of connector DM230XXA to structure ground (WDM 23-31-21) (WDM 23-31-31) (WDM 23-31-41) (WDM 23-31-61).
 - (c) If there is not 28 VDC at pin A2 of DM230XXA, then do these steps:
 - 1) For SDM in column 1, repair the circuit between connector DM230XXA and this circuit breaker:
(WDM 23-31-21)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	9	C23634	SDM COL 1

- 2) For SDM in column 2, repair the circuit between connector DM230XXA and this circuit breaker:
(WDM 23-31-31)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C23635	SDM COL 2

- 3) For SDM in column 3, repair the circuit between connector DM230XXA and this circuit breaker:
(WDM 23-31-41)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	11	C23636	SDM COL 3

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- 4) For SDM in column 4, repair the circuit between connector DM230XXA and this circuit breaker:

(WDM 23-31-61)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	9	C23652	SDM COL 5

- 5) Re-connect DM230XXA.
- 6) Do the QUICK TEST on the CSCP.
- 7) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If there is 28 VDC at pin A2 of DM230XXA, then do these steps:
- 1) Re-connect DM230XXA.
 - 2) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

890. Response Problems from all Subsequent SDMs - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03202.

B. Fault Isolation Procedure

- (1) Do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (2) Do the wiring check for the applicable SDM to make sure that the resistance is less than 150 ohms:
- (a) For the SDM in zone 1;
Do a continuity check between these pins of connector DM23016AB at the E1-4 shelf to make sure the resistance is less than 150 ohms (WDM 23-31-22):

DM23016AB	DM23016AB
pin K3	pin J3

- (b) For the SDM in zone 2;
Do a continuity check between these pins of connector DM23016AB at the E1-4 shelf to make sure the resistance is less than 150 ohms (WDM 23-31-32):

DM23016AB	DM23016AB
pin D6	pin E6

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- (c) For the SDM in zone 3;

Do a continuity check between these pins of connector DM23016AB at the E1-4 shelf to make sure the resistance is less than 150 ohms (WDM 23-31-42):

DM23016AB	DM23016AB
pin G6	pin H6

- (d) For the SDM in zone 4;

Do a continuity check between these pins of connector DM23016AB at the E1-4 shelf to make sure the resistance is less than 150 ohms (WDM 23-31-62):

DM23016AB	DM23016AB
pin D9	pin E9

- (3) Do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (4) If the resistance is more than 150 ohms, do these steps:

- (a) Make sure the electrical connectors are fully connected on each Speaker Drive Module (SDM) in order towards the front of the aircraft starting with the first Speaker Drive Module (SDM) in the Possible Causes List.

- 1) Do an ALL TEST on the Cabin System Control Panel (CSCP).
- 2) If the maintenance message does not show in the ALL TEST Fault Results, you corrected the fault.
- 3) If the maintenance message does show, continue.

- (b) Disconnect connector DM23XXXA (XXX is different for each SDM) from the first Speaker Drive Module (SDM) in the Possible Causes list.

- (c) Disconnect connector DM23XXXA (XXX is different for each SDM) from the second SDM in the Possible Causes list.

- (d) Do a wiring check between these pins of the two connectors DM230XXXA at the SDMs (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42) (WDM 23-31-62):

DM23XXXA for the first SDM	DM23XXXA for the second SDM
pin 6	pin 18
pin 7	pin 19

- (e) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-connect the two connectors DM23XXXA.
- 3) Do QUICK TEST on the Cabin System Control Panel (CSCP).
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (f) If you do not find a problem with the wiring, then do this check:

- 1) Do a check for 28 VDC from pin A2 of two connectors DM23XXXA to structure ground (WDM 23-31-21) (WDM 23-31-31) (WDM 23-31-41) (WDM 23-31-61).

- (g) If there is not 28 VDC at pin A2 of DM23XXXA, then do these steps:

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- 1) For the SDM in column 1, repair the circuit between connector DM23XXXXA and this circuit breaker:

(WDM 23-31-21)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	9	C23634	SDM COL 1

- 2) For the SDM in column 2, repair the circuit between connector DM23XXXXA and this circuit breaker:

(WDM 23-31-31)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C23635	SDM COL 2

- 3) For the SDM in column 3, repair the circuit between connector DM23XXXXA and this circuit breaker:

(WDM 23-31-41)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	11	C23636	SDM COL 3

- 4) For the SDM in column 4, repair the circuit between connector DM23XXXXA and this circuit breaker:

(WDM 23-31-61)

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	9	C23652	SDM COL 5

- 5) Re-connect the two connectors DM23XXXXA.
 - 6) Do the ALL TEST on the CSCP.
 - 7) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (h) If there is 28 VDC at pin A2 of DM230XXA, re-connect the connector DM230XXA and continue.

- 1) Replace the first SDM shown in the Possible Causes list.

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- 3) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - a) Replace the second SDM shown in the Possible Causes list.

These are the tasks:

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Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (5) If the resistance is less than 150 ohms, do these steps:
 - (a) Replace the first SDM shown in the Possible Causes list.
These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - 1) Do the ALL TEST on the CSCP.
 - a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - b) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - 2) Replace in order the next aft SDM from the SDM just replaced.
These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - a) Do an ALL TEST after each replacement.
 - b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

891. SDM Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03210, 23-03250, 23-03276.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).
These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

892. SDM Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03217.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).
These are the tasks:

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Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

893. SDM Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03218.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Speaker Drive Module (SDM). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the SDM.
These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

894. SDM Configuration database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03219.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Speaker Drive Module (SDM).
These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

895. SDM Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03234.

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B. Fault Isolation Procedure

- (1) Disconnect connector DM230XXA (XX is different for each SDM) from the Speaker Drive Module (SDM).
- (2) Do a check for a short to ground at shop mode pins 1 and 13 of connector DM230XXA.
- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM230XXA.
 - (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (d) If the maintenance message does not show in the All Test Fault Results - Masked and unmasked, you corrected the fault.
- (4) If there is not a short to ground, then do these steps:
 - (a) Replace the SDM.

These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - (b) If the maintenance message does not show in All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

896. SDM Program Line Input Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03227.

B. Fault Isolation Procedure

- (1) Replace the first Speaker Drive Module (SDM) shown in the Possible Causes list.

These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the second SDM shown in the Possible Causes list.

These are the tasks:
Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - 1) Disconnect connector DM230XXA (XX is different for each SDM) from the first SDM shown in the Possible Causes list.
 - 2) Disconnect connector DM230XXA (XX is different for each SDM) from the second SDM shown in the Possible Causes list

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- 3) Do a wiring check between these pins of the two connectors DM230XXA at the SDMs (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42):

**DM230XXA for
the first SDM**

pin 4
pin 5

**DM234XXA for
the second SDM**

pin 15
pin 16

- 4) If you find a problem with the wiring, then do these steps:
- Repair the wiring.
 - Re-connect the two connectors DM230XXA.
 - Do the ALL TEST on the CSCP.
 - If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

897. SDM Program Line Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03228, 23-03229, 23-03230.

B. Fault Isolation Procedure

- (1) Replace the first Speaker Drive Module (SDM) shown in the Possible Causes list.

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (3) If the maintenance message shows in the All Test Fault Results, then do these steps:

- (a) Replace the second SDM shown in the Possible Causes list.

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:

- 1) Disconnect connector DM230XXA (XX is different for each SDM) from the first SDM shown in the Possible Causes list.
- 2) Disconnect connector DM230XXA (XX is different for each SDM) from the second SDM shown in the Possible Causes list
- 3) Do a wiring check between these pins of two connectors DM230XXA at the SDMs (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42):

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DM230XXA for the first SDM

pin 15
pin 16

DM230XXA for the second SDM

pin 4
pin 5

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-connect the two connectors DM230XXA.
 - c) Do the ALL TEST on the CSCP.
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

END OF TASK

898. PAC Digital Audio Bus Fault from all SDMs in a Column - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03247.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.
 - (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
 - (a) Do this check of the wiring between the PA/CI and the first Speaker Drive Module (SDM) in the specified column:
 - 1) Disconnect connector DM23016AB from the PA/CI, M23016.
 - 2) Disconnect connector DM230XXA (XX is different for each SDM) from the first SDM in the specified column.
 - 3) For the SDM in column 1;
Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23018A at the first SDM in the column (WDM 23-31-22):

DM23016AB

pin J1
pin K1

DM23018A

pin 9
pin 10

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- 4) For the SDM in column 2;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23029A at the first SDM in the column (WDM 23-31-32):

DM23016AB	DM23029A
pin A6	pin 9
pin B6	pin 10

- 5) For the SDM in column 3;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23043A at the first SDM in the column (WDM 23-31-42):

DM23016AB	DM23043A
pin J5	pin 9
pin K5	pin 10

- 6) For the SDM in column 4;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23613A at the first SDM in the column (WDM 23-31-62):

DM23016AB	DM23613A
pin A9	pin 9
pin B9	pin 10

- 7) If you find a problem with the wiring, then do these steps:

- Repair the wiring.
- Re-connect DM23016AB.
- Re-connect DM230XXA.
- Do the QUICK TEST on the CSCP.
- If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- 8) If you do not find a problem with the wiring, then continue:

- (5) Re-connect DM23016AB.

- (6) Replace the first SDM in the column.

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,

Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (a) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (b) If the maintenance message shows in the Quick Test Fault results, then continue.

- (7) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- (a) Do the QUICK TEST on the CSCP.
- (b) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

899. SDM Analog Input Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03277.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,

Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

900. SDM Analog Input Circuit Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03279.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,

Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

901. SDM Audio Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03302.

B. Fault Isolation Procedure

- (1) Disconnect connector DM230XXB (XX is different for each SDM) from the Speaker Drive Module (SDM).

- (2) Disconnect connector from the speaker.

- (3) If the CSCP shows that the unit connected to SDM pins J3-1,6 is the possible cause, then do these steps:

- (a) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

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DM230XXB	SPEAKER CONNECTOR
pin 1	term +
pin 6	term -

- (4) If the CSCP shows that the unit connected to SDM pins J3-5,9 is the possible cause, then do these steps:
- (a) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

DM230XXB	SPEAKER CONNECTOR
pin 5	term +
pin 9	term -

- (5) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
- (b) Re-connect DM230XXB.
- (c) Re-connect connector to the speaker.
- (d) Do the QUICK TEST on the CSCP.
- (e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (6) If you do not find a problem with the wiring, then do these steps:
- (a) Re-connect DM230XXB.
- (b) Replace the speaker.
- These are the tasks:
- Speaker Removal, AMM TASK 23-31-03-000-805,
Speaker Installation, AMM TASK 23-31-03-400-805.
- (c) Do the QUICK TEST on the CSCP.
- (d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If the maintenance message shows in the Quick Test Fault Results, then do these steps:
- 1) Replace the SDM.
- These are the tasks:
- Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.
- 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

902. SDM Audio Output Circuit Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03303.

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B. Fault Isolation Procedure

- (1) Replace the speaker.

These are the tasks:

Speaker Removal, AMM TASK 23-31-03-000-805,

Speaker Installation, AMM TASK 23-31-03-400-805.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Disconnect connector DM230XXB (XX is different for each SDM) from the Speaker Drive Module (SDM).
 - (b) Disconnect connector from the speaker.
 - (c) If the CSCP shows that the unit connected to SDM pins J3-1,6 is the possible cause, then do these steps:
 - 1) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

DM230XXB	SPEAKER CONNECTOR
pin 1	term +
pin 6	term -

- (d) If the CSCP shows that the unit connected to SDM pins J3-5,9 is the possible cause, then do these steps:
 - 1) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

DM230XXB	SPEAKER CONNECTOR
pin 5	term +
pin 9	term -

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect DM230XXB.
 - 3) Re-connect connector to the speaker.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (f) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-connect connector to the speaker.
 - 2) Replace the SDM.

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These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

903. SDM Audio Output Circuit Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03304.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module.

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Disconnect connector DM230XXB (XX is different for each SDM) from the SDM.
 - (b) Disconnect connector from the speaker.
 - (c) If the CSCP shows that the unit connected to SDM pins J2-1,6 is the possible cause, then do these steps:
 - 1) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

DM230XXB

pin 1	.....	term +
pin 6	.....	term -

SPEAKER CONNECTOR

- (d) If the CSCP shows that the unit connected to SDM pins J2-5,9 is the possible cause, then do these steps:
 - 1) Do a wiring check between these pins of connector DM230XXB at the SDM and the connectors on the wire bundle for the speaker (WDM 23-31-24) (WDM 23-31-34) (WDM 23-31-44):

DM230XXB

pin 5	.....	term +
pin 9	.....	term -

SPEAKER CONNECTOR

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect DM230XXB.

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- 3) Re-connect connector to the speaker.
 - 4) Do the QUICK TEST on the CSCP.
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (f) If you do not find a problem with the wiring, then do these steps:
- 1) Re-connect DM230XXB.
 - 2) Replace the speaker.
- These are the tasks:
- Speaker Removal, AMM TASK 23-31-03-000-805,
Speaker Installation, AMM TASK 23-31-03-400-805.
- 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

904. SDM Power Output Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03278, 23-03305.

B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM).

These are the tasks:

Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801,
Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

910. ZMU Response Problems from all OEUs in a Column - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02403.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU).

These are the tasks:

Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - (a) Disconnect connector DM2307XC (X is different for each ZMU) from the ZMU.
 - (b) Disconnect connector D5XXXP or DM234XXA (XXX or XX is different for each OEU) from the Overhead Electronics Unit (OEU) that shows in the Possible Causes list.

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- (c) Do a wiring check between these pins of connector DM2307XC at the ZMU and connector D5XXXP or DM234XXA at the OEU:

LEFT OEU

(WDM

23-33-34,

23-33-44,

23-33-54)

DM2307XC

D5XXXP or

DM234XXA

pin 1	.....	pin 9
pin 2	.....	pin 10
pin 4	.....	pin 1
pin 5	.....	pin 5

RIGHT OEU

(WDM

23-33-35,

23-33-45,

23-33-55)

DM2307XC

D5XXXP or

DM234XXA

pin 11	.....	pin 9
pin 12	.....	pin 10
pin 14	.....	pin 1
pin 15	.....	pin 5

CENTER OEU

(WDM

23-33-36,

23-33-46,

12-33-56)

DM2307XC

D5XXXP or

DM234XXA

pin 6	.....	pin 9
pin 7	.....	pin 10
pin 9	.....	pin 1
pin 10	.....	pin 5

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect DM2307XC.
 - 3) Re-connect D5XXXP or DM234XXA.
 - 4) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - 5) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then do these steps:
- 1) Re-connect DM2307XC.
 - 2) Replace the OEU shown in the Possible Causes list.

These are the tasks:

Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,

Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.

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- 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- 4) If the maintenance message shows in the All Test Fault Results, then continue.
- (4) Do these steps to find which OEU in the column caused the problem:
NOTE: The objective is to divide the column of OEUs in half and find which group of OEUs has the problem. Each time that you find which group has the problem, you divide that group in half until you find the OEU that caused the problem.
 - (a) Go to the OEU that is in the middle between the first and last OEU in the column.
 - (b) Disconnect connector D5XXXP or DM234XXA (XXX or XX is different for each OEU).
 - (c) Do the QUICK TEST on the CSCP.
 - (d) If the maintenance message does not show in the Quick Test Fault Results, then an OEU between the disconnected connector and the last OEU caused the problem.
NOTE: If the maintenance message shows in the Quick Test Fault Results, then an OEU between the first OEU and the disconnected connector caused the problem.
 - (e) Re-connect D5XXXP or DM234XXA.
 - (f) Continue to divide the problem group in half until you find the OEU that caused the problem (use the steps above to disconnect the connector, do the QUICK TEST, and re-connect the connector).
 - (g) Do this check of the wiring:
 - 1) Disconnect connector D5XXXP or DM234XXA from the OEU that caused the problem.
 - 2) Disconnect connector D5XXXP or DM234XXA from the next OEU in the column (the "next" OEU is one position closer to the ZMU than the OEU that caused the problem).
 - 3) Do a wiring check between these pins of the specified connectors (WDM 23-33-34 thru 23-33-56):

**D5XXXP or
DM234XXA of
OEU that
caused the
problem**

**D5XXXP or
DM234XXA of
next OEU**

pin 1	.....	pin 2
pin 5	.....	pin 8
pin 9	.....	pin 11
pin 10	.....	pin 12

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-connect D5XXXP or DM234XXA.
 - c) Do the QUICK TEST on the CSCP.
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 5) If you do not find a problem with the wiring, then do these steps:
 - a) Re-connect D5XXXP or DM234XXA.

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- b) Replace the OEU that caused the problem.
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

912. ZMU Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-02410, 23-02421, 23-02531, 23-02533.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU).
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

917. ZMU Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02418.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Zone Management Unit (ZMU). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the ZMU.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (b) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

918. ZMU Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02419.

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B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Zone Management Unit (ZMU).

These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (b) If the maintenance message does not in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

919. ZMU Program Line Output to OEU Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-02428, 23-02429, 23-02430.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU).

These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the Overhead Electronics Unit (OEU).

These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then do this check of the wiring:
 - 1) Disconnect connector DM2307XC (X is different for each ZMU) from the ZMU.
 - 2) Disconnect connector DM234XXA (XX is different for each OEU) from the OEU.
 - 3) For the OEU in column 1;

Do a wiring check between these pins of connector DM2307XC at the ZMU and connector DM234XXA at the OEU (WDM 23-33-34) (WDM 23-33-44) (WDM 23-33-54):

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DM2307XC	DM234XXA
pin 4	pin 1
pin 5	pin 5

- 4) For the OEU in column 2;

Do a wiring check between these pins of connector DM2307XC at the ZMU and connector DM234XXA at the OEU (WDM 23-33-35) (WDM 23-33-45) (WDM 23-33-55):

DM2307XC	DM234XXA
pin 14	pin 1
pin 15	pin 5

- 5) For the OEU in column 3;

Do a wiring check between these pins of connector DM2307XC at the ZMU and connector DM234XXA at the OEU (WDM 23-33-36) (WDM 23-33-46) (WDM 23-33-56):

DM2307XC	DM234XXA
pin 9	pin 1
pin 10	pin 5

- 6) For the OEU in column 4;

Do a wiring check between these pins of connector DM23127C at the ZMU and connector DM23XXA at the OEU (WDM 23-33-36) (WDM 23-33-46) (WDM 23-33-56):

DM23127C	DM23XXA
pin 9	pin 1
pin 10	pin 5

- 7) If you find a problem with the wiring, then do these steps:

- Repair the wiring.
- Re-connect DM2307XC.
- Re-connect DM234XXA.
- Do the ALL TEST on the Cabin System Control Panel (CSCP).
- If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

———— **END OF TASK** ————

921. ZMU Shop Mode Program Pin Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02434.

B. Fault Isolation Procedure

- Disconnect connector DM2307XE (X is different for each ZMU) from the Zone Management Unit (ZMU).
- Do a check for a short to ground at shop mode pins 38 and 41 of connector DM2307XE.

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- (3) If there is a short to ground, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect DM2307XE.
 - (c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (d) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
 - (e) If the maintenance message shows in the All Test Fault Results - Masked and Unmasked, then do these steps:
 - 1) Replace the ZMU.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 2) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

922. ZMU Program Pins Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02472.

B. Fault Isolation Procedure

- (1) If the Cabin System Control Panel (CSCP) shows that the Zone Management Unit (ZMU) 1 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23071D from the ZMU 1, M23071.
 - (b) Make sure the program pins 22, 23, and 24 of connector DM23071D agree with WDM 23-33-31.
 - (c) If the program pins do not agree with WDM 23-33-31, then do these steps:
 - 1) Change the wiring to agree with WDM 23-33-31.
 - 2) Re-connect DM23071D.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the program pins agree with WDM 23-33-31, then do these steps:
 - 1) Replace the ZMU 1, M23071.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (2) If the CSCP shows that the ZMU 2 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23072D from the ZMU 2, M23072.
 - (b) Make sure the program pins 22, 23, and 24 of connector DM23072D agree with WDM 23-33-41.

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- (c) If the program pins do not agree with WDM 23-33-41, then do these steps:
 - 1) Change the wiring to agree with WDM 23-33-41.
 - 2) Re-connect DM23072D.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the program pins agree with WDM 23-33-41, then do these steps:
 - 1) Replace the ZMU 2, M23072.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the CSCP shows that the ZMU 3 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23073D from the ZMU 3, M23073.
 - (b) Make sure the program pins 22, 23, and 24 of connector DM23073D agree with WDM 23-33-51.
 - (c) If the program pins do not agree with WDM 23-33-51, then do these steps:
 - 1) Change the wiring to agree with WDM 23-33-51.
 - 2) Re-connect DM23073D.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the program pins agree with WDM 23-33-51, then do these steps:
 - 1) Replace the ZMU 3, M23073.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the CSCP shows that the ZMU 4 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23127D from the ZMU 4, M23127.
 - (b) Make sure the program pins 22, 23, and 24 of connector DM23127D agree with WDM 23-33-71.
 - (c) If the program pins do not agree with WDM 23-33-71, then do these steps:
 - 1) Change the wiring to agree with WDM 23-33-71.
 - 2) Re-connect DM23127D.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (d) If the program pins agree with WDM 23-33-71, then do these steps:

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- 1) Replace the ZMU 4, M23127.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- 2) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

925. ZMU Hardware Configuration Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02417.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU).
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (2) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— **END OF TASK** —————

926. PAC Left System ARINC 629 Coupler Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01439.

B. Fault Isolation Procedure

- (1) Replace the ARINC 629 coupler, B23128, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the Passenger Address/Cabin Interphone Controller (PA/CI), M23016 to the system 629-L.
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message does show in the Quick Test Fault Result, then do these steps:
 - (a) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the QUICK TEST on the CSCP.

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- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then do this check of the wiring:
 - 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Disconnect connector DB23128 from the coupler, B23128.
 - 3) Do a wiring check between these pins of connector DM23016AF at the E1-4 shelf and connector DB23128 at the P111 panel (WDM 23-31-11):

DM23016AF	DB23128
pin 5T	pin 2
pin 5TR	pin 1
pin 6T	pin 5
pin 6TR	pin 4

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - b) Install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-connect DB23128.
 - d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

927. **PAC No Input on Systems 629 Bus-L - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01437, 23-01438.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the Quick Test Fault Result, then do these steps:
 - (a) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI, M23016 to the Systems 629 Bus-L.

- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the Quick Test Fault Results, then do this check of the wiring:
 - 1) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - 2) Disconnect connector DB23128 from the coupler, B23128.
 - 3) Do a wiring check between these pins of connector DM23016AF at the E1-4 shelf and connector DB23128 at the P111 panel (WDM 23-31-11):

DM23016AF	DB23128
pin 5T	pin 2
pin 5TR	pin 1
pin 6T	pin 5
pin 6TR	pin 4

- 4) If you find a problem with the wiring, then do these steps:
 - a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - b) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Re-connect DB23128.
 - d) Do the QUICK TEST on the CSCP.
 - e) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

932. FDE Cabin Faults - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-00001, 23-00002.

B. Fault Isolation Procedure

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:

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- (a) CABIN MAINTENANCE
 - (b) CABIN FAULTS REVIEW
 - (c) FLIGHT DECK EFFECTS FAULTS (ACTIVE)
- (3) If you find a maintenance message, then do these steps:
- (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (4) If you do not find a maintenance message, then touch these selections on the CSCP:
- (a) PREVIOUS MENU
 - (b) FLIGHT DECK EFFECTS FAULTS (HISTORY)
- (5) If you find a maintenance message, then do these steps:
- (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (6) If the problems still exist, replace the Flight Deck Handset:
- (a) Do these tasks: Flight Deck Handset Removal, AMM TASK 23-42-02-000-801, Flight Deck Handset Installation, AMM TASK 23-42-02-400-801.

END OF TASK

933. PA/CI No Output to Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-38841.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:
- (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:
- (a) CABIN MAINTENANCE
 - (b) CABIN FAULTS REVIEW
 - (c) FLIGHT DECK EFFECTS FAULTS (ACTIVE)
- (3) If you find a maintenance message, then do these steps:
- (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.

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- (b) Do the specified fault isolation task.
- (4) If you do not find the maintenance message, continue.
- (5) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
- These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
- Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the ARINC 629 coupler, B23128, in the P111 panel.
- These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
- ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE:** This coupler connects the PA/CI, M23016 to the system 629-L.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Do this check of the wiring from the PA/CI to the coupler:
- (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (b) Disconnect connector DB23128 from the coupler, B23128.
- (c) Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DB23128 at the P111 panel (WDM 23-31-11):
- | DM23016AF | DB23128 |
|-------------------|----------------|
| pin 5T | pin 2 |
| pin 5TR | pin 1 |
| pin 6T | pin 5 |
| pin 6TR | pin 4 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-connect DB23128.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

934. CSMU No Output to Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-38862.

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B. Initial Evaluation

- (1) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU, M23061 to the system 629-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the CACP/CSCP reset switch in the Attendant Switch Panel.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring from the CSMU to the coupler:
 - (a) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Disconnect connector DB23228 from the coupler, B23228.
 - (c) Do a wiring check between these pins of connector DM23601AC at the E1-4 shelf and connector DB23228 at the P211 panel (WDM 23-33-11):

DM23061AC

DB23228

pin 5T	.....	pin 5
pin 5TR	.....	pin 4
pin 6T	.....	pin 2
pin 6TR	.....	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - 2) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 3) Re-connect DB23228.

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

935. PA/CI No Input from LSCF ASG-L on System 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left ARINC Signal Gateway (ASG), P85A12.

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31201, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left ASG to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

936. PA/CI No Input from CTC-L on Systems 626 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left Cabin Temperature Controller (CTC), M21631.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21631, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left CTC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

937. PA/CI No Input from FSEU 1 Monitor Channel on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Flap Slat Electronics Unit (FSEU) 1 Monitor Channel, M27001.

These are the tasks:

Flap/Slat Electronics Unit (FSEU) Removal, AMM TASK 27-51-01-000-801,

Flap/Slat Electronics Unit (FSEU) Installation, AMM TASK 27-51-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B27101, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the FSEU 1 Monitor Channel to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

938. PA/CI No Input from OPBC-L on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left Overhead Panel Bus Controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.



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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

939. PA/CI No Input from PSEU 2 on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Circuit Card Assembly (CCA), Communication, A17 in Proximity Sensor Electronics Unit (PSEU) 2, M32025-A17.

These are the tasks:

Proximity Sensor Electronics Unit Removal, AMM TASK 32-08-01-000-801,

Proximity Sensor Electronics Unit Installation, AMM TASK 32-08-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B32215, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects PSEU 2 to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

940. PA/CI No Input from WES-L on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left Warning Electronic Unit (WES), M31107.

These are the tasks:

Warning Electronic Unit Removal, AMM TASK 31-51-01-000-801,

Warning Electronic Unit Installation, AMM TASK 31-51-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23128, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the PA/CI to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31123, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left WES to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

————— END OF TASK —————

941. CSMU No Input from RSCF ASG-R on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Right ARINC Signal Gateway (ASG), P85A15.

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31202, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right ASG to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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942. CSMU No Input from CTC-R on Systems 626 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right Cabin Temperature Controller (CTC), M21632.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21634, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the Right CTC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

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943. CSMU No Input from FSEU 2 on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Flap Slat Electronics Unit (FSEU) 2, M27002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B27201, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the FSEU 2 to the Systems 629 Bus-R.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

944. CSMU No Input from AIMS-L on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM (M004) module in left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31211, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

945. CSMU No Input from AIMS-R on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

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Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM (M004) module in the right AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31214, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

946. CSMU No Input from OPBC-R on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right Overhead Panel Bus Controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23227, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

947. CSMU No Input from PSEU 2 on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Replace the Circuit Card Assembly (CCA), Communication, A02 in Proximity Sensor Electronic Unit (PSEU) 2.

These are the tasks:

PSEU Circuit Card Removal, AMM TASK 32-08-02-000-801,

PSEU Circuit Card Installation, AMM TASK 32-08-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23228, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the CSMU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B32302, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects PSEU 2 to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

949. PAC Discrete Output Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01414, 23-01415.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the Quick Test Fault Results, then do these steps:
- (a) Replace the Passenger Address/Cabin Interphone controller (PA/CI), M23016.
- These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
- Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (b) Do the QUICK TEST on the CSCP.
- (c) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

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- (d) If the maintenance message shows in the Quick Test Fault Results, then continue.
- (4) If the CSCP shows that the unit connected to PA/CI pin A-A10 is the possible cause, then do these steps:
- (a) Do the QUICK TEST on the CSCP.
 - (b) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the Quick Test Fault Results, then continue.
 - (d) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (e) Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM23075 at the E2-4 shelf (WDM 23-31-18):

DM23016AA	DM23075
pin A10	pin 56

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Do the QUICK TEST on the CSCP.
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (g) If you do not find a problem with the wiring, then do these steps:
 - 1) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Do the QUICK TEST on the CSCP.
 - 3) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

950. CSMU 10Base2 Intersystem Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01044.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061. These are the tasks:
- Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801
 - Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801
- (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the Installation Fault Results, then continue.
- (2) Replace the Zone Management Unit (ZMU) 1. These are the tasks:
- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801

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- (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (b) If the maintenance message shows in the Installation Fault Results, then continue.
- (3) Replace the Zone Management Unit (ZMU) 2. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (b) If the maintenance message shows in the Installation Fault Results, then continue.
- (4) Replace the Zone Management Unit (ZMU) 3. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - (b) If the maintenance message shows in the Installation Fault Results, then continue.
- (5) Replace the Passenger Address/Cabin Interphone (PA/CI), M23016. These are the tasks:
 - Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801
 - Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

952. OEU Configuration Database Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03552.

B. Fault Isolation Procedure

- (1) Make sure that you have a correct configuration database installed in the Overhead Electronics Unit (OEU).
 - (a) Install a new configuration database if it is necessary. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (b) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (2) Replace the OEU. These are the tasks:
 - Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806
 - Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806
 - (a) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— **END OF TASK** —————

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953. OEU Token Address Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03553.

B. Fault Isolation Procedure

- (1) Replace the Overhead Electronics Unit (OEU). These are the tasks:
 - Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806
 - Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806
 - (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

954. SDM Configuration Database Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03352.

B. Fault Isolation Procedure

- (1) Make sure that you have a correct configuration database installed in the Speaker Drive Unit (SDM).
 - (a) Install a new configuration database if it is necessary. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (b) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (c) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.
- (2) Replace the Speaker Drive Module (SDM). These are the tasks:
 - Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
 - (a) If the maintenance message does not show in the All Test Fault Results - Masked and Unmasked, you corrected the fault.

————— END OF TASK —————

955. SDM Token Address Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03353.

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B. Fault Isolation Procedure

- (1) Replace the Speaker Drive Module (SDM). These are the tasks:
 - Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

958. Token Address Out of Sequence Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03354, 23-03554, 23-03754.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

959. PAC Digital Audio Bus Problems from Subsequent SDMs in a Column - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-03249.

B. Fault Isolation Procedure

- (1) Do this check of the wiring:
 - (a) Disconnect the DM230XXA (XX is different for each SDM) from the first Speaker Drive Module (SDM) shown in the Possible Causes list (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42).
 - (b) Disconnect the DM230XXA (XX is different for each SDM) from the second SDM shown in the Possible Causes list (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42).
 - (c) Do a check of the wiring between these pins of connector DM230XXA at the first SDM and DM230XXA at the second SDM (WDM 23-31-22) (WDM 23-31-32) (WDM 23-31-42):

DM230XXA at the first SDM

pin 21
pin 22

DM230XXA at the second SDM

pin 9
pin 10

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
- 2) Re-connect connectors DM230XXA.
- 3) Do the QUICK TEST on the CSCP.
- 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (2) Replace the first SDM shown in the Possible Causes list. These are the tasks:
 - Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) Replace the second SDM shown in the Possible Causes list. These are the tasks:
 - Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

961. ZMU Response Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02401.

B. Initial Evaluation

NOTE: The Zone Management Unit (ZMU) may not operate correctly. If it does not operate correctly, you may not be able to control the cabin lighting, the reading lights, and the attendant call lights. You may be able to correct this problem by turning the ZMU circuit breakers off and on.

- (1) Do these steps to cycle the circuit breakers for the applicable ZMU:
 - (a) For the ZMU in zone 1;
 - 1) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23415	ZONE MGMT UNIT 1

- 2) Wait for 5 seconds.
- 3) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23415	ZONE MGMT UNIT 1

- (b) For the ZMU in zone 2;

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- 1) Open this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C23417	ZONE MGMT UNIT 2

- 2) Wait for 5 seconds.

- 3) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C23417	ZONE MGMT UNIT 2

- (c) For the ZMU in zone 3;

- 1) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C23419	ZONE MGMT UNIT 3

- 2) Wait for 5 seconds.

- 3) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C23419	ZONE MGMT UNIT 3

- (d) For the ZMU in zone 4;

- 1) Open this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	23	C23463	ZONE MGMT UNIT 4

- 2) Wait for 5 seconds.

- 3) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	23	C23463	ZONE MGMT UNIT 4

- (2) Do the Quick Test on the Cabin System Control Panel (CSCP).

- (a) If the maintenance message does not show on the Quick Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows on the Quick Test Fault Results, then continue.

C. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU). These are the tasks:

- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
- Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801

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- (a) If the maintenance message does not show on the Quick Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows on the Quick Test Fault Results, then continue.
- (2) If the Cabin System Control Panel (CSCP) shows the ZMU 1 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23071D from the ZMU 1.
 - (b) Do a check for 115V AC from pin 32 of connector DM23071D to structure ground (WDM 23-33-31).
 - (c) If there is no 115V AC at pin 32 of connector DM23071D, then do these steps:
 - 1) Open the P110 left power management panel.
 - 2) Do a check for 115V AC from the load terminal circuit breaker C23415 to structure ground (WDM 23-33-31).
 - 3) If there is no 115V AC at the load terminal circuit breaker C23415, then do these steps:
 - a) Replace this circuit breaker:
(WDM 23-33-31)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23415	ZONE MGMT UNIT 1

- b) Re-connect connector DM23071D.
 - c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
 - 4) If there is 115V AC at the load terminal circuit breaker C23415, then do these steps:
 - a) Repair the wiring between these pins of connector DM23071D at the ZMU 1 and at the load terminal circuit breaker C23415 (WDM 23-33-31):

DM23071D	C23415
pin 32	term 2
- b) Re-connect connector DM23071D.
 - c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (3) If the CSCP shows the ZMU 2 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23072D from the ZMU 2.
 - (b) Do a check for 115V AC from pin 32 of connector DM23072D to structure ground (WDM 23-33-41).
 - (c) If there is no 115V AC at pin 32 of connector DM23072D, then do these steps:
 - 1) Open the P210 right power management panel.
 - 2) Do a check for 115V AC from the load terminal circuit breaker C23417 to structure ground (WDM 23-33-41).

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- 3) If there is no 115V AC at the load terminal circuit breaker C23417, then do these steps:

- a) Replace this circuit breaker:

(WDM 23-33-41)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C23417	ZONE MGMT UNIT 2

- b) Re-connect connector DM23072D.
c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- 4) If there is 115V AC at the load terminal circuit breaker C23417, then do these steps:

- a) Repair the wiring between these pins of connector DM23072D at the ZMU 2 and at the load terminal circuit breaker C23417 (WDM 23-33-41):

DM23072D	C23417
pin 32	term 2

- b) Re-connect connector DM23072D.
c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (4) If the Cabin System Control Panel (CSCP) shows the ZMU 3 is the possible cause, then do these steps:

- (a) Disconnect connector DM23073D from the ZMU 3.
(b) Do a check for 115V AC from pin 32 of connector DM23073D to structure ground (WDM 23-33-51).

- (c) If there is no 115V AC at pin 32 of connector DM23073D, then do these steps:

- 1) Open the P110 left power management panel.
2) Do a check for 115V AC from the load terminal circuit breaker C23419 to structure ground (WDM 23-33-51).

- 3) If there is no 115V AC at the load terminal circuit breaker C23419, then do these steps:

- a) Replace this circuit breaker:

(WDM 23-33-51)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C23419	ZONE MGMT UNIT 3

- b) Re-connect connector DM23073D.
c) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

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- 4) If there is 115V AC at the load terminal circuit breaker C23419, then do these steps:
- Repair the wiring between these pins of connector DM23073D at the ZMU 3 and at the load terminal circuit breaker C23419 (WDM 23-33-51):

DM23073D	C23419
pin 32	term 2

- Re-connect connector DM23073D.
- Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

- (5) If the Cabin System Control Panel (CSCP) shows the ZMU 4 is the possible cause, then do these steps:

- Disconnect connector DM23127D from the ZMU 4.
- Do a check for 115V AC from pin 32 of connector DM23127D to structure ground (WDM 23-33-51).
- If there is no 115V AC at pin 32 of connector DM23127D, then do these steps:
 - Open the P110 left power management panel.
 - Do a check for 115V AC from the load terminal circuit breaker C23463 to structure ground (WDM 23-33-71).
 - If there is no 115V AC at the load terminal circuit breaker C23463, then do these steps:

- Replace this circuit breaker:
(WDM 23-33-71)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	23	C23463	ZONE MGMT UNIT 4

- Re-connect connector DM23127D.
 - Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 4) If there is 115V AC at the load terminal circuit breaker C23463, then do these steps:
- Repair the wiring between these pins of connector DM23127D at the ZMU 4 and at the load terminal circuit breaker C2341963 (WDM 23-33-71):

DM23127D	C23463
pin 32	term 2

- Re-connect connector DM23127D.
- Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

———— **END OF TASK** ————

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962. ZMU Response Problems from Other ZMUs - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02402.

B. Fault Isolation Procedure

- (1) Do this check of the wiring:

- (a) Disconnect connector DM2307XK (X is difference for each ZMU) from the first Zone Management Unit (ZMU) shown in the Possible Causes list on the CSCP.
- (b) Disconnect connector DM2307XK (X is difference for each ZMU) from the second Zone Management Unit (ZMU) shown in the Possible Causes list on the CSCP.
- (c) Do a wiring check between these pins of connector DM2307XK at the first ZMU and connector DM2307XK at the second ZMU (WDM 23-33-11):

**DM2307XK at
the first ZMU**

**DM2307XK at
the second ZMU**

pin A3 pin A4

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connectors DM2307XK.
 - 3) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - 4) If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (2) Replace the first ZMU shown in the Possible Causes list. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
- (a) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows on the All Test Fault Results, then continue.
- (3) Replace the second ZMU shown in the Possible Causes list. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
- (a) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

965. ZMU Response Problems on All Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02424.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU). These are the tasks:
- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801

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- (a) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows on the All Test Fault Results, then continue.
- (2) If the Cabin System Control Panel (CSCP) shows the ZMU 1 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23071D from the ZMU 1.
 - (b) Do a check for 115V AC from pin 32 of connector DM23071D to structure ground (WDM 23-33-31).
 - (c) If there is no 115V AC at pin 32 of connector DM23071D, then do these steps:
 - 1) Open the P110 left power management panel.
 - 2) Do a check for 115V AC from the load terminal circuit breaker C23415 to structure ground (WDM 23-33-31).
 - 3) If there is no 115V AC at the load terminal circuit breaker C23415, then do these steps:
 - a) Replace this circuit breaker:
(WDM 23-33-31)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	1	C23415	ZONE MGMT UNIT 1

- b) Re-connect connector DM23071D.
 - c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - d) If the maintenance message does not show in the ALL Test Fault Results, you corrected the fault.
 - 4) If there is 115V AC at the load terminal circuit breaker C23415, then do these steps:
 - a) Repair the wiring between these pins of connector DM23071D at the ZMU 1 and at the load terminal circuit breaker C23415 (WDM 23-33-31):

DM23071D	C23415
pin 32	term 2
- b) Re-connect connector DM23071D.
 - c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (3) If the CSCP shows the ZMU 2 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23072D from the ZMU 2.
 - (b) Do a check for 115V AC from pin 32 of connector DM23072D to structure ground (WDM 23-33-41).
 - (c) If there is no 115V AC at pin 32 of connector DM23072D, then do these steps:
 - 1) Open the P210 right power management panel.
 - 2) Do a check for 115V AC from the load terminal circuit breaker C23417 to structure ground (WDM 23-33-41).

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- 3) If there is no 115V AC at the load terminal circuit breaker C23417, then do these steps:

- a) Replace this circuit breaker:

(WDM 23-33-41)

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	25	C23417	ZONE MGMT UNIT 2

- b) Re-connect connector DM23072D.
c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- 4) If there is 115V AC at the load terminal circuit breaker C23417, then do these steps:

- a) Repair the wiring between these pins of connector DM23072D at the ZMU 1 and at the load terminal circuit breaker C23417 (WDM 23-33-41):

DM23072D	C23417
pin 32	term 2

- b) Re-connect connector DM23072D.
c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (4) If the Cabin System Control Panel (CSCP) shows the ZMU 3 is the possible cause, then do these steps:

- (a) Disconnect connector DM23073D from the ZMU 3.
(b) Do a check for 115V AC from pin 32 of connector DM23073D to structure ground (WDM 23-33-51).

- (c) If there is no 115V AC at pin 32 of connector DM23073D, then do these steps:

- 1) Open the P110 left power management panel.
2) Do a check for 115V AC from the load terminal circuit breaker C23419 to structure ground (WDM 23-33-51).

- 3) If there is no 115V AC at the load terminal circuit breaker C23419, then do these steps:

- a) Replace this circuit breaker:

(WDM 23-33-51)

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C23419	ZONE MGMT UNIT 3

- b) Re-connect connector DM23073D.
c) Do the ALL TEST on the Cabin System Control Panel (CSCP).
d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

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- 4) If there is 115V AC at the load terminal circuit breaker C23419, then do these steps:
- Repair the wiring between these pins of connector DM23073D at the ZMU 1 and at the load terminal circuit breaker C23419 (WDM 23-33-51):

DM23073D	C23419
pin 32	term 2

- Re-connect connector DM23073D.
- Do the ALL TEST on the Cabin System Control Panel (CSCP).
- If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

- (5) If the Cabin System Control Panel (CSCP) shows the ZMU 4 is the possible cause, then do these steps:

- Disconnect connector DM23127D from the ZMU 4.
- Do a check for 115V AC from pin 32 of connector DM23127D to structure ground (WDM 23-33-51).
- If there is no 115V AC at pin 32 of connector DM23127D, then do these steps:
 - Open the P110 left power management panel.
 - Do a check for 115V AC from the load terminal circuit breaker C23463 to structure ground (WDM 23-33-71).
 - If there is no 115V AC at the load terminal circuit breaker C23463, then do these steps:

- Replace this circuit breaker:
(WDM 23-33-71)

Right Power Management Panel, P210

Row	Col	Number	Name
G	23	C23463	ZONE MGMT UNIT 4

- Re-connect connector DM23127D.
 - Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.
- 4) If there is 115V AC at the load terminal circuit breaker C23463, then do these steps:
- Repair the wiring between these pins of connector DM23127D at the ZMU 4 and at the load terminal circuit breaker C2341963 (WDM 23-33-71):

DM23127D	C23463
pin 32	term 2

- Re-connect connector DM23127D.
- Do the QUICK TEST on the Cabin System Control Panel (CSCP).
- If the maintenance message does not show in the Quick Test Fault Results, you corrected the fault.

————— END OF TASK —————

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967. ZMU Intersystem Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02444.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU) shown in the Possible Causes list one at a time. These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP) after each ZMU replacement.
- (b) If the maintenance message does not show in the All Test Fault Results after a ZMU replacement, you corrected the fault.
- (c) If the maintenance message shows in the All Test Fault Results after a ZMU replacement, then continue to replace the next ZMU in the Possible Causes list.

————— **END OF TASK** —————

969. ZMU Data Bus to OEU Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02453.

B. Fault Isolation Procedure

- (1) Replace the Zone Management Unit (ZMU). These are the tasks:
 - Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the Overhead Electronics Unit (OEU) (23-33-02/401).
 - (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) If the CSCP shows ZMU 1 is the possible cause, then do these steps:
 - (a) Disconnect connector DM23071C from the ZMU 1, M23071.
 - (b) Disconnect connector DM234XXA or D51XXP (XX is difference for each OEU) from the OEU (first OEU in a column).
 - (c) For OEU in zone 1 left;
Do a wiring check between these pins of connector DM23071C at the ZMU 1 and connector DM23412A at the OEU (WDM 23-33-34):

DM23071C

pin 1
pin 2

DM23412A

pin 9
pin 10

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- (d) For OEU in zone 1 right;

Do a wiring check between these pins of connector DM23071C at the ZMU 1 and connector DM23402A at the OEU (WDM 23-33-35):

DM23071C	DM23412A
pin 11	pin 9
pin 12	pin 10

- (e) For OEU in zone 1 center;

Do a wiring check between these pins of connector DM23071C at the ZMU 1 and connector D5141P at the OEU (WDM 23-33-36):

DM23071C	D5141P
pin 6	pin 9
pin 7	pin 10

- (f) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-connect connector DM234XXA or D51XXP.
- 3) Re-connect connector DM23071C.
- 4) Do the ALL TEST on the CSCP.
- 5) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

- (4) If the CSCP shows ZMU 2 is the possible cause, then do these steps:

- (a) Disconnect connector DM23072C from the ZMU 2, M23072.

- (b) Disconnect connector D52XXP (XX is difference for each OEU) from the OEU (first OEU in a column).

- (c) For OEU in zone 2 left;

Do a wiring check between these pins of connector DM23072C at the ZMU 2 and connector D5201P at the OEU (WDM 23-33-44):

DM23072C	D5201P
pin 1	pin 9
pin 2	pin 10

- (d) For OEU in zone 2 right;

Do a wiring check between these pins of connector DM23072C at the ZMU 2 and connector D5221P at the OEU (WDM 23-33-45):

DM23072C	D5221P
pin 11	pin 9
pin 12	pin 10

- (e) For OEU in zone 2 center;

Do a wiring check between these pins of connector DM23072C at the ZMU 2 and connector D5241P at the OEU (WDM 23-33-46):

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DM23072C	D5241P
pin 6	pin 9
pin 7	pin 10

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector D52XXP.
 - 3) Re-connect connector DM23072C.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.
- (5) If the CSCP shows ZMU 3 is the possible cause, then do these steps:
- (a) Disconnect connector DM23073C from the ZMU 3, M23073.
- (b) Disconnect connector DM234XXA or D53XXP (XX is difference for each OEU) from the OEU (first OEU in a column).
- (c) For OEU in zone 3 left;
- Do a wiring check between these pins of connector DM23073C at the ZMU 3 and connector DM23405A at the OEU (WDM 23-33-54):

DM23073C	DM23405A
pin 1	pin 9
pin 2	pin 10

- (d) For OEU in zone 3 right;
- Do a wiring check between these pins of connector DM23073C at the ZMU 3 and connector DM23406A at the OEU (WDM 23-33-55):

DM23073C	DM23406A
pin 11	pin 9
pin 12	pin 10

- (e) For OEU in zone 3 center
- Do a wiring check between these pins of connector DM23073C at the ZMU 3 and connector D5341P at the OEU (WDM 23-33-56):

DM23073C	D5341P
pin 6	pin 9
pin 7	pin 10

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM234XXA or D53XXP.
 - 3) Re-connect connector DM23073C.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

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- (6) If the CSCP shows ZMU 4 is the possible cause, then do these steps:
- Disconnect connector DM23127C from the ZMU 4, M23127.
 - Disconnect connector DM23XXXXA or D53XXP (XX is difference for each OEU) from the OEU (first OEU in a column).
 - For OEU in zone 4 left;
Do a wiring check between these pins of connector DM23127C at the ZMU 4 and connector DM23XXXXA at the first OEU (WDM 23-33-71):

DM23127C	DM23XXXXA
pin 1	pin 9
pin 2	pin 10
 - For OEU in zone 4 right;
Do a wiring check between these pins of connector DM23127C at the ZMU 4 and connector DM23XXXXA at the first OEU (WDM 23-33-71):

DM23127C	DM23XXXXA
pin 11	pin 9
pin 12	pin 10
 - For OEU in zone 4 center;
Do a wiring check between these pins of connector DM23127C at the ZMU 4 and connector DM23XXXXA at the first OEU (WDM 23-33-71):

DM23127C	DM23XXXXA
pin 6	pin 9
pin 7	pin 10
 - If you find a problem with the wiring, then do these steps:
 - Repair the wiring.
 - Re-connect connector DM23XXXXA.
 - Re-connect connector DM23127C.
 - Do the ALL TEST on the CSCP.
 - If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

972. ZMU 10Base2 Intersystem Bus Termination Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-02532.

B. Fault Isolation Procedure

- (1) Do this check of the termination wiring:
- Disconnect connector DM23073K from the Zone Management Unit (ZMU) 3, M23073.
 - Do a continuity check between pin 9 and 17 of connector DM23073K on the ZMU 3, M23073 (WDM 23-33-11).
 - If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
 - 2) Re-connect connector DM23073.
 - 3) Do the QUICK TEST on the Cabin System Control Panel (CSCP).
 - 4) If the maintenance message does not show on the Quick Test Fault Results, you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.
- (2) Replace the ZMU 3, M23073. These are the tasks:
- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

974. PAC Digital Audio Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01448.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (b) If the maintenance message does not show on the All Test Fault Results, then do these steps:
- 1) Replace the Passenger Address/Cabin Interphone (PA/CI), M23016. These are the tasks:
 - Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801
 - Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801
 - 2) Do the ALL TEST on the CSCP.
 - 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the Speaker Drive Module (SDM). These are the tasks:
- Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) Do this check of the wiring:
- (a) Remove the Passenger Address/Cabin Interphone (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.

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- (b) Disconnect connector DM230XXA (XX is difference for each SDM) from the SDM (first SDM in a zone).

- (c) For SDM in zone 1;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23018A at the SDM (WDM 23-31-22):

DM23016AB	DM23018A
pin J1	pin 9
pin K1	pin 10

- (d) For SDM in zone 2;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23029A at the SDM (WDM 23-31-32):

DM23016AB	DM23029A
pin A6	pin 9
pin B6	pin 10

- (e) For SDM in zone 3;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23043A at the SDM (WDM 23-31-42):

DM23016AB	DM23043A
pin J5	pin 9
pin K5	pin 10

- (f) For SDM in zone 4;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23613A at the SDM (WDM 23-31-62):

DM23016AB	DM23613A
pin A9	pin 9
pin B9	pin 10

- (g) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-connect connector DM230XXA.
- 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 4) Do the ALL TEST on the CSCP.
- 5) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

- (h) If you do not find a problem with the wiring, then continue.

- (4) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) Do the ALL TEST on the CSCP.

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- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

975. PAC Data Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01453.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (b) If the maintenance message does not show on the All Test Fault Results, then do these steps:
- 1) Replace the Passenger Address/Cabin Interphone (PA/CI), M23016. These are the tasks:
 - Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801
 - Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801
 - 2) Do the ALL TEST on the CSCP.
 - 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the Speaker Drive Module (SDM). These are the tasks:
- Speaker Drive Module (SDM) Removal, AMM TASK 23-31-02-000-801
 - Speaker Drive Module (SDM) Installation, AMM TASK 23-31-02-400-801
- (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) Do this check of the wiring:
- (a) Remove the Passenger Address/Cabin Interphone (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Disconnect connector DM230XXA (XX is difference for each SDM) from the SDM (first SDM in a zone).
 - (c) For SDM in zone 1;
Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23018A at the SDM (WDM 23-31-22):

DM23016AB		DM23018A
pin J3		pin 6
pin K3		pin 7
 - (d) For SDM in zone 2;

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Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23029A at the SDM (WDM 23-31-32):

DM23016AB	DM23029A
pin D6	pin 6
pin E6	pin 7

- (e) For SDM in zone 3;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23043A at the SDM (WDM 23-31-42):

DM23016AB	DM23043A
pin G6	pin 6
pin H6	pin 7

- (f) For SDM in zone 4;

Do a wiring check between these pins of connector DM23016AB at the E1-4 shelf and connector DM23613A at the SDM (WDM 23-31-62):

DM23016AB	DM23613A
pin D9	pin 6
pin E9	pin 7

- (g) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-connect connector DM230XXA.
- 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- 4) Do the ALL TEST on the CSCP.
- 5) If the maintenance message does not show on the All Test Fault Results, you corrected the fault.

- (h) If you do not find a problem with the wiring, then continue.

- (4) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) Do the ALL TEST on the CSCP.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

979. Flight Deck PA Handset Problems - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the Flight Deck Handset, B23004. These are the tasks:
 - Flight Deck Handset Removal, AMM TASK 23-42-02-000-801
 - Flight Deck Handset Installation, AMM TASK 23-42-02-400-801
- (a) If you can not find a problem with the flight deck handset, then you corrected the fault.
- (b) If you find a problem with the flight deck handset, then continue.

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- (2) Replace the Passenger Address/Cabin Interphone (PA/CI) Controller, M23016. These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801
 - Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801
- (a) If you can not find a problem with the flight deck handset, then you corrected the fault.
- (b) If you find a problem with the flight deck handset, then continue.
- (3) Do this check of the wiring:
- (a) Remove the Passenger Address/Cabin Interphone Controller (PA/CI), M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (b) Remove the Flight Deck Handset, B23004. To remove it, do this task: Flight Deck Handset Removal, AMM TASK 23-42-02-000-801.
- (c) Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DB23004 at the Aft Aisle Stand, P8 (WDM 23-42-11):
- | DM23016AD | DB23004 |
|------------------|---------|
| pin A7 | pin 1 |
| pin A9 | pin 3 |
| pin A8 | pin 2 |
| pin B9 | pin 4 |
| pin B8 | pin 5 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the Flight Deck Handset, B23004. To install it, do this task: Flight Deck Handset Installation, AMM TASK 23-42-02-400-801.
 - 3) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) If you can not find a problem with the flight deck handset, then you corrected the fault.

————— **END OF TASK** —————

984. PA/CI Controller No Input from Center CDU on PA/CI CDU-C 429 Bus - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone (PA/CI) Controller, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

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Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the center CDU, N34303. To remove it, do this task: Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801.
 - (b) Remove the PA/CI Controller, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (c) Do a wiring check between these pins of connector DN34303C at the P8 Panel and connector DM23016AD at the E1-4 shelf (WDM 23-42-11):

DN34303C

pin 21 pin D8
pin 22 pin E8

DM23016AD

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the center CDU, N34303. To install it, do this task: Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - 3) Re-install the PA/CI Controller, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the center control display unit (CDU), N34303.
These are the tasks:
Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

985. Cabin System Control Panel (CSCP) Inop - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the CSCP CCP, M23062.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (a) If the CSCP shows the Main Menu, then you corrected the fault.

————— **END OF TASK** —————

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986. Configuration Database Missing or Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01016.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

990. CIC Internal Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01603.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (a) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— **END OF TASK** —————

991. CIC Data/Audio Bus Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01708, 23-01717.

B. Fault Isolation Procedure

- (1) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the Zone Management Unit (ZMU).

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These are the tasks:

Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.

- (b) Do the ALL TEST on the CSCP.
- (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (d) If the maintenance message shows in the All Test Fault Results, then continue.
- (5) Do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Disconnect connector DM2307XK (X is different for each ZMU) from the ZMU shown in the Possible Causes list.
 - (c) For the ZMU in zone 1:

Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23071H at ZMU-1 (WDM 23-42-12):

DM23016AE	DM23071H
pin C7	pin 13
pin C8	pin 14
pin A7	pin 10
pin A8	pin 11

- (d) For the ZMU in zone 2:

Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23072H at ZMU-2 (WDM 23-42-12):

DM23016AE	DM23072H
pin E9	pin 13
pin F9	pin 14
pin E11	pin 10
pin F11	pin 11

- (e) For the ZMU in zone 3:

Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23073H at ZMU-3 (WDM 23-42-12):

DM23016AE	DM23073H
pin K7	pin 13
pin K8	pin 14
pin H7	pin 10
pin H8	pin 11

- (f) For the ZMU in zone 4:

Do a wiring check between these pins of connector DM23016AE at the E1-4 shelf and connector DM23074H at ZMU-4 (WDM 23-42-11):

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DM23016AE

pin C10
pin C11
pin A10
pin A11

DM23073H

pin 13
pin 14
pin 10
pin 11

- (g) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the ZMU. To install it, do this task: Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 6) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - a) Re-install the ZMU. To install it, do this task: Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - b) Install a new PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - c) Do the ALL TEST on the CSCP.
 - d) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

— END OF TASK —

992. PA/CI Norm/Alt Switching Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01548, 23-01747.

B. Fault Isolation Procedure

- (1) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.
- These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
- Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
- (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Do this check of the wiring:

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- (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
- (b) Remove the Cabin System Management Unit (CSMU), M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
- (c) For maintenance message 23-01747;

Do a wiring check between these pins of connector DM23016AD at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-42-13):

DM23016AD	DM23061AA
pin B1	pin E4

- (d) For maintenance message 23-01548;
Do a wiring check between these pins of connector DM23016AA at the E1-4 shelf and connector DM23061AA at the E1-4 shelf (WDM 23-31-11):

DM23016AA	DM23061AA
pin K11	pin E1

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - 4) Do the ALL TEST on the CSCP.
 - 5) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - 6) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) Replace the CSMU, M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

993. OEU AC Output Circuit Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-03493, 23-03494, 23-03495.

B. Fault Isolation Procedure

- (1) Replace the applicable light (AMM TASK 33-20-00-970-801).
 - (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

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- (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the OEU.
- These are the tasks:
- Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- (a) Do the ALL TEST on the CSCP.
- (b) If the maintenance message does not show in the All Test Fault results, you corrected the fault.
- (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) Disconnect connector DM234XXB (XX is different for each OEU) from the Overhead Electronics Unit (OEU).
- (4) Disconnect connector DMYYYY (YYYY is different for each light) from the applicable light.
- (5) Do a wiring check between the applicable pin of connector DM234XXB at the OEU and the pin of connector DMYYYY at the applicable light.
- NOTE:** The applicable pin number of the connector at the OEU shows with the maintenance message on the CSCP. Use the referenced schematic to find the pin number for the applicable light.
- (6) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
- (b) Re-connect DM234XXB.
- (c) Re-connect DMYYYY.
- (d) Do the ALL TEST on the CSCP.
- (e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

995. ZMU Supply Voltage Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01870, 23-02470.

B. Fault Isolation Procedure

- (1) Disconnect connector DM2307XH (X is different for each ZMU) from the Zone Management Unit (ZMU).
- (2) Do a check for 28 VDC from pin A3 of connector DM2307XH at the ZMU to structure ground (WDM 23-42-12).
- (3) If there is not 28 VDC at pin A3, then do these steps:
- (a) Do a check of the wiring from connector DM2307XH to these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	7	C23653	CAB INTPH ZMU 1 & 3
E	8	C23654	CAB INTPH ZMU 2 & 4

- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.

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- 2) Re-connect connector DM2307XH.
 - 3) Do the ALL TEST on the CSCP.
 - 4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (c) If you did not find a problem with the wiring, then replace the Zone Management Unit.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
- (d) Do the ALL TEST on the CSCP.
- (e) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If there is 28 VDC at pin A3, then do these steps:
- (a) Replace the Zone Management Unit.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

997. OEU Analog Input Fault - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the Overhead Electronics Unit (OEU).
These are the tasks:
Overhead Electronics Unit (OEU) Removal, AMM TASK 23-33-02-000-806,
Overhead Electronics Unit (OEU) Installation, AMM TASK 23-33-02-400-806.
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
 - (b) If the maintenance message shows in the All Test Fault Results, then continue.
- (3) If the possible causes list on the CSCP shows that the unit connected to the OEU pins J3-7,8 or J3-9,10 is the waste tank logic control module, M38X04 (X is different for each logic control module), then do these steps:
 - (a) Replace the Waste Tank Logic Control Module, M38X04.
These are the tasks:
Logic Control Module Removal, AMM TASK 38-33-03-000-801,
Logic Control Module Installation, AMM TASK 38-33-03-400-801.
 - (b) Do the ALL TEST on the CSCP.
 - (c) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

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- (d) If the maintenance message shows in the All Test Fault Results, then continue.
- (e) Do a wiring check between these pins of connector DM38X04 at the applicable Logic Control Module and connector DM2340XC at the applicable OEU (WDM 38-32-11) (WDM 38-32-12) (WDM 38-32-13):

Fwd Tank
Logic Cont
Mod (WDM
38-32-11)

DM38104D	DM23407C
pin 18	pin 7
pin 7	pin 8

Ctr Tank Logic
Cont Mod
(WDM
38-32-12)

DM38204D	DM23407C
pin 18	pin 9
pin 7	pin 10

Aft Tank Logic
Cont Mod
(WDM
38-21-13)

DM38304D	DM23408C
pin 18	pin 7
pin 7	pin 8

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Do the ALL TEST on the CSCP.
 - 3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

———— **END OF TASK** ————

998. Cabin Area Control Panel (CACP) Inop - Fault Isolation

A. Fault Isolation Procedure

- (1) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (a) If the ALL TEST FAULTS REVIEW screen shows, do these steps:
- 1) Touch ALL UNITS on the CSCP.
 - 2) Touch CONTINUE on the CSCP.
 - 3) For each maintenance message that shows in the All Test Fault Results, then do these steps:
 - a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - b) Do the specified fault isolation task.
- (b) If ALL TEST COMPLETE - NO FAULTS shows on the CSCP, do these steps:
- 1) Replace the CCP.

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These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- a) If the CACP works normally, then you fixed the fault.

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- b) If the CACP is still inop, then continue.
- 2) Replace the MMC.

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.

- a) If the CACP works normally, then you fixed the fault.

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————— END OF TASK —————

A01. PAC Audio Input Circuit Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-01479, 23-01480.

B. Fault Isolation Procedure

- (1) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.

- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (a) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A03. PA/CI No Output on Any Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-38801.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:
 - (a) CABIN MAINTENANCE

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- (b) CABIN TESTS
- (c) START ALL TEST
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Touch these selections on the Cabin System Control Panel (CSCP) to find Flight Deck Effects (FDE) faults:
 - (a) CABIN MAINTENANCE
 - (b) CABIN FAULTS REVIEW
 - (c) FLIGHT DECK EFFECTS FAULTS (ACTIVE)
- (3) If you find a maintenance message, then do these steps:
 - (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (4) If you do not find the maintenance message, continue.
- (5) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016 .

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM
TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM
TASK 23-39-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

A04. CSCP/CACP Touchscreen Hard To Read - Fault Isolation

A. Description

- (1) The Liquid Crystal Display will not function if the temperature is below zero degrees centigrade. The display is disabled below zero degrees centigrade. The Display Status Indicator LED will remain on until the display operating temperature is above zero degrees centigrade.

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- (2) While the CCP is operating, the Liquid Crystal Display is equally illuminated even if one of the two backlight bulbs has failed. The Display Status Indicator LED comes on when a single backlight bulb has failed. The LED indicates that a backlight bulb must be replaced. If the bulb is not replaced before the second bulb fails then the condition cannot be diagnosed on the airplane and the CCP must be removed. If one bulb must be replaced, both bulbs should be replaced at the same time. The Display Status Indicator LED supplies the indications per the table below (Table 201):

Table 201/23-39-00-993-801 LED Status

CONDITION	EXPECTED RESULT
Both bulbs ON in BRIGHT MODE	GREEN LED not on
Both bulbs not ON	GREEN LED not on

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ARO 001-015 (Continued)

Table 201/23-39-00-993-801 LED Status (Continued)

CONDITION	EXPECTED RESULT
One bulb ON in DIM MODE, one bulb out	GREEN LED not on
Both bulbs ON in DIM MODE	GREEN LED not on
One bulb ON in BRIGHT MODE, one bulb out	GREEN LED is on

ARO 001-015; AIRPLANES WITH CCP 285W0863-1

- (3) If one of the two backlight bulbs has failed then the display illumination is not equal. The Display Status Indicator LED function is not used to indicate that a single backlight has failed. The Display Status Indicator LED is only used to indicate that the unit is too cold to operate.

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B. Possible Causes

ARO 001-015; AIRPLANES WITH CCP 285W0863-2 THROUGH -999

- (1) Backlights

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- (2) CCP

C. Fault Isolation Procedure

ARO 001-015; AIRPLANES WITH CCP 285W0863-2 THROUGH -999

- (1) Replace the backlight in the CCP. To replace the backlight, do this task: Backlight Replacement, AMM TASK 23-39-16-960-801.
- (a) Make sure the menu shows brightly on the CSCP or CACP.
- 1) If you can see the menu clearly, then you corrected the fault.
 - 2) If you can not see the menu clearly, then you continue.

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- (2) Replace the applicable CCP.

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (3) Make sure the menu shows brightly on the CSCP or CACP.

- (a) If you can see the menu clearly, then you corrected the fault.

————— END OF TASK —————

A05. CCP Internal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04053, 23-04071, 23-04139, 23-04145, 23-04146, 23-04210, 23-04253, 23-04339.

B. Fault Isolation Procedure

- (1) Replace the Cabin Control Panel (CCP).

These are the tasks:

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Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (2) Do the ALL TEST on the Cabin Control Panel (CCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A06. CCP Has An Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04010, 23-04057, 23-04257.

B. Fault Isolation Procedure

- (1) Replace the Mass Memory Card (MMC) in the CCP.

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.

- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) If the maintenance message does not show in the All Test Fault Results you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the Cabin Control Panel (CCP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A07. CCP Has An Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04017, 23-04150, 23-04217.

B. Fault Isolation Procedure

- (1) Replace the Mass Memory Card (MMC) in the CCP.

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.

- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) When All Test is complete, touch these selections on the CSCP to see the masked faults:
 - 1) ENGINEERING TESTS
 - 2) EXTENDED CABIN FAULTS REVIEW
 - 3) MASKED AND UNMASKED FAULTS REVIEW (ALL TEST)

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- 4) PANELS (CACP, CSCP)
- 5) CONTINUE
- (c) If the maintenance message does not show in the All Test Panels Fault Results you corrected the fault.
- (d) If the maintenance message shows in the All Test panels Fault Results, then continue.
- (2) Replace the Cabin Control Panel (CCP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

 - (a) Do the ALL TEST on the CSCP.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A08. MMC Missing or Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04058.

B. Fault Isolation Procedure

- (1) Replace the Mass Memory Card (MMC).

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.
- (2) Do the ALL TEST on the Cabin Control Panel (CCP).
- (3) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A09. CCP Configuration Database Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04019, 23-04149, 23-04219.

B. Fault Isolation Procedure

- (1) Install the configuration database. To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Mass Memory Card (MMC).

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.
 - (b) When All Test is complete, touch these selections on the CSCP to see the masked faults:

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- 1) ENGINEERING TESTS
 - 2) EXTENDED CABIN FAULTS REVIEW
 - 3) MASKED AND UNMASKED FAULTS REVIEW (ALL TEST)
 - 4) PANELS (CACP, CSCP)
 - 5) CONTINUE
- (c) If the maintenance message does not in the All Test Panels Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Panels Fault Results, then do these steps:
- (a) Replace the Cabin Control Panel (CCP).
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (b) When All Test is complete, touch these selections on the CSCP to see the masked faults:
 - 1) ENGINEERING TESTS
 - 2) EXTENDED CABIN FAULTS REVIEW
 - 3) MASKED AND UNMASKED FAULTS REVIEW (ALL TEST)
 - 4) PANELS (CACP, CSCP)
 - 5) CONTINUE
 - (c) If the maintenance message does not in the All Test Panels Fault Results, you corrected the fault.

————— END OF TASK —————

A10. CCP Operational Program Software Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04218.

B. Fault Isolation Procedure

- (1) Install the operational program software for the Cabin Control Panel (CCP). To install it, do this task: Operational Program Software Installation (Phase II), AMM TASK 23-39-00-400-808.
- (2) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (3) If the maintenance message shows in the Installation Fault Results, then do these steps:
 - (a) Replace the Mass Memory Card (MMC).
These are the tasks:
Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,
Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.
- (4) If the maintenance message shows in the All Test Fault Results, then do these steps:
 - (a) Replace the CCP.
These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

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Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

A11. Operational Software Problem-Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04018.

B. Fault Isolation Procedure

- (1) Replace the Mass Memory Card (MMC) in the CCP.

These are the tasks:

Mass Memory Card (MMC) Removal, AMM TASK 23-39-16-000-803,

Mass Memory Card (MMC) Installation, AMM TASK 23-39-16-400-801.

- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - (b) If the maintenance message does not show in the All Test Fault Results you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results, then continue.
- (2) Replace the Cabin Control Panel (CCP).

These are the tasks:

Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,

Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.

- (a) Do the ALL TEST on the CSCP.
- (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— **END OF TASK** —————

A12. CSCP Response Problem From I-Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04006.

B. Fault Isolation Procedure

- (1) Push the PA NORM/ALT switch on the Attendant Switch Panel (ASP).
- (2) Do the ALL TEST on the Cabin System Control Panel (CSCP).
- (3) If the maintenance message does not show in the All Test Fault Results, then do these steps:
 - (a) Replace the Passenger Address/Cabin Interphone Controller (PA/CI), M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (b) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
- (c) If the maintenance message does show, then continue.

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- (4) Replace the Zone Management Unit (ZMU) shown in the Possible Causes list one at a time.
These are the tasks:
Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801.
 - (a) Do the ALL TEST on the Cabin System Control Panel (CSCP) after each ZMU replacement.
 - (b) If the maintenance message does not show in the All Test Fault Results after a ZMU replacement, you corrected the fault.
 - (c) If the maintenance message shows in the All Test Fault Results after a ZMU replacement, then continue to replace the next ZMU in the Possible Causes list.
 - (d) If the maintenance message shows in the All Test Fault Results after you replaced the last ZMU shown in the Possible Causes list, then continue.
- (5) Replace the Cabin System Management Unit (CSMU), M23061.
These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (a) Do the ALL TEST on the Cabin System Control Panel.
 - (b) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A13. MMC Incorrect Configuration - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-04059, 23-04060.

B. Initial Evaluation

NOTE: This message shows if a CCP is not in the correct configuration. An MMC 20 is installed with a FDD. Make sure the correct configuration is installed.

- (1) If the CCP is installed as a CACP, then remove the FDD.
- (2) If the CCP is installed as a CSCP, then install the correct MCC.
- (3) Do the ALL TEST on the Cabin Control Panel (CCP).
- (4) If the maintenance message does not show in the All Test Fault Results, you corrected the fault.

————— END OF TASK —————

A14. CSMU Response Problem From RS485 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01006.

B. Nuisance Maintenance Message

- (1) This nuisance Maintenance Message “23-01006 CSMU has no response from IFE LRU” applies to airplanes with Thales IFE system only.

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C. Fault Isolation Procedure

- (1) Use WDM 23-32-18 to determine which IFE-HE LRU is connected to the CSMU.
 - (a) Replace the IFE-HE LRU that is connected to the CSMU.
 - (b) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.
 - 2) If the maintenance message shows, then continue.
- (2) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

 - (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.
 - 2) If the maintenance message shows, then continue.
- (3) Do the wiring check that follows:
 - (a) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Use WDM 23-32-18 to determine which IFE-HE LRU is connected to the CSMU and remove the IFE-HE LRU.
 - (c) Use WDM 23-32-18 and do a check of the wiring between the CSMU and the IFE-HE LRU connected to the CSMU.
 - (d) Repair the problems that you find.
 - (e) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (f) Re-install the IFE-HE LRU that is connected to the CSMU.
 - (g) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.

————— END OF TASK —————

A17. Reduced Power for Fluorescent Lighting - Fault Isolation

A. General

- (1) This message can show on the cabin system control panel (CSCP):
 - (a) REDUCED POWER CONDITION - Fluorescent Lights May Be Off. Night Lights are Locked On.
 - 1) This message is a normal condition if:
 - a) The Cabin/Utility switch in the flight compartment (P5) is set to off.
 - b) The ground service bus is not available.
 - 2) There is a CLEAR button on the screen for this message.
 - a) If there is a false annunciation of the ground service bus loss, the attendant can push the CLEAR button to set the fluorescent lights to on.

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- b) If there is a real ground service bus loss condition, the night lights are locked on and the fluorescent lights cannot be set to on.

B. Initial Evaluation

- (1) Make sure the Cabin/Utility switch in the flight compartment (P5) is set to ON.
- (2) Make sure the ground service bus is connected.
- (3) Touch these selections on the Cabin System Control Panel (CSCP) to do the ALL TEST:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) CONTINUE
- (4) If the ALL TEST FAULTS REVIEW screen shows, touch these selections on the CSCP to show the maintenance messages:
 - (a) ALL UNITS
 - (b) CONTINUE
- (5) For each maintenance message that shows in the All Test Fault Results, do these steps:
 - (a) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (6) If the ALL TEST shows no faults, but the Reduced Power message still shows, then make these selections at the CSCP:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) ENGINEERING TESTS
 - (d) INPUT/OUTPUT MONITOR
 - (e) ARINC 629 BUS INPUTS
 - (f) Scroll down to the "Cabin/Utility Switch" signal.
 - 1) If the Cabin/Utility Switch is in the OFF State, then do the Fault Isolation Procedure - Cabin/Utility Switch Problem.
 - 2) If the Cabin/Utility Switch is in the ON state, then continue.
 - (g) Scroll down to "Ground Service Bus Loss" signal.
 - 1) If the "Ground Service Bus Loss" signal shows NOT AVAILABLE, then do the Fault Isolation Procedure - CSMU Problem.
 - 2) If the "Ground Service Bus Loss" signal shows TRUE, INACTIVE OR INVALID, then do the Fault Isolation Procedure - Ground Service Status Problem.

C. Fault Isolation Procedure - Cabin/Utility Switch Problem

- (1) Do a wiring check of the Cabin/Utility Switch, S15 on the P5 Overhead Panel (WDM 24-51-41).
 - (a) If there is a problem with the Cabin/Utility Switch, replace the switch.
 - 1) If the reduced power message does not show at the CSCP, then you corrected the fault.
 - (b) If the reduced power message shows, then continue.
- (2) Replace the cabin system management unit (CSMU), M23061. These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,

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Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) If the reduced power message does not show at the CSCP, then you corrected the fault.
 - (b) If the reduced power message shows, then continue.
- (3) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT
J	23	C24618	P210 PSU B ALTN

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI

- (4) Do wiring checks or replace components as necessary between the CSMU, M23061 and the Cabin/Utility Switch, S15 (WDM 24-51-41, WDM 23-93-11, WDM 23-33-11):
- (a) Coupler B23228 (AMM PAGEBLOCK 23-91-01/401).
 - (b) Coupler, B23227 (AMM PAGEBLOCK 23-91-01/401).
 - (c) Overhead panel bus controller, M23212 (AMM PAGEBLOCK 23-93-01/401).
 - (d) Overhead panel card file, right, M23217 (AMM PAGEBLOCK 23-93-02/201).
 - (e) Repair the problems that you find.
- (5) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT
J	23	C24618	P210 PSU B ALTN

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI

- (6) If the reduced power message does not show at the CSCP, then you corrected the fault.
- (7) If the problem continues, contact Boeing Customer Service for assistance.

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D. Fault Isolation Procedure - CSMU Problem

- (1) Replace the cabin system management unit (CSMU), M23061. These are the tasks:
Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (a) If the reduced power message does not show at the CSCP, then you corrected the fault.
 - (b) If the reduced power message shows, then continue.
- (2) Replace the cabin system control panel (CSCP). These are the tasks:
Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
 - (a) If the reduced power message does not show at the CSCP, then you corrected the fault.

E. Fault Isolation Procedure - Ground Service Bus Status Problem

- (1) Make sure that the Ground Service Bus is connected and available.
 - (a) If the reduced power message does not show at the CSCP, then there was an intermittent fault.
 - (b) If the reduced power message shows, then continue.
- (2) Disconnect and re-connect the Ground Service Bus.
 - (a) If the reduced power message does not show at the CSCP, then you corrected the fault.
 - (b) If the reduced power message shows, then continue.
- (3) Look for faults for the Ground Service Bus or the Bus Power Control Unit (BPCU), M24002.
 - (a) Repair the problems that you find.
 - (b) If the reduced power message does not show at the CSCP, then you corrected the fault.
 - (c) If the problem continues, contact Boeing Customer Service for assistance.

————— END OF TASK —————

A18. CSCP Is Connected To Wrong Bus Port: CSCP May Be In Wrong Location - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04056.

B. General

- (1) This message may appear:
 - (a) As a result of the wrong configuration data base loaded.
 - (b) As a result of the CSCP connected to the wrong input port on the ZMU or CSMU. (For example: After a cabin reconfiguration.)
 - (c) As a result of a wiring problem.
 - (d) As a result of a CSCP, ZMU, or CSMU failure.

C. Fault Isolation Procedure

- (1) Get the correct configuration database (CDB) part number from airline engineering.
- (2) Make sure that the correct CDB is installed in the system:
 - (a) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804.
 - 1) Make sure the CDB part number is correct.

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- (3) If the CDB part number is not correct:
- (a) Get the correct CDB software.
 - (b) Install the correct CDB software.
To install it, do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - 1) If the maintenance message does not show in the Installation Fault Results, then you corrected the fault.
 - 2) If the maintenance message does show in the Installation Fault Results, then continue.
- (4) Do a wiring check of the wire bundle(s) between the CSCP that shows the failure and the applicable Zone Management Unit (ZMU) or Cabin System Management Unit (CSMU) (SSM 23-33-02, WDM 23-33-12, WDM 23-33-13, WDM 23-33-14, WDM 23-33-15).
- NOTE:** Some wiring diagrams refer to both the Cabin System Control Panel (CSCP) and the Cabin Area Control Panels (CACPs) as Cabin Control Panels (CCPs). If you can not determine which of the CCPs is the "CSCP", refer to system schematic 23-33-02. The CSCP is connected to either a ZMU or to the CMSU.
- (a) If you find a problem with the wiring then do these steps:
- 1) Repair the wiring.
 - 2) Install the cabin configuration database if needed. Do this task: Configuration Database and Lighting Database Installation (Phase II), AMM TASK 23-39-00-400-811.
 - 3) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804.
 - 4) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - 5) If the maintenance message does show in the Installation Fault Results, then continue.
- (5) Replace the Cabin System Control Panel (CSCP).
- (a) These are the tasks:
- Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805,
 - Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804.
- (b) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804.
- 1) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.
 - 2) If the maintenance message does show in the Installation Fault Results, then continue.
- (6) Replace the applicable Zone Management Unit (ZMU) or Cabin System Management Unit (CSMU).
- These are the tasks:
- Zone Management Unit (ZMU) Removal, AMM TASK 23-39-04-000-801,
 - Zone Management Unit (ZMU) Installation, AMM TASK 23-39-04-400-801,

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Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) Do this task: Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804.
 - 1) If the maintenance message does not show in the Installation Fault Results, you corrected the fault.

————— END OF TASK —————

A19. CSMU ARINC 628 Bus Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-01055.

B. Fault Isolation Procedure

- (1) Replace the Cabin System Management Unit (CSMU), M23061.

These are the tasks:

Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801,
Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.

- (a) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.
 - 2) If the maintenance message shows, then continue.
- (2) Use WDM 23-32-18 to determine which IFE-HE LRU is connected to the CSMU.
 - (a) Replace the IFE-HE LRU that is connected to the CSMU.
 - (b) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.
 - 2) If the maintenance message shows, then continue.
- (3) Do the wiring check that follows:
 - (a) Remove the CSMU, M23061. To remove it, do this task: Cabin System Management Unit (CSMU) Removal, AMM TASK 23-39-11-000-801.
 - (b) Use WDM 23-32-18 to determine which IFE-HE LRU is connected to the CSMU and remove the IFE-HE LRU.
 - (c) Use WDM 23-32-18 and do a check of the wiring between the CSMU and the IFE-HE LRU connected to the CSMU.
 - (d) Repair the problems that you find.
 - (e) Re-install the CSMU, M23061. To install it, do this task: Cabin System Management Unit (CSMU) Installation, AMM TASK 23-39-11-400-801.
 - (f) Re-install the IFE-HE LRU that is connected to the CSMU.
 - (g) Do the ALL TEST on the Cabin System Control Panel (CSCP).
 - 1) If the maintenance message does not show in the results, then you corrected the fault.

————— END OF TASK —————

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A20. Loss of Control of the Cabin Service System - Fault Isolation

A. Description

- (1) The CSS Intersystem Bus network can cause this condition.
- (2) The CSS Intersystem Bus network is a connection between the CSMU, PA/CI, and ZMUs via coax cables (10 base 2).
- (3) The CSMU and PA/CI acquire the ARINC 629 data and other data, then transmits data to other LRUs such as CSCP, OEUs, and ALCs via ZMU for a specific zone on the airplane.
- (4) The CSCP communicates to the system through a ZMU via 10 base T wiring.

B. Possible Causes

- (1) The CSS Intersystem Bus network could be corrupted if any "element" within the network fails (such as a shorted coax cable).
- (2) When corrupted, several CSS LRUs, such as the CSCP, cannot get valid data from the airplane side and instead uses default values (for example, the AIR/GROUND signal is set to AIR mode on CSCP).

C. Fault Isolation Procedure

- (1) Perform the following actions, in numeric order, until the condition is resolved. If a particular action provides resolution, no further action is required.
- (2) Troubleshooting of the interface between CSCP and ZMU (SSM 23-33-02) as follows:
 - (a) Perform the "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT" from the CSCP. Select the Zone Management Unit that connects to the CSCP, then click on CONTINUE.
 - (b) Make sure all the inputs and outputs of the ZMU are valid.
 - (c) If any inputs or outputs are invalid, then swap the ZMU with a known good ZMU and perform the "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT" again.
 - (d) If any inputs or outputs are still invalid, use SSM 23-33-02 to perform wiring checks between the CSCP and ZMU.
 - (e) If any inputs or outputs are still invalid, install a new CSCP and perform the "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT" again,
 - (f) If all inputs and outputs are valid, then replace the defective ZMU and perform the INPUT MONITOR – ARINC 629.
 - (g) If the INPUT MONITOR – ARINC 629 shows valid data, then make sure the Cabin Service System is back to normal operation.
 - (h) If the INPUT MONITOR – ARINC 629 shows invalid data, then perform the troubleshooting of the interface between ZMUs, as follows.
- (3) Troubleshooting of the CSS Intersystem Bus (WDM 23-33-11) as follows:
 - (a) Disconnect the coax cable connected between ZMU 1 and ZMU 2.
 - (b) Install the termination jumper at ZMU 1 (pins 9 & 17).

NOTE: The termination jumper provides the termination of the CSS Intersystem Bus to ZMU 1 and allows troubleshooting of one ZMU at a time.
 - (c) Cycle the ZMU 1 Circuit Breaker.

NOTE: Failure to cycle power to the ZMU after removal/installation of the termination jumper could cause confusion during troubleshooting, as the CSS does not know the current configuration of the ZMU.



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- (d) For the CSCP that connects to ZMU 1, perform the "INPUT MONITOR – ARINC 629" from the CSCP and make sure the data shown is valid.
- (e) For the CACP that connects to ZMU 1, check the Cabin Door Status and Cabin Temperature Indications on the CACP and make sure the data shown is valid.
- (f) If the CSCP shows the ARINC 629 data is invalid or the CACP shows the Cabin Door Status and Cabin Temperature Indications are invalid, then perform wiring checks of the coax cable connected between the ZMU 1 and PA/CI (WDM 23-33-11) and the coax cable connected between the CSMU and PA/CI.
 - 1) Make sure there is no intermittent short between the center conductor and the shield of the coax cable, and no openings along the center conductor or along the shield.

NOTE: An intermittent short can be caused by foreign object debris (FOD), located between the center conductor and the shield coax cable.
 - 2) Check for bad CSMU or PA/CI.
- (g) If the CSCP shows the ARINC 629 data is valid or the CACP shows the Cabin Door Status and Cabin Temperature Indications are valid, then remove the termination jumper at ZMU 1 (pins 9 & 17) and reconnect the coax cable connected between ZMU 1 and ZMU 2.
- (h) Disconnect the coax cable connected between ZMU 2 and ZMU 3.
 - (i) Install the termination jumper at ZMU 2 (pins 9 & 17).
 - (j) Cycle the ZMU 1 and ZMU 2 Circuit Breakers.
- (k) Perform "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT".
 - 1) Select Zone Management Unit to "2" then click on CONTINUE.
 - 2) Check whether the data showing is valid.
- (l) If the data is invalid, then perform wiring checks of the coax cable connected between ZMU 1 and ZMU 2 (WDM 23-33-11).
 - 1) Make sure there is no intermittent short between the center conductor and the shield of the coax cable, and no openings along the center conductor or along the shield.
 - 2) If the wiring checks good, then replace the ZMU 2.
- (m) If the data is valid, then remove the termination jumper at ZMU 2 (pins 9 & 17) and reconnect the coax cable connected between ZMU 2 and ZMU 3.
- (n) Disconnect the coax cable connected between ZMU 3 and ZMU 4.
- (o) Install the termination jumper at ZMU 3 (pins 9 & 17).
- (p) Cycle the ZMU 2 and ZMU 3 Circuit Breakers.
- (q) Perform the "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT".
 - 1) Select Zone Management Unit to "3" then click on CONTINUE.
 - 2) Check whether the data showing is valid.
- (r) If the data is invalid, then perform wiring checks of the coax cable connected between ZMU 2 and ZMU 3 (WDM 23-33-11).
 - 1) Make sure there is no intermittent short between the center conductor and the shield of the coax cable, and no openings along the center conductor or along the shield.
 - 2) If the wiring checks good, then replace the ZMU 3.

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- (s) If the data is valid, then remove the termination jumper at ZMU 3 (pins 9 & 17) and reconnect the coax cable connected between ZMU 3 and ZMU 4.
- (t) Cycle the ZMU 3 and ZMU 4 Circuit Breakers.
- (u) Perform the "INPUT/OUTPUT MONITOR – ZONE MANAGEMENT UNIT".
 - 1) Select Zone Management Unit to "4" then click on CONTINUE.
 - 2) Check whether the data showing is valid.
- (v) If the data is invalid, then perform wiring checks of the coax cable connected between ZMU 3 and ZMU 4 (WDM 23-33-11).
 - 1) Make sure there is no intermittent short between the center conductor and the shield of the coax cable, and no openings along the center conductor or along the shield.
 - 2) If the wiring checks good, then replace the ZMU 4.
- (w) If the data is valid, then make sure the Cabin Service System is back to normal operation.

———— **END OF TASK** ————

A21. CSCP/CACP Will Not Power Off After Pushing The Switch.

A. Fault Isolation Procedure

- (1) If all CCP's do not power off and the amber light does not come on after pushing the switch.
 - (a) Replace the CCP switch.
 - (b) If all CCP's power off and the amber light comes on after pushing the switch, you corrected the fault.
 - (c) If some CCP's do not power off and the amber light comes on after pushing the switch, continue troubleshooting with appropriate zones.
- (2) For CCP in Zone 1.
 - (a) Replace the CCP RESET relay K23336.
 - (b) If the CCP powers off after pushing the switch, you corrected the fault.
 - (c) If the CCP does not power off after pushing the switch, then continue.
 - (d) Do a wiring check between these pins (WDM 23–33–13, 23–33–16).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT
DK23336
X1**

**P110 POWER
MANAGEMENT
PANEL LEFT
D11021P
14**

- (e) If you find a problem with the wiring, repair the wiring.
- (f) If the CCP powers off after pushing the switch, you corrected the fault.
- (g) If the CCP does not power off after pushing the switch, then continue.
- (h) Do a wiring check between these pins (WDM 23–33–13).

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**P202
INTEGRATION
PANEL ZONE 2
RIGHT**

DK23336

X2 38

P97

D6624P

- (i) If you find a problem with the wiring, repair the wiring.
- (j) If the CCP powers off after pushing the switch, you corrected the fault.
- (k) If the CCP does not power off after pushing the switch, then continue.
- (l) Do a wiring check between these pins (WDM 23-33-13, 23-33-12).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT**

DK23336

A3 8

CCP ZONE 1

M23554

- (m) If you find a problem with the wiring, repair the wiring.
- (n) If the CCP powers off after pushing the switch, you corrected the fault.
- (3) For CCP in Zone 2.
 - (a) Replace the CCP RESET relay K23336.
 - (b) If the CCP powers off after pushing the switch, you corrected the fault.
 - (c) If the CCP does not power off after pushing the switch, then continue.
 - (d) Do a wiring check between these pins (WDM 23-33-13, 23-33-16).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT**

DK23336

X1 14

**P110 POWER
MANAGEMENT
PANEL LEFT**

D11021P

- (e) If you find a problem with the wiring, repair the wiring.
- (f) If the CCP powers off after pushing the switch, you corrected the fault.
- (g) If the CCP does not power off after pushing the switch, then continue.
- (h) Do a wiring check between these pins (WDM 23-33-13).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT**

DK23336

X2 38

P97

D6624P

- (i) If you find a problem with the wiring, repair the wiring.

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- (j) If the CCP powers off after pushing the switch, you corrected the fault.
- (k) If the CCP does not power off after pushing the switch, then continue.
- (l) Do a wiring check between these pins (WDM 23-33-13).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT
DK23336
B3 8**

**CCP ZONE 2
M23555**

- (m) If you find a problem with the wiring, repair the wiring.
 - (n) If the CCP powers off after pushing the switch, you corrected the fault.
- (4) For CCP in Zone 3.
- (a) Replace the CCP RESET relay K23337.
 - (b) If the CCP powers off after pushing the switch, you corrected the fault.
 - (c) If the CCP does not power off after pushing the switch, then continue.
 - (d) Do a wiring check between these pins (WDM 23-33-13, 23-3314).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT
DK23337
X1 14**

**P110 POWER
MANAGEMENT
PANEL LEFT
D11021P**

- (e) If you find a problem with the wiring, repair the wiring.
- (f) If the CCP powers off after pushing the switch, you corrected the fault.
- (g) If the CCP does not power off after pushing the switch, then continue.
- (h) Do a wiring check between these pins (WDM 23-33-13).

**P202
INTEGRATION
PANEL ZONE 2
RIGHT
DK23337
X2 38**

**P97
D6624P**

- (i) If you find a problem with the wiring, repair the wiring.
- (j) If the CCP powers off after pushing the switch, you corrected the fault.
- (k) If the CCP does not power off after pushing the switch, then continue.
- (l) Do a wiring check between these pins (WDM 23-33-13, 23-33-14).

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PANEL ZONE 2
RIGHT
DK23337
A3

CCP ZONE 3
M23557
8

- (m) If you find a problem with the wiring, repair the wiring.
- (n) If the CCP powers off after pushing the switch, you corrected the fault.

————— END OF TASK —————

A22. CACP Incorrect Configuration

A. Maintenance Messages

- (1) This task is for maintenance message: 23-04062.

B. Description

- (1) This message indicates a duplicate Cabin Service Control Panel (CSCP). The CSS can only have one CSCP, the other control panel must be configured as Cabin Area Control Panel (CACP). The CSCP and cabin area control panels (CACPs) must have the correct hardware configuration for them to operate.
 - (a) A CSCP must have an 85 megabyte mass memory card (MMC) and a floppy disk drive installed.
 - (b) A CACP configuration must have a 20 megabyte MMC and no floppy disk drive installed.

C. Possible Causes

- (1) CACP has incorrect hardware configuration.

D. Circuit Breakers

- (1) For a CCP installed as CACP.
- (2) Open this circuit breaker and install safety tag:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	9	C23444	AREA CONTROL PANELS

E. Fault Isolation Procedure

- (1) Make sure that the CACP has the correct part number. If the CACP has an incorrect part number, do the steps that follow:
 - (a) Remove the CACP that has the incorrect part. This is the task: Cabin Control Panel (CCP) Removal, AMM TASK 23-39-16-000-805.
 - (b) Install the correct CACP. This is the task: Cabin Control Panel (CCP) Installation, AMM TASK 23-39-16-400-804
 - (c) Do the Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-802 or Operational Program Software and Database Verification Test, AMM TASK 23-39-00-700-804.

————— END OF TASK —————

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801. Service Interphone Inoperative at all Jacks - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the Audio Management Unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

————— **END OF TASK** —————

802. Service Interphone Does not Connect to Flight Interphone with SERV INTPH Switch to ON - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the Audio Management Unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

————— **END OF TASK** —————

803. Service Interphone Problem at Jack adjacent to Weather Radar Transceiver - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23011.

————— **END OF TASK** —————

804. Service Interphone Problem at Jack at P40 Nose Gear Electrical Service Panel - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23012.

————— **END OF TASK** —————

805. Service Interphone Problem at Jack at E3 Rack in Main Equipment Center - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23010.

————— **END OF TASK** —————

806. Service Interphone Problem at Jack at P35 Forward Cargo Handling Accessory Panel - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23007.

————— **END OF TASK** —————

807. Service Interphone Problem at Jack at Engine (left) Nacelle - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23003.

————— **END OF TASK** —————

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808. Service Interphone Problem at Jack at Engine (right) Nacelle - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23003.

———— **END OF TASK** ————

809. Service Interphone Problem at Jack at Refuel Station (left wing) - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23006.

———— **END OF TASK** ————

810. Service Interphone Problem at Jack at Refuel Station (right wing) - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23008.

———— **END OF TASK** ————

811. Service Interphone Problem at Jack at P56 Wheel Well Electrical Service Panel - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23009.

———— **END OF TASK** ————

812. Service Interphone Problem at Jack at Aft Cargo Handling Panel - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23013.

———— **END OF TASK** ————

813. Service Interphone Problem at Jack in Bulk Cargo Area - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23016.

———— **END OF TASK** ————

814. Service Interphone Problem at Jack at Forward Tail Cone - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23017.

———— **END OF TASK** ————

815. Service Interphone Problem at Jack at Mid Tail Cone - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23018.

———— **END OF TASK** ————

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816. Service Interphone Problem at Jack in APU Compartment - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the service interphone jack, D23015.

———— **END OF TASK** ————

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801. EICAS Message CABIN ALERT - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the cabin crew places an alert call to the flight crew on the cabin interphone system. No maintenance action is necessary. To clear this message, lift the flight deck handset.

- (1) If the CABIN ALERT message does not clear when you lift the flight deck handset, do the Fault Isolation Procedure - Cabin Alert On.
- (2) If the CABIN ALERT message does not show when the cabin crew places an alert call to the flight crew on the cabin interphone system, do the Fault Isolation Procedure - Cabin Alert Message Missing.

B. Fault Isolation Procedure - Cabin Alert On

- (1) Do the Quick Test on the Cabin System Control Panel (CSCP).
 - (a) If maintenance message 23-01610 shows in the Quick Test Fault Results, do these steps:
 - 1) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Do the Quick Test on the CSCP.
 - a) If the maintenance message does not show on the CSCP, you corrected the fault.
 - (b) If maintenance message 23-01610 does not show in the Quick Test Fault Results, then continue.
- (2) Do these steps to check the wiring from the PA/CI to AIMS:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To remove them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801.
 - (c) Do a wiring check between pin J3 of connector DM23016AD at the E1-4 shelf and pin 37 of connector D6623 or D6622 at the E3-1 shelf (WDM 23-42-11).
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To install them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.
- (3) Do these steps to test the Cabin Alert message:
 - (a) Remove an attendant handset from its cradle.
 - (b) Push the code for PILOT ALERT on the handset.

NOTE: The dial code directory is on the back of the attendant handset.

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- (c) Make sure that CABIN ALERT is shown on the EICAS display in the flight compartment.
- (d) Remove the flight deck handset from its cradle.
 - 1) If the CABIN ALERT message clears from the EICAS display, then you corrected the fault.
- (e) Put the flight deck handset back in its cradle.
- (f) Put the attendant handset back in its cradle.

C. Fault Isolation Procedure - Cabin Alert Message Missing

- (1) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do these steps to test the Cabin Alert message:
 - (a) Remove an attendant handset from its cradle.
 - (b) Push the code for PILOT ALERT on the handset.

NOTE: The dial code directory is on the back of the attendant handset.
 - (c) If CABIN ALERT is shown on the EICAS display in the flight compartment, then you corrected the fault.
 - (d) Put the attendant handset back in its cradle.
- (3) If the CABIN ALERT message does not show, do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To remove them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801.
 - (c) Do a wiring check between pin J3 of connector DM23016AD at the E1-4 shelf and pin 37 of connector D6623 or D6622 at the E3-1 shelf (WDM 23-42-11).
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To install them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.
 - 4) Do the test of the Cabin Alert message.
 - a) If the CABIN ALERT message shows on the EICAS, you corrected the fault.

————— **END OF TASK** —————

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802. EICAS Message CABIN READY - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the cabin crew places a cabin ready call to the flight crew on the cabin interphone system. No maintenance action is necessary. This message clears automatically after one minute.

- (1) If the CABIN READY message does not show when the cabin crew places a cabin ready call to the flight crew on the cabin interphone system, do the Fault Isolation Procedure - Cabin Ready Message Missing.

B. Fault Isolation Procedure - Cabin Ready Message Missing

- (1) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do these steps to test the Cabin Ready message:

- (a) Remove an attendant handset from its cradle.
- (b) Push the code for CABIN READY on the handset.

NOTE: The dial code directory is on the back of the attendant handset.

- (c) Make sure CABIN READY is shown on the EICAS display in the flight compartment.
- (d) Put the attendant handset back in its cradle.

- (3) Do the step above again.

NOTE: There is a failure mode of the PA/CI and the wiring which lets the CABIN READY message show only one time after you reset the power to the PA/CI. You need to do the Cabin Ready message test again to make sure you corrected the fault.

- (a) If CABIN READY is shown on the EICAS display in the flight compartment, you corrected the fault.
- (4) If the CABIN READY message does not show, do this check of the wiring:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To remove them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801.
 - (c) Do a wiring check between pin J2 of connector DM23016AD at the E1-4 shelf and pin 60 of connector D6623 or D6622 at the E3-1 shelf (WDM 23-42-11).
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 3) Re-install the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To install them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.
 - 4) Do the test of the Cabin Ready message.

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- a) Make sure CABIN READY shows on the EICAS display.
- 5) Do the test of the Cabin Ready message again.
 - a) If the CABIN READY message shows on the EICAS, you corrected the fault.

————— **END OF TASK** —————

803. EICAS Message CABIN CALL - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the cabin crew places a normal call to the flight crew on the cabin interphone system. No maintenance action is necessary. To clear this message, lift the flight deck handset from its cradle.

- (1) If the CABIN CALL message does not clear when you lift the flight deck handset, do the Fault Isolation Procedure - Cabin Call On.
- (2) If the CABIN CALL message does not show when the cabin crew places an normal call to the flight crew on the cabin interphone system, do the Fault Isolation Procedure - Cabin Call Message Missing.

B. Fault Isolation Procedure - Cabin Call On

- (1) Do the Quick Test on the Cabin System Control Panel (CSCP).
 - (a) If maintenance message 23-01610 shows in the Quick Test Fault Results, do these steps:
 - 1) Replace the PA/CI, M23016.
These are the tasks:
Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,
Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.
 - 2) Do the Quick Test on the CSCP.
 - a) If the maintenance message does not show on the CSCP, you corrected the fault.
 - (b) If maintenance message 23-01610 does not show in the Quick Test Fault Results, then continue.
- (2) Do these steps to check the wiring from the PA/CI to AIMS:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To remove them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801.
 - (c) Do a wiring check between pin H2 of connector DM23016AD at the E1-4 shelf and pin 38 of connector D6623 or D6622 at the E3-1 shelf (WDM 23-42-11).
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- 3) Re-install the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To install them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.
- (3) Do these steps to test the Cabin Call message:
 - (a) Remove an attendant handset from its cradle.
 - (b) Push the code for PILOT on the handset.

NOTE: The dial code directory is on the back of the attendant handset.
 - (c) Make sure that CABIN CALL is shown on the EICAS display in the flight compartment.
 - (d) Remove the flight deck handset from its cradle.
 - (e) If the CABIN CALL message clears from the EICAS display, then you corrected the fault.
 - (f) Put the flight deck handset back in its cradle.
 - (g) Put the attendant handset back in its cradle.

C. Fault Isolation Procedure - Cabin Call Message Missing

- (1) Replace the PA/CI, M23016.

These are the tasks:

Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801,

Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

- (2) Do these steps to test the Cabin Call message:
 - (a) Remove an attendant handset from its cradle.
 - (b) Push the code for PILOT on the handset.

NOTE: The dial code directory is on the back of the attendant handset.
 - (c) If CABIN CALL is shown on the EICAS display in the flight compartment, then you corrected the fault.
 - 1) Put the attendant handset back in its cradle.
 - (d) If CABIN CALL does not show on the EICAS display in the flight compartment, then continue.
 - 1) Put the attendant handset back in its cradle.
- (3) Do these steps to check the wiring from the PA/CI to AIMS:
 - (a) Remove the PA/CI, M23016. To remove it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801.
 - (b) Remove the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To remove them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Removal, AMM TASK 31-41-02-000-801.
 - (c) Do a wiring check between pin H2 of connector DM23016AD at the E1-4 shelf and pin 38 of connector D6623 or D6622 at the E3-1 shelf (WDM 23-42-11).
 - (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the PA/CI, M23016. To install it, do this task: Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801.

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- 3) Re-install the CPM/GG 1 and 2 in the AIMS Cabinet - Left, M31101. To install them, do this task: Core Processor Module/Graphics Generator (CPM/GG) Installation, AMM TASK 31-41-02-400-801.
- (4) Do the test of the Cabin Call message.
 - (a) If CABIN CALL is shown on the EICAS display in the flight compartment, then you corrected the fault.
 - 1) Put the attendant handset back in its cradle.

————— **END OF TASK** —————

804. Cabin Interphone Problems - Fault Isolation

A. **Fault Isolation Procedure**

- (1) Touch these selections on the Cabin System Control Panel (CSCP) to do the QUICK TEST:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START QUICK TEST
 - (d) CONTINUE
- (2) Make sure that there are no failures for the Passenger Address/Cabin Interphone (PA/CI) Controller (Cabin Interphone) or the Zone Management Unit (Cabin Interphone).
 - (a) For each maintenance message that shows in the Quick Test Fault Results, then do these steps:
 - 1) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (b) If there are no maintenance messages for the PA/CI Controller (Cabin Interphone) or the Zone Management Unit (Cabin Interphone), then continue.
- (3) Push the CI NORM/ALT switch on the Attendant Switch Panel (ASP).
- (4) Do the QUICK TEST on the CSCP again.
- (5) Make sure that there are no failures for the PA/CI Controller (Cabin Interphone) or the Zone Management Unit (Cabin Interphone).
 - (a) For each maintenance message that shows in the Quick Test Fault Results, then do these steps:
 - 1) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - 2) Do the specified fault isolation task.
 - (b) If there are no maintenance messages for the PA/CI Controller (Cabin Interphone) or the Zone Management Unit (Cabin Interphone), then continue.
- (6) Touch these selections on the CSCP to do the ALL TEST:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) CONTINUE
- (7) Make sure that there are no failures for the PA/CI Controller (Cabin Interphone) or the Zone Management Unit (Cabin Interphone).

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- (a) For each maintenance message that shows in the All Test Fault Results, then do these steps:
- 1) Find the maintenance messages number in the FIM 23-Maintenance Message Index.
 - 2) Do the specified fault isolation task.
- (b) If no maintenance messages show in the All Test Fault Results and the observed fault persists, and the observed fault is "unable to call from cabin attendant handsets to the flight deck handset, but still able to call from flight deck handset to cabin attendant handsets" then do this step:
- 1) Do an operation test of the AMU and Flight Deck Handset to isolate the condition.
 - 2) If the affected unit operates normally, check the aircraft wiring from the AMU and Flight Deck Handset to the PA/CI per SSM 23-42-11 and 23-51-61.
- (c) If the fault continues and if the affected unit does not operate correctly, do these steps:
- 1) Open and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C23638	CAB INTPH PRI
F	13	C23639	CAB INTPH SEC

- 2) Disconnect and connect the PA handset cord.
 - a) Check if the fault has been corrected.

————— **END OF TASK** —————

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801. EICAS Message GROUND CALL - Fault Isolation

A. Description

- (1) This message shows when you push the FLIGHT DECK CALL switch on the P40 service and APU shutdown panel.

B. Fault Isolation

- (1) No maintenance action is necessary.

————— **END OF TASK** —————

802. Ground Crew Call Horn Does Not Come on When Selected on CDU - Fault Isolation

A. Fault Isolation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
- (2) If a maintenance message related to the AMU shows in the Existing Faults, then do these steps:
 - (a) Find the message in the applicable FIM Maintenance Message Index.
 - (b) Do the specified task for the maintenance message.
- (3) If a maintenance message related to the AMU does not show in Existing Faults, then continue.
- (4) Make these selections on CSCP to do ALL Test:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) CONTINUE
- (5) If the ALL TEST FAULTS REVIEW screen shows, make these selections on the CSCP to show the maintenance messages related to PA/CI controller.
 - (a) ALL UNITS
 - (b) CONTINUE
- (6) For each maintenance message that shows in the ALL Test Fault Results related to the PA/CI controller, then do these steps:
 - (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (7) If the maintenance message related to the PA/CI controller does not shows on the CSCP, then continue.
- (8) Replace the ground crew call horn, M23085.
These are the tasks:
Ground Crew Call Horn Removal, AMM TASK 23-43-01-000-801,
Ground Crew Call Horn Installation, AMM TASK 23-43-01-400-801.

————— **END OF TASK** —————

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803. CALL Light on Audio Control Panels Do Not Come on When FLIGHT DECK CALL Switch on P40 Panel Pushed - Fault Isolation

A. Fault Isolation

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
- (2) If a maintenance message related to the AMU shows in the Existing Faults, then do these steps:
 - (a) Find the message in the applicable FIM Maintenance Message Index.
 - (b) Do the specified task for the maintenance message.
- (3) If a maintenance message related to the AMU does not show in Existing Faults, then continue.
- (4) Make these selections on CSCP to do ALL Test:
 - (a) CABIN MAINTENANCE
 - (b) CABIN TESTS
 - (c) START ALL TEST
 - (d) CONTINUE
- (5) If the ALL TEST FAULTS REVIEW screen shows, make these selections on the CSCP to show the maintenance messages related to PA/CI controller.
 - (a) ALL UNITS
 - (b) CONTINUE
- (6) For each maintenance message that shows in the ALL Test Fault Results related to the PA/CI controller, then do these steps:
 - (a) Find the maintenance message number in the FIM 23-Maintenance Message Index.
 - (b) Do the specified fault isolation task.
- (7) If the maintenance message related to the PA/CI controller does not shows on the CSCP, then continue.
- (8) Replace the FLIGHT DECK CALL switch on the P40 panel.

————— **END OF TASK** —————

804. Relay P310 (HORN ENABLE) not in commanded position - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-95002.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the relay (HORN ENABLE), K23478, in the P310 panel.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the signal interface unit 2, M24513, in the P310 panel.

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This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring from the relay (HORN ENABLE), K23478, to the signal interface unit 2, M24513:
 - (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	3	C23626	GND CREW HORN
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

- (b) Disconnect connector DM24513A from the signal interface unit 2, M24513, in the P310 panel.
- (c) Disconnect connector DK23478 from the relay (HORN ENABLE), K23478, in the P310 panel.
- (d) Do a wiring check between these pins of connector DM24513A at the signal interface unit and connector DK23478 at the relay (HORN ENABLE), in the P310 panel (WDM 23-43-11):

DM24513A	DK23478
pin 38	pin B1

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-10-13).
 - 2) Re-connect connectors DM24513A and DK23478.
 - 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	3	C23626	GND CREW HORN
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
 - 1) Re-connect connectors DM24513A and DK23478.

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- 2) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	3	C23626	GND CREW HORN
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring from the relay (HORN ENABLE), K23478 to the signal interface unit 2, M24513:
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	3	C23626	GND CREW HORN
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

- (b) Disconnect connector DM24513B from the signal interface unit 2, M24513, in the P310 panel.
- (c) Disconnect connector DK23478 from the relay (HORN ENABLE), K23478, in the P310 panel.
- (d) Do a wiring check between these pins of connector DM24513B at the signal interface unit and connector DK23478 at the relay (HORN ENABLE), in the P310 panel (WDM 23-43-11):

DM24513B	DK23478
pin 16	pin X2

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring (SWPM 20-10-13).
- 2) Re-connect connectors DM24513B and DK23478.
- 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	3	C23626	GND CREW HORN
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

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801. Audio Management Unit Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55010.

B. Description

- (1) The Audio Management Unit (AMU) has an internal fault.

NOTE: If the flight crew did not observe/record any obvious effects, this maintenance message can be ignored as a nuisance fault (SL777-45-003A).

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) If the flight crew did not observe/record any Flight Interphone problems, then this maintenance message is a nuisance fault. No maintenance action is necessary.
- (2) If the flight crew observed/recorded Flight Interphone problems, then replace the Audio Management Unit (AMU). These are the tasks:
 - Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
 - Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

802. Captain's Audio Control Panel Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55020.

B. Initial Evaluation

NOTE: Audio Control Panels (ACPs) have a condition where the internal BITE circuitry produces false volume control failure indications. These are reported to the CMCS as an ACP failure. If no obvious flight deck effects are noted by the flight crew, this maintenance message may be ignored. If flight deck effects are noted by the flight crew, then continue.

C. Fault Isolation Procedure

- (1) Replace the Captain's Audio Control Panel (ACP), M23009.
These are the tasks:
Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the captain's ACP, M23009. To remove it, do this task: Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801.

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- (b) Remove the audio management unit (AMU), M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
- (c) Do a wiring check between these pins of connector DM23009 at the P8 panel and connector DM23008AA at the E1-4 shelf (WDM 23-51-11):

DM23009	DM23008AA
pin 17	pin A1
pin 18	pin A2
pin 20	pin B1
pin 21	pin B2

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the captain's ACP, M23009. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-install the captain's ACP, M23009. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
- (3) Install a new AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

803. First Officer's Audio Control Panel Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55030.

B. Initial Evaluation

NOTE: Audio Control Panels (ACPs) have a condition where the internal BITE circuitry produces false volume control failure indications. These are reported to the CMCS as an ACP failure. If no obvious flight deck effects are noted by the flight crew, this maintenance message may be ignored. If flight deck effects are noted by the flight crew, then continue.

C. Fault Isolation Procedure

- (1) Replace the first officer's ACP, M23010.

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:

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- (a) Remove the first officer's ACP, M23010. To remove it, do this task: Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801.
- (b) Remove the audio management unit (AMU), M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
- (c) Do a wiring check between these pins of connector DM23010 at the P8 panel and connector DM23008AC at the E1-4 shelf (WDM 23-51-22):

DM23010	DM23008AC
pin 17	pin A10
pin 18	pin A9
pin 20	pin B10
pin 21	pin B9

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the first officer's ACP, M23010. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-install the first officer's ACP, M23010. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
- (3) Install a new AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

804. Second Observer's Audio Control Panel Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55040.

B. Initial Evaluation

NOTE: Audio Control Panels (ACPs) have a condition where the internal BITE circuitry produces false volume control failure indications. These are reported to the CMCS as an ACP failure. If no obvious flight deck effects are noted by the flight crew, this maintenance message may be ignored. If flight deck effects are noted by the flight crew, then continue.

C. Fault Isolation Procedure

- (1) Replace the second observer's audio control panel (ACP), M23476.
These are the tasks:
Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) Remove the second observer's ACP, M23476. To remove it, do this task: Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801.
 - (b) Remove the audio management unit (AMU), M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
 - (c) Do a wiring check between these pins of connector DM23476 at the P18 panel and connector DM23008AB at the E1-4 shelf (WDM 23-51-41):
- | DM23476 | DM23008AB |
|------------------|------------------|
| pin 17 | pin A10 |
| pin 18 | pin A9 |
| pin 20 | pin B10 |
| pin 21 | pin B9 |
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the second observer's ACP, M23476. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-install the second observer's ACP, M23476. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
- (3) Install a new AMU, M23008. 5 To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

805. First Observer's Audio Control Panel Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55050.

B. Initial Evaluation

NOTE: Audio Control Panels (ACPs) have a condition where the internal BITE circuitry produces false volume control failure indications. These are reported to the CMCS as an ACP failure. If no obvious flight deck effects are noted by the flight crew, this maintenance message may be ignored. If flight deck effects are noted by the flight crew, then continue.

C. Fault Isolation Procedure

- (1) Replace the first observer's audio control panel (ACP), M23011.
- These are the tasks:
- Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Remove the first observer's ACP, M23011. To remove it, do this task: Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801.
 - (b) Remove the audio management unit (AMU), M23008. To remove it, do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801.
 - (c) Do a wiring check between these pins of connector DM23011 at the P18 panel and connector DM23008AB at the E1-4 shelf (WDM 23-51-31):

DM23011	DM23008AB
pin 17	pin D14
pin 18	pin D15
pin 20	pin E15
pin 21	pin E14
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the first observer's ACP, M23011. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
 - 3) Re-install the AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-install the first observer's ACP, M23011. To install it, do this task: Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.
- (3) Install a new AMU, M23008. To install it, do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

806. AMU No Output on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-55841.

B. Description

- (1) Audio Management Unit (AMU) has no output on System ARINC 629 Bus L.

C. Possible Causes

- (1) AMU, M23008
- (2) ARINC 629 Coupler AMU, B23102
- (3) Wiring

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D. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	13	C23611	INTPH GND

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	23	C24618	P210 PSU B ALTN
J	24	C24617	P110 PSU A PRI
P	15	C24655	P110 PSU B PRI
P	16	C24657	P210 PSU A ALTN

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	23	C23646	INTERPHONE-STBY F/O
B	24	C23631	INTERPHONE-SERVICE
B	25	C23627	INTERPHONE-CAPTAIN
B	26	C23629	INTERPHONE-F/OBS
C	25	C23628	INTERPHONE-F/O

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	3	C24624	P110 PSU B ALTN
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI
J	6	C24658	P110 PSU A ALTN

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

E. Related Data

- (1) WDM 23-51-61

F. Initial Evaluation

- (1) If the MAT shows ACTIVE for the Maintenance Message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the Maintenance Message, then there was an intermittent fault.

G. Fault Isolation Procedure

- (1) Replace the AMU, M23008. These are the tasks:
- Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
 - Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

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- (a) Do the Repair Confirmation at the end of this task.
- (2) Do this check at the P111 panel of the ARINC 629 Coupler, B23102:
- NOTE:** This coupler connects the AMU to the System 629 Bus-L.
- (a) Disconnect Connector, DB23102, from the Coupler, B23102.
- (b) Disconnect the Connector, from a Coupler that's adjacent to B23102 and is on the same bus.
- NOTE:** It is possible that other Maintenance Messages will show on the MAT while this Connector is disconnected.
- (c) Connect Connector, DB23102 to the adjacent Coupler.
- (d) If the MAT shows NOT ACTIVE for the Maintenance Message (or if the message does not show), then do these steps:
- 1) Disconnect connector DB23102 from the adjacent coupler.
 - 2) Re-connect the adjacent Coupler to its Connector.
 - 3) Replace the ARINC 629 Coupler, B23102. These are the tasks:
 - ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
 - ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
 - 4) Do the Repair Confirmation at the end of this task.
 - 5) Disconnect Connector, DB23102, from adjacent Coupler.
 - 6) Re-connect the adjacent Coupler to its Connector.
- (3) Do this check of the wiring from the AMU, M23008, to the Coupler, B23102:
- (a) Remove the AMU, M23008. Do this task: Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
- (b) Between the E1-4 Shelf, Connector, DB23008AA, and the P111 Panel, Connector, DB23102, do a wiring check of the pins as follows (WDM 23-51-61):

DM23008AA	DB23102
pin 1T	pin 2
pin 1TR	pin 1
pin 2T	pin 5
pin 2TR	pin 4

- (c) Do a check of the ground circuit between the backshell of Connector, DB23102, and the coupler panel. These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801
 - ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801
- (d) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect the Connector, DB23102.
 - 3) Re-install the AMU, M23008. Do this task: Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
 - 4) Do the Repair Confirmation at the end of this task.

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H. Repair Confirmation

- (1) If the MAT shows NOT ACTIVE for the Maintenance Message (or if the message does not show), you corrected the problem.
- (2) If the MAT shows active for the Maintenance Message, continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

807. AMU No Input from AIMS-L on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59464.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the audio management unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 L coupler, B23102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects AMU to the System 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 L coupler, B31112, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

808. AMU No Input from AIMS-R on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59467.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the audio management unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 L coupler, B23102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 L coupler, B31113, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

809. AMU No Input from PSEU 2 on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59476.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the Audio Management Unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the circuit card assembly (CCA), communication in PSEU 2, M32025-A17.

These are the tasks:

PSEU Circuit Card Removal, AMM TASK 32-08-02-000-801,

PSEU Circuit Card Installation, AMM TASK 32-08-02-400-801.

- (a) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (b) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
- (3) Replace the ARINC 629 L coupler, B23102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects AMU to the System 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left ARINC 629 coupler in P111 (PSEU2), B32215.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

811. Flight Interphone Transmission Problem on the Captain's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can transmit on each of the captain's microphones.
- (5) If you cannot transmit from a microphone, do these steps:
 - (a) Temporarily replace it with a good microphone.
 - (b) Make sure you can transmit on the replacement microphone.
 - (c) If you can transmit with the replacement microphone, replace the original microphone.
- (6) If the problem continues, replace the AMU, M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (7) If the problem continues, replace the captain's ACP, M23009.

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,

Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

————— **END OF TASK** —————

812. Flight Interphone Transmission Problem on the First Officer's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can transmit on each of the first officer's microphones.
- (5) If you cannot transmit from a microphone, do these steps:
 - (a) Temporarily replace it with a good microphone.
 - (b) Make sure you can transmit on the replacement microphone.
 - (c) If you can transmit with the replacement microphone, replace the original microphone.
- (6) If the problem continues, replace the AMU, M23008.

These are the tasks:

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Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (7) If the problem continues, replace the first officer's ACP, M23010.

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

————— **END OF TASK** —————

813. Flight Interphone Transmission Problem on the First Observer's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can transmit on each of the first observer's microphones.
- (5) If you cannot transmit from a microphone, do these steps:
 - (a) Temporarily replace it with a good microphone.
 - (b) Make sure you can transmit on the replacement microphone.
 - (c) If you can transmit with the replacement microphone, replace the original microphone.
- (6) If the problem continues, replace the AMU, M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (7) If the problem continues, replace the first observer's ACP, M23011.

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

————— **END OF TASK** —————

814. Flight Interphone Reception Problem on the Captain's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can receive on the captain's headphones.
- (5) If you cannot receive on the headphone, do these steps:
 - (a) Temporarily replace it with a good headphone.
 - (b) Make sure you can receive on the replacement headphone.

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- (c) If you can receive with the replacement headphone, replace the original headphone.
- (6) If the problem continues, replace the AMU, M23008.
- These are the tasks:
- Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- (7) If the problem continues, replace the captain's ACP, M23009.
- These are the tasks:
- Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

———— **END OF TASK** ————

815. Flight Interphone Reception Problem on the First Officer's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can receive on the first officer's headphones.
- (5) If you cannot receive on the headphone, do these steps:
- (a) Temporarily replace it with a good headphone.
- (b) Make sure you can receive on the replacement headphone.
- (c) If you can receive with the replacement headphone, replace the original headphone.
- (6) If the problem continues, replace the AMU, M23008.
- These are the tasks:
- Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
- (7) If the problem continues, replace the first officer's ACP, M23010.
- These are the tasks:
- Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

———— **END OF TASK** ————

816. Flight Interphone Reception Problem on the First Observer's Station - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) Look on the MAT for the maintenance message related to the flight interphone system.
- (3) If you find a maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.
- (4) If you do not find a maintenance message related to the flight interphone system, make sure you can receive on the first observer's headphones.

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- (5) If you cannot receive on the headphone, do these steps:
 - (a) Temporarily replace it with a good headphone.
 - (b) Make sure you can receive on the replacement headphone.
 - (c) If you can receive with the replacement headphone, replace the original headphone.
- (6) If the problem continues, replace the AMU, M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (7) If the problem continues, replace the first observer's ACP, M23011.

These are the tasks:

Audio Control Panel (ACP) Removal, AMM TASK 23-51-01-000-801,
Audio Control Panel (ACP) Installation, AMM TASK 23-51-01-400-801.

————— **END OF TASK** —————

817. Flight Interphone Problem on All Stations - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the audio management unit (AMU).

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

————— **END OF TASK** —————

818. Captain's Flight Deck Speaker Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the captain's flight deck speaker.

These are the tasks:

Flight Interphone Speaker Removal, AMM TASK 23-51-05-000-801,
Flight Interphone Speaker Installation, AMM TASK 23-51-05-400-801.

————— **END OF TASK** —————

819. First Officer's Flight Deck Speaker Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the first officer's flight deck speaker.

These are the tasks:

Flight Interphone Speaker Removal, AMM TASK 23-51-05-000-801,
Flight Interphone Speaker Installation, AMM TASK 23-51-05-400-801.

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820. Captain's Hand Microphone Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) If the problem continues, replace the captain's hand microphone.

———— **END OF TASK** ————

821. First Officer's Hand Microphone Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) If the problem continues, replace the first officer's hand microphone.

———— **END OF TASK** ————

822. First Observer's Hand Microphone Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) If the problem continues, replace the first observer's hand microphone.

———— **END OF TASK** ————

823. Second Observer's Hand Microphone Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the second observer's hand microphone.

———— **END OF TASK** ————

824. Captain's Headset Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) If the problem continues, replace the captain's headset.

———— **END OF TASK** ————

825. First Officer's Headset Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Make sure the OBS AUDIO switch on the P8 panel is in the NORM position.
- (2) If the problem continues, replace the first officer's headset.

———— **END OF TASK** ————

826. First Observer's Headset Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the first observer's headset.

———— **END OF TASK** ————

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827. Second Observer's Headset Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Replace the second observer's headset.

————— **END OF TASK** —————

828. Captain's Audio Control Panel Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Look on the MAT for the maintenance message related to the flight interphone system.
- (2) If you find any maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.

————— **END OF TASK** —————

829. First Officer's Audio Control Panel Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Look on the MAT for the maintenance message related to the flight interphone system.
- (2) If you find any maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.

————— **END OF TASK** —————

830. First Observer's Audio Control Panel Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Look on the MAT for the maintenance message related to the flight interphone system.
- (2) If you find any maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.

————— **END OF TASK** —————

831. Second Observer's Audio Control Panel Problem - Fault Isolation

A. Fault Isolation Procedure

- (1) Look on the MAT for the maintenance message related to the flight interphone system.
- (2) If you find any maintenance message, then find the message number in the FIM 23-MAINT MSG INDEX and do the specified task.

————— **END OF TASK** —————

832. EICAS Message RADIO TRANSMIT - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a VHF or HF radio has had the push-to-talk (PTT) switch pressed for thirty seconds or longer.

- (1) If the message goes away when no PTT switch is pressed, no maintenance action is necessary.

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- (2) If the message continues to display when no PTT switch is pressed, it is possible that a flight crew PTT switch is stuck in transmission.

NOTE: A PTT switch may be stuck if normal voice "traffic" transmission are no longer heard on the radio or the crew member with the stuck microphone transmit switch is unable to receive external radio transmissions on the radio selected.

B. Procedure

- (1) Do the steps that follow to identify the location of the stuck PTT switch:
 - (a) Push the FLT microphone selector switch at all flight crew Audio Control Panels.
 - (b) Identify the flight crew station with continuous voice or PTT signal transmission. Examine all PTT switches associated with this station and identify the one that causes problem.
- (2) Fix or replace the suspected PTT switch.
- (3) Test the repaired/replaced switch for HF/VHF radio transmission. If the system works well and no message is displayed, you corrected the problems.

————— **END OF TASK** —————

833. AMU No Input from CDU-L on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59470.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the audio management unit (AMU), M23008.
These are the tasks:
Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,
Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the L CDU, N34103, on the P11 panel.
These are the tasks:
Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 L coupler, B23102, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 L coupler, B31113, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects left CDU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

834. AMU No Input from CDU-R on System 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-59473.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the audio management unit (AMU), M23008.

These are the tasks:

Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801,

Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the R CDU, N34203, on the P11 panel.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,

Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 L coupler, B23102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects AMU to the System 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 L coupler, B31115, in P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right CDU to the System 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

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801. Cockpit Voice Recorder Monitor Jack Signal Problems - Fault Isolation

A. Initial Evaluation

- (1) Do this step:
 - (a) Set the voice recorder AUTO/ON switch on the P5 panel to the ON position.
NOTE: Both engines must be off for at least five minutes.
- (2) Speak into the microphones for the captain, the first officer, and the first observer, and the area microphone on the P5 overhead panel.
 - (a) If you hear your voice on all four channels through the headset at the headphone jack, there was an intermittent problem.
 - (b) If you can not hear your voice on all four channels through the headset at the headphone jack, then do the Fault Isolation Procedure below.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance for Exist Faults on the MAT display.
 - (a) If the maintenance message is related to the flight interphone system, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If the maintenance message is not related to the flight interphone system, then continue.
- (2) Replace the cockpit voice recorder.

These are the tasks:

Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801,
Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801.

 - (a) Speak into the microphones for the captain, the first officer, and the first observer, and the area microphone on the P5 overhead panel.
 - 1) If hear your voice on all four channels through the headset at the headphone jack, you corrected the fault.
 - (b) If you can not hear your voice on all four channels through the headset at the headphone jack, then continue.
- (3) Replace the cockpit voice recorder panel.

These are the tasks:

Cockpit Voice Recorder Panel Removal, AMM TASK 23-71-02-000-801,
Cockpit Voice Recorder Panel Installation, AMM TASK 23-71-02-400-801.

 - (a) Speak into the microphones for the captain, the first officer, and the first observer, and the area microphone on the P5 overhead panel.
 - 1) If you hear your voice on all four channels through the headset at the headphone jack, you corrected the fault.
- (4) Do this step:
 - (a) Set the voice recorder AUTO/ON switch on the P5 panel to the AUTO position.

————— **END OF TASK** —————

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803. Cockpit Voice Recorder STATUS light or TEST light Problem - Fault Isolation

A. Initial Evaluation

- (1) Make sure that the Data Communication Management Function is serviceable (Data Communications Management Function - System Test, AMM TASK 23-27-00-740-801)
- (2) Make sure that these circuit breakers are closed:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (3) Do this step:
 - (a) Set the voice recorder AUTO/ON switch on the P5 panel to the ON position.
NOTE: Both engines must be off for at least 10 minutes.
- (4) Push the test button on the cockpit voice recorder panel for approximately one half second, then release it.
 - (a) Make sure the STATUS or TEST light comes on momentarily.
 - (b) If the STATUS or TEST light does not come on momentarily, then do the Fault Isolation Procedure below.
 - (c) If the STATUS or TEST light comes on momentarily, then the fault was intermittent.

B. Fault Isolation Procedure

- (1) Look at the Extended Maintenance for Exist Faults on the MAT display.
 - (a) If the maintenance message is related to the flight interphone system, then do these steps:
 - 1) Find the message in the applicable FIM Maintenance Message Index.
 - 2) Do the specified task for the maintenance message.
 - (b) If the maintenance message is not related to the flight interphone system, then continue.
- (2) Look at the BITE indicator on the front panel of the voice recorder.
 - (a) If the BITE indicator comes on and stays on, then replace the cockpit voice recorder.
These are the tasks:
Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801,
Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801.
 - 1) Push the test button on the voice recorder panel for approximately one half second, then release it.
 - a) If the STATUS or TEST light comes on momentarily, you corrected the fault.

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- b) If the STATUS or TEST light does not come on momentarily, then continue.
- (b) If the BITE indicator does not come on, then continue.
- (3) Replace the cockpit voice recorder panel.
- These are the tasks:
- Cockpit Voice Recorder Panel Removal, AMM TASK 23-71-02-000-801,
Cockpit Voice Recorder Panel Installation, AMM TASK 23-71-02-400-801.
- (a) Push the test button on the voice recorder panel for approximately one half second, then release it.
- 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- 2) If the STATUS or TEST light does not come on momentarily, then continue.
- (4) Replace the CVR Dispatch Relay, K23332 (if applicable).
- NOTE:** See WDM 23-71-11 and WDM 23-71-12 for configuration of the voice recorder system.
- (a) Push the test button on the voice recorder panel for approximately one half second, then release it.
- 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- 2) If the STATUS or TEST light does not come on momentarily, then continue.
- (5) Replace the APU BAT BKUP PWR CVR circuit breaker, C23671.
- (a) Push the test button on the voice recorder panel for approximately one half second, then release it.
- 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- 2) If the STATUS or TEST light does not come on momentarily, then continue.
- (6) Replace the AC Undervoltage Sensor relay, K23335.
- (a) Push the test button on the voice recorder panel for approximately one half second, then release it.
- 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- 2) If the STATUS or TEST light does not come on momentarily, then continue.
- (7) Repair the wiring between the CVR dispatch relay, K23332 and its applicable circuit breaker (WDM 23-71-11, WDM 23-71-12).
- (a) Push the test button on the voice recorder panel for approximately one half second, then release it.
- 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- 2) If the STATUS or TEST light does not come on momentarily, then continue.
- (8) Examine the wiring for continuity between the voice recorder and the voice recorder panel (WDM 23-71-11, WDM 23-71-12).

CVR Control

Panel	CVR
DM23477A	DM23001
pin D	pin 15
pin E	pin 16

- (a) Repair the wiring problem that you find.

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- (b) Push the test button on the voice recorder panel for approximately one half second, then release it.
 - 1) If the STATUS or TEST light comes on momentarily, you corrected the fault.
- (9) Do this step:
 - (a) Set the voice recorder AUTO/ON switch on the P5 panel to the AUTO position.

— END OF TASK —

804. Cockpit Voice Recorder has an internal fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43001.

B. Description

ARO 001, 002, 004-999; ARO 003 PRE SB 777-31-0264 AND PRE SB 777-31-0218 OR PRE SB 777-31-0263 OR POST SB 777-31-0227 OR POST SB 777-31-0263 OR POST SB 777-31-0264 OR POST SB 777-31-0218

- (1) The cockpit voice recorder has an internal fault, or no power, or auto-power off is enabled.

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C. Possible Causes

- (1) Cockpit Voice Recorder, M23001
- (2) Therapeutic Oxygen/Misc Switch Module (M35440)
- (3) The voice recorder has no input power

D. Initial Evaluation

- (1) Make sure that these circuit breakers are closed:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

Make sure that these circuit breakers are closed:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	7	C76607	L ENG FUEL/IGN CTRL
G	8	C76606	R ENG FUEL/IGN CTRL

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- (2) Do these steps to prepare the test:
 - (a) Make sure the CVR AUTO/ON switch on the Therapeutic Oxygen/Misc switch panel (P5) is in the AUTO position.
 - (b) Make sure that both (left and right) fuel control switches are in the CUTOFF position (P10).

NOTE: Both engines must be off for at least 10 minutes.
 - (c) Make sure that both (left and right) engine fire handles are in the Stowed (pushed in) position.
- (3) Set the CVR AUTO/ON switch on the Therapeutic Oxygen/Misc switch panel (P5) to the ON position.
- (4) Look for the maintenance message 23-43001 on the MAT:
 - (a) If the MAT shows ACTIVE for the maintenance message 23-43001, then do the Fault Isolation Procedure below.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message 23-43001 (or if the message does not show), then do these steps:
 - 1) Set the CVR AUTO/ON switch on the Therapeutic Oxygen/Misc switch panel (P5) back to the AUTO position.
 - 2) The voice recorder system is good. No further action is necessary.

E. Fault Isolation Procedure - Auto-power off is enabled

- (1) Set the CVR AUTO/ON switch on the Therapeutic Oxygen/Misc switch panel (P5) to the ON position.
- (2) Do a voice recorder test at the CVR control panel (P5):
 - (a) Push the TEST switch on the voice recorder's control panel for approximately one half second.
 - 1) Make sure that LED light comes on.
- (3) Make sure that the MAT does not show maintenance message 23-43001.
- (4) Set the CVR AUTO/ON switch on the Therapeutic Oxygen/Misc switch panel (P5) to the AUTO position.
- (5) Do a voice recorder test at the CVR control panel (P5) for the next ten minutes.
 - (a) Push the TEST switch on the voice recorder's control panel for approximately one half second.
 - 1) For the first ten minutes, make sure that the LED comes on.
 - 2) After ten minutes, make sure that the LED will not come on.
- (6) If the test is satisfactory, then the CVR system is serviceable. No further action is necessary.
- (7) If the test is not satisfactory or the voice recorder system has no power, then continue.

F. Fault Isolation Procedure - The voice recorder has an internal fault

- (1) Replace the cockpit voice recorder, M23001.

These are the tasks:

Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801

Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

G. Fault Isolation Procedure - The voice recorder has no input power

- (1) Examine the 115V AC at the load terminal of the VOX RCDR circuit breaker.
- (a) If you do not find 115V AC at the load terminal of the VOX RCDR circuit breaker, then do these steps:
- 1) Replace this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (b) If you find 115V AC at the load terminal of the VOX RCDR circuit breaker, then do these steps:
- 1) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

- 2) Remove the voice recorder (M23001) (Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801).
- 3) Remove the Therapeutic Oxygen/Misc. Switch Module (M35440).
- 4) Do this check for continuity between the load terminal of VOX RCDR circuit breaker (C23425) and pin 16 of connector DM35440.
- 5) Do this check for continuity between the load terminal of CVR SW circuit breaker (C23673) and pin 26 of connector DM35440.
- 6) Do this check for continuity between these pins at the GEN CTL/IGN L ENG relay (K76104) and these pins at the Therapeutic Oxygen/Misc Switch Module (M35440):

P110	P5
DK76104	DM35440P
D3	29

- 7) Do this check for continuity between these pins at the GEN CTL/IGN R ENG relay (K76204) and these pins at the Therapeutic Oxygen/Misc Switch Module (M35440):

P210	P5
DK76204	DM35440P
D3	18

- 8) Do this check for continuity between these pins at the voice recorder (M23001) and these pins at the Therapeutic Oxygen/Misc Switch Module (M35440):

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E7-1	P5
DM23001	DM35440P
2	17

- 9) If you find a problem with wiring, then do these steps:
 - a) Repair the wiring problem that you found.
 - b) Install the Therapeutic Oxygen/Misc Switch Module (M35440).
 - c) Install the Cockpit Voice Recorder (M23001) (AMM TASK 23-71-01-400-801).
- 10) If you do not find a problem with wiring, then do these steps:
 - a) Replace the Therapeutic Oxygen/Misc Switch Module (M35440).
 - b) Install the Cockpit Voice Recorder (M23001) (AMM TASK 23-71-01-400-801).
- 11) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

H. Repair Confirmation

- (1) Do this task: Cockpit Voice Recorder System - System Test, AMM TASK 23-71-00-730-801.

————— **END OF TASK** —————

805. Cockpit Voice Recorder has no input from Left AIMS on ARINC 429 Bus or is failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43002.

B. Description

- (1) Cockpit Voice Recorder has no input from Left AIMS on ARINC 429 Bus or is failed.

C. Possible Causes

- (1) Cockpit Voice Recorder, M23001
- (2) IOM (M004) in Left AIMS (P11)
- (3) Wiring

D. Initial Evaluation

- (1) To make sure that the DCMF is serviceable, do this task: Data Communications Management Function - System Test, AMM TASK 23-27-00-740-801.
 - (a) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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E. Fault Isolation Procedure

- (1) Remove the Cockpit Voice Recorder, M23001 (Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801).

- (a) Use an analyzer, COM-1562 to examine the ARINC 429 bus activity at connector DM23001 between pins 33 (B-Line-LO) and 34 (A-Line-HI).
- (b) Make sure that the ARINC 429 analyzer shows label 270.
 - 1) If the ARINC 429 analyzer shows label 270, then do these steps:
 - a) Replace the Cockpit Voice Recorder, M23001.
These are the tasks:
Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801
Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801
 - b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - c) If the MAT shows ACTIVE for the maintenance message, then continue.
 - 2) If the ARINC 429 analyzer does not show label 270, do these steps:
 - a) Re-install the Cockpit Voice Recorder, M23001 (Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801).
 - b) Continue the procedure.

- (2) Replace the Input/Output Module (M004) in Left AIMS (P11)

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
 - (a) Remove the Cockpit Voice Recorder, M23001 (Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801).
 - (b) Remove the IOM (M004) module from the left AIMS cabinet, M31101 (Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801).
 - (c) Do a wiring check between these pins of connector DM23001 at the E7-1 shelf and connector D6617 at the E3-1 shelf (WDM 23-71-12:

DM23001		D6617	
33	.....	19	0
34	.....	18	0

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the Cockpit Voice Recorder, M23001 (Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801).
 - 3) Re-install the IOM (004) module in the left AIMS cabinet, M31101 (Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801).

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

806. Cockpit Voice Recorder has an internal fault, no power, or recording is not enabled - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43003.

B. Description

- (1) The Cockpit Voice Recorder has an internal fault, no power, or recording is not enabled.
(2) The Maintenance Message 23-43003 shows when the voice recorder reports both CVR fault and Datalink fault to the central maintenance computer system (CMCS).
(3) If the last engine has been shutdown for more than 10 minutes and the Maintenance Message 23-43003 shows in the MAT, then this message may be a nuisance fault. Do the procedure in the Initial Evaluation to confirm the voice recorder system is serviceable.

C. Possible Causes

- (1) Cockpit Voice Recorder (M23001)
(2) Overhead Panel Cardfile (OPCF) - Left (M23117)
(3) Therapeutic Oxygen/Misc. Switch Module (M35440)
(4) Generator Control / Ignition Relay - Left Engine (K76104)
(5) Generator Control / Ignition Relay - Right Engine (K76204)
(6) Voice Recorder Circuit Breaker (C23425)
(7) CVR SW Circuit Breaker (C23673)
(8) Interval Timer Relay (K23334)
(9) Wiring

D. Circuit Breakers

- (1) Make sure that these circuit breakers are closed:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

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E. Initial Evaluation

- (1) Make sure that the Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (2) Make sure that the engines have been shutdown for more than 10 minutes.
- (3) Set the voice recorder AUTO/ON switch on the P5 panel to the ON position.
- (4) Connect the headphone, STD-1390 to the cockpit voice recorder's control panel.
 - (a) Speak an usual voice into the CVR area microphone.
 - (b) Make sure that you can hear the conversation through the area microphone in the headphone.
- (5) On the MAT or LMAT, make sure that the maintenance message 23-43003 is not displayed.
 - (a) If the message is not displayed and you can hear the conversation through the CVR area microphone, then there is no fault in the voice recorder system. No further maintenance action is necessary.
 - (b) If the message is displayed, then continue.
- (6) If you can hear the conversation through the area microphone, then do these steps:
 - (a) Do this Fault Isolation Procedure: Datalink Message Recording is not enabled.
- (7) If you cannot hear the conversation through the area microphone, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure - CVR Has A Fault

- (1) Replace the Cockpit Voice Recorder (M23001).

These are the tasks:

Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801.

Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the Left Overhead Panel Cardfile (M23117).

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802.

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the Therapeutic Oxygen/Misc. Switch Module (M35440).
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left engine generator control / ignition relay, K76104.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (5) Replace the right engine generator control / ignition relay, K76204.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do a check of wiring from the voice recorder (M23001) to the Left OPCF (M23117):
 - (a) Remove the voice recorder (M23001) (AMM TASK 23-71-01-000-801).
 - (b) Remove the Left Overhead Panel Cardfile (OPCF) (M23117) (AMM TASK 23-93-02-000-802).
 - (c) Do a wiring check between these pins of connector DM23001 at the voice recorder and connector DM23117G at the Left OPCF:

CVR	Left OPCF
DM23001	DM23117G
23	B1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the voice recorder (M23001) (AMM TASK 23-71-01-400-801).
 - 3) Install the Left OPCF (M23117) (AMM TASK 23-93-02-400-802).
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
 - (e) If you do not find a problem with the wiring, then do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Install the Left OPCF (23117) (AMM TASK 23-93-02-400-802).
 - 3) Continue the procedure.
 - (7) Do this check of wiring at the voice recorder (M23001):
 - (a) Make sure that the voice recorder is removed (AMM TASK 23-71-01-000-801).
 - (b) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

Left Power Management Panel, P110

Row	Col	Number	Name
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

- (c) Set the voice recorder AUTO/ON switch on the P5 panel to the ON position.
 - (d) Examine the 115V AC between pin 2 and pin 3 of connector DM23001 on electronics shelf, E7-1.
 - 1) If you do not find a 115V AC, then do these steps:
 - a) Do this check for continuity between pin 3 of connector DM23001 on electronics shelf, E7-1 and ground.
 - <1> If you do not find continuity, then do these steps:
 - <a> Replace the Interval Timer Relay, K23334 at E7-1 electronics shelf.

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- If problem continues, repair the wiring between pin 6 of connector DK23334 and pin 3 of connector DM23001 or the ground wire to pin 8 of connector DK23334.
- <c> Install the voice recorder (M23001) (AMM TASK 23-71-01-400-801).
- <d> If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- <e> If the MAT shows ACTIVE for the maintenance message, then continue.
- <2> If you find continuity, then do these steps:
 - <a> Install the voice recorder (M23001) (AMM TASK 23-71-01-400-801).
 - Continue the procedure.
- b) Do this Fault Isolation Procedure: The Voice Recorder Has No 115V AC Input Power.
- 2) If you find a 115 V AC, then do this step:
 - a) Do this Fault Isolation Procedure: Datalink Message Recording is not enabled.

G. Fault Isolation Procedure - The Voice Recorder Has No 115V AC Input Power

- (1) Examine the 115V AC at the load terminal of the VOX RCDR circuit breaker.
 - (a) If you do not find 115V AC at the load terminal of the VOX RCDR circuit breaker, then do these steps:
 - 1) Replace this circuit breaker:
- (b) If you find 115V AC at the load terminal of the VOX RCDR circuit breaker, then do these steps:
 - 1) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- b) If the MAT shows ACTIVE for the maintenance message, then continue.

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

- 2) Remove the voice recorder (M23001) (Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801).
- 3) Remove the Therapeutic Oxygen/Misc. Switch Module (M35440).
- 4) Do this check for continuity between the load terminal of VOX RCDR circuit breaker (C23425) and pin 16 of connector DM35440.
- 5) Do this check for continuity between the load terminal of CVR SW circuit breaker (C23673) and pin 26 of connector DM35440.

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- 6) Do this check for continuity between these pins at the GEN CTL/IGN L ENG relay (K76104) and these pins at the Therapeutic Oxygen/Misc. Switch Module (M35440):

P110	P5
DK76104	DM35440P
D3	29

- 7) Do this check for continuity between these pins at the GEN CTL/IGN R ENG relay (K76204) and these pins at the Therapeutic Oxygen/Misc Switch Module (M35440):

P210	P5
DK76204	DM35440P
D3	18

- 8) Do this check for continuity between these pins at the voice recorder (M23001) and these pins at the Therapeutic Oxygen/Misc Switch Module (M35440):

E7-1	P5
DM23001	DM35440P
2	17

- 9) If you find a problem with wiring, then do these steps:
- Repair the wiring problem that you found.
 - Install the Therapeutic Oxygen/Misc Switch Module (M35440).
 - Install the Cockpit Voice Recorder (M23001) (AMM TASK 23-71-01-400-801).
 - If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - If the MAT shows ACTIVE for the maintenance message, then continue.

H. Fault Isolation Procedure - Datalink Message Recording is not enabled

- (1) Do this check of the wiring from the voice recorder (M23001) to the Left OPCF (M23117):
- Remove the voice recorder (M23001) (AMM TASK 23-71-01-000-801).
 - Remove the Left OPCF (M23117) (AMM TASK 23-93-02-000-802).
 - Do a wiring check between these pins of connector DM23001 on electronics shelf, E7-1 and the connector DM23117G of the Left OPCF (M23117):

CVR	Left OPCF
DM23001	DM23117G
31	B4

- (d) If you find a problem with wiring, then do these steps:
- Repair the wiring problem that you found.
 - Install the voice recorder (M23001) (AMM TASK 23-71-01-400-801).
 - Install the Left OPCF (M23117) (AMM TASK 23-93-02-400-802).
 - If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring from the voice recorder (M23001) to ground:

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- (a) Remove the voice recorder (M23001) AMM TASK 23-71-01-000-801.
- (b) Do a wiring check between these pins of connector DM23001 on electronics shelf, E7-1 and ground:

CVR	E7-1
	Structure
DM23001	Ground
56	Ground

- (c) If you find a problem with wiring, then do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Install the voice recorder (M23001) (AMM TASK 23-71-01-400-801).
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

I. Repair Confirmation

- (1) Do this task: Cockpit Voice Recorder System - System Test, AMM TASK 23-71-00-730-801.

————— **END OF TASK** —————

807. STATUS light does not come on as specified in Voice Recorder Battery Backup Power functional test - Fault Isolation

A. Description

- (1) STATUS light does not come on as specified in Voice Recorder Battery Backup Power functional test.

B. Possible Causes

- (1) Interval Timer Relay (K23334)
- (2) Undervoltage Sensor Relay (K23335)
- (3) APU Battery Isolation Diode (R23711)
- (4) Main Battery Isolation Diode (R23712)
- (5) APU Battery Backup Power CVR circuit breaker (C23671)
- (6) Main Battery Backup Power CVR circuit breaker (C23672)
- (7) Wiring

C. Circuit Breakers

- (1) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

D. Initial Evaluation

- (1) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (2) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - (a) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (3) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (4) Do a test for the voice recorder at the voice recorder-control panel:
 - (a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - 1) Make sure that the TEST light comes on one time.
- (5) If you see the STATUS or TEST light comes on, then do these steps:
 - (a) Open this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Do a test for the voice recorder at the voice recorder control panel:
 - 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.
- (c) If you do not see the STATUS or TEST light comes on, then do this step:
 - 1) Do this Fault Isolation Procedure: Voice recorder battery backup power problem from the APU battery.
- (d) If you see the STATUS or TEST light comes on, then continue.
- (e) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

Open this circuit breaker:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

- (f) Do a test for the voice recorder at the voice recorder control panel:

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- 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.
- (g) If you do not see the STATUS or TEST light comes on, then do this step:
 - 1) Do this Fault Isolation Procedure: Voice recorder battery backup power problem from the Main battery.
- (h) If you see the STATUS or TEST light comes on, then do these steps:
 - 1) Remove the safety tags and close these circuit breakers but do not close the circuit breaker labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 2) The voice recorder battery backup power system is OK.
- (6) If you do not see the STATUS or TEST light comes on, then continue the procedure below.

E. Fault Isolation Procedure

- (1) Replace the Interval Timer Relay (K23334)
 - (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.

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- (d) Open this circuit breaker:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:

- 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.

- (f) If you see the STATUS or TEST light comes on, then you corrected the problem.

- (g) If you do not see the STATUS or TEST light comes on, then continue.

- (2) Do this check of the wiring from the Interval Timer Relay (K23334) to the voice recorder (M23001):

- (a) Remove the voice recorder (M23001) (AMM TASK 23-71-01-000-801).

- (b) Remove the Interval Timer relay (K23334).

- (c) Do a wiring check between these pins of connector DK23334 at the Interval Timer relay and connector DM23001 at the voice recorder (WDM 23-71-12):

E7-1		E7-1	
DK23334		DM23001	
5	.....	9	0
6	.....	3	0

- (d) If you find a problem in wiring, do these steps:

- 1) Repair the wiring problem that you found.
- 2) Install the Interval Timer relay (K23334).
- 3) Install the voice recorder (AMM TASK 23-71-01-400-801).
- 4) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- 5) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 6) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.

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- a) Make sure that the switch stays in the ON position.
- 7) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 8) Do a test for the voice recorder at the voice recorder-control panel:
 - a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - <1> Make sure that the STATUS light comes on one time.
- 9) If you see the STATUS or TEST light comes on, you corrected the problem.
- 10) If you do not see the STATUS or TEST light comes on, then continue.
- (3) Do this check of the wiring from the Interval Timer Relay (K23334) to ground:
 - (a) Do a wiring check between these pins of connector DK23334 at the Interval Timer relay and ground (WDM 23-71-12):

E7-1	E7-1	
DK23334	Structure	
	ground	
1	structure	0
	ground	
3	structure	0
	ground	

- (b) If you find a problem in wiring, do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Install the Interval Timer relay (K23334).
 - 3) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- 4) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 5) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.

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- 6) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 7) Do a test for the voice recorder at the voice recorder-control panel:

- a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.

<1> Make sure that the STATUS light comes on one time.

- 8) If you see the STATUS or TEST light comes on, you corrected the problem.

- 9) If you do not see the STATUS or TEST light comes on, then continue.

- (4) Do this check of the wiring from the Interval Timer Relay (K23334) to the AC Undervoltage Sensor Relay (K23335):

- (a) Do a wiring check between these pins of connector DK23334 at the Interval Timer relay and connector DK23335 at the AC Undervoltage Sensor relay (WDM 23-71-12):

E7-1		E7-1	
DK23334		DK23335	
2	.....	8	0
2	.....	12	0
7	.....	8	0
7	.....	12	0

- (b) If you find a problem in wiring, do these steps:

- 1) Repair the wiring problem that you found.
- 2) Install the Interval Timer relay (K23334).
- 3) Install the AC Undervoltage Sensor relay (K23335).
- 4) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- 5) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 6) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.

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- 7) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 8) Do a test for the voice recorder at the voice recorder-control panel:
- Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
<1> Make sure that the STATUS light comes on one time.
- 9) If you see the STATUS or TEST light comes on, you corrected the problem.
- 10) If you do not see the STATUS or TEST light comes on, then continue.

F. Voice recorder battery backup power problem from the Main battery

- (1) Replace the AC Undervoltage Sensor Relay (K2335) on the electronics shelf, E7-1.
- Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- Do a test for the voice recorder at the voice recorder control panel:
 - Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - Make sure that the TEST light comes on one time.
 - If you see the STATUS or TEST light comes on, then you corrected the problem.
 - If you do not see the STATUS or TEST light comes on, then continue.

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- (2) Replace the Main Battery Backup Power CVR circuit breaker (C23672) on the P310 panel.
- (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
- 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (d) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:
- 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
- a) Make sure that the TEST light comes on one time.
- (f) If you see the STATUS or TEST light comes on, then you corrected the problem.
- (g) If you do not see the STATUS or TEST light comes on, then continue.
- (3) Replace the Main Battery Isolation Diode (R23712) on the electronics shelf, E7-1.
- (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (d) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:
 - 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.
 - (f) If you see the STATUS or TEST light comes on, then you corrected the problem.
 - (g) If you do not see the STATUS or TEST light comes on, then continue.
- (4) Do this check for 115V AC power at the load terminal of the Main BAT BKUP PWR CVR (C23672) (WDM 23-71-12).
 - (a) If you do not find 115V AC power, then make sure that the Main battery electrical system is serviceable.
 - (b) If you find 115V AC power, then continue.
- (5) Do this check of the wiring between the load terminal of the Main BAT BKUP PWR CVR circuit breaker (C23672) and pin A2 of TB1223DQ for the Main Battery Isolation Diode (R23712) (WDM 23-71-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

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- 3) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 4) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.
- 5) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 6) Do a test for the voice recorder at the voice recorder-control panel:
 - a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - <1> Make sure that the STATUS light comes on one time.
 - 7) If you see the STATUS or TEST light comes on, you corrected the problem.
 - 8) If you do not see the STATUS or TEST light comes on, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (6) Do this check of the wiring between the pin 11 of connector DK23335 and pin B2 of TB1223DQ for the Main Battery Isolation Diode (R23712) (WDM 23-71-12).
- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring problem that you found.
 - 2) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- 3) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 4) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.
- 5) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

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- 6) Do a test for the voice recorder at the voice recorder-control panel:
 - a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - <1> Make sure that the STATUS light comes on one time.
 - 7) If you see the STATUS or TEST light comes on, you corrected the problem.
 - 8) If you do not see the STATUS or TEST light comes on, then continue.
- (b) If you do not find a problem with the wiring, then continue.

G. Voice recorder battery backup power problem from the APU battery

- (1) Replace the AC Undervoltage Sensor Relay (K2335) on the electronics shelf, E7-1.
 - (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (d) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:
 - 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.
 - (f) If you see the STATUS or TEST light comes on, then you corrected the problem.
 - (g) If you do not see the STATUS or TEST light comes on, then continue.
- (2) Replace the APU Battery Backup Power CVR circuit breaker (C23671) on the APU auxiliary panel, P49.



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- (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
- 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (d) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:
- 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
- a) Make sure that the TEST light comes on one time.
- (f) If you see the STATUS or TEST light comes on, then you corrected the problem.
- (g) If you do not see the STATUS or TEST light comes on, then continue.
- (3) Replace the APU Battery Isolation Diode (R23711) on the electronics shelf, E7-1.
- (a) Remove the safety tags and close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- (b) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- (c) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - 1) Make sure that the voice recorder AUTO/ON switch stays in the ON position.
- (d) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (e) Do a test for the voice recorder at the voice recorder control panel:
 - 1) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - a) Make sure that the TEST light comes on one time.
 - (f) If you see the STATUS or TEST light comes on, then you corrected the problem.
 - (g) If you do not see the STATUS or TEST light comes on, then continue.
- (4) Do this check for 115V AC power at the load terminal of the APU BAT BKUP PWR CVR (C23671) (WDM 23-71-12).
 - (a) If you do not find 115V AC power, then make sure that the APU battery electrical system is serviceable.
 - (b) If you find 115V AC power, then continue.
- (5) Do this check of the wiring between the load terminal of the APU BAT BKUP PWR CVR circuit breaker (C23671) and pin A4 of TB1223DQ for the APU Battery Isolation Diode (R23711) (WDM 23-71-12).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Close these circuit breakers but do not close the circuit breaker(s) labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

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- 3) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 4) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.
- 5) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- 6) Do a test for the voice recorder at the voice recorder-control panel:
 - a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - <1> Make sure that the STATUS light comes on one time.
 - 7) If you see the STATUS or TEST light comes on, you corrected the problem.
 - 8) If you do not see the STATUS or TEST light comes on, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (6) Do this check of the wiring between the pin 6 of connector DK23335 and the pin B4 of TB1223DQ for the APU Battery Isolation Diode (R23711) (WDM 23-71-12).
- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring problem that you found.
 - 2) Close these circuit breakers but do not close the circuit breaker labeled as INOP:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C23671	APU BAT BKUP PWR CVR

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
M	6	C23673	CVR SW

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	13	C23672	MAIN BAT BKUP PWR CVR

- 3) Make sure that Data Communication Management Function is serviceable (AMM TASK 23-27-00-740-801).
- 4) Set the voice recorder AUTO/ON switch on the Therapeutic Oxygen/Misc Switch Module to the ON position.
 - a) Make sure that the switch stays in the ON position.
- 5) Open this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

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- 6) Do a test for the voice recorder at the voice recorder-control panel:
 - a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 <1> Make sure that the STATUS light comes on one time.
- 7) If you see the STATUS or TEST light comes on, you corrected the problem.

H. Repair Confirmation

- (1) Do this task: Cockpit Voice Recorder System - CVR Battery Backup Power Functional Test, AMM TASK 23-71-00-720-801.

————— END OF TASK —————

808. STATUS light does not come on in air mode during voice recorder system test

A. Description

- (1) Do this task when the STATUS light does not come on in air mode during the voice recorder system test.

B. Possible Causes

- (1) Air/Ground Relay (K32314)
- (2) Wiring

C. Circuit Breakers

- (1) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

D. Initial Evaluation

- (1) Make sure that the Data Communication Management Function (DCMF) is serviceable (AMM PAGEBLOCK 23-27-00/501).
- (2) Make sure that the voice recorder AUTO/ON switch is in the AUTO position.
- (3) Make sure that the left and right engine fuel/ignition control switches are in the CUTOFF position (P10) for more than 10 minutes.
- (4) Set the airplane in air mode simulation (AIR/GROUND SYSTEM (AGS) - MAINTENANCE PRACTICES, AMM 32-09-00/201).
- (5) Do this test:
 - (a) Push the TEST switch on the cockpit voice recorder panel for approximately one half second.
 - 1) Make sure that the STATUS light comes on once.
- (6) If you see the STATUS or TEST light come on, then do these steps:
 - (a) Set the airplane back to the ground mode configuration (AIR/GROUND SYSTEM (AGS) - MAINTENANCE PRACTICES, AMM 32-09-00/201).
 - (b) The voice recorder system is OK.
- (7) If you do not see the STATUS or TEST light come on, then do the fault isolation procedure below.

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E. Fault Isolation Procedure

- (1) Replace the air/ground relay (K32314).
- (2) Do the steps in the Initial Evaluation.
 - (a) If you see the STATUS or TEST light come on, then you corrected the problem.
 - (b) If you do not see the STATUS or TEST light come on, then continue.
- (3) Do this check of the wiring from the VOX RCDR circuit breaker to the air/ground relay (K32314):

- (a) Open this circuit breaker and install safety tag:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR

- (b) Remove the air/ground relay (K32314).
 - (c) Do a check for continuity between pin 2 of VOX RCDR circuit breaker (C23425) and pin A2 of connector DK32314 at the air/ground relay (K32314) (WDM 23-71-12).
 - (d) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Install the air/ground relay (K32314).
 - 3) Close this circuit breaker:
- #### Left Power Management Panel, P110
<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23425	VOX RCDR
- 4) Do the steps in the Initial Evaluation.
 - a) If you see the STATUS or TEST light come on, you corrected the problem.
 - b) If you do not see the STATUS or TEST light come on, then continue.
 - (4) Do this check of the wiring from the voice recorder (M23001) to the air/ground relay (K32314):
 - (a) Remove the voice recorder (M23001) (Cockpit Voice Recorder Removal, AMM TASK 23-71-01-000-801).
 - (b) Remove the air/ground relay (K32314).
 - (c) Do a check for continuity between pin 2 of connector DM23001 at the voice recorder (M23001) and pin A1 of connector DK32314 at the air/ground relay (K32314) (WDM 23-71-12).
 - (d) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring problem that you found.
 - 2) Install the air/ground relay (K32314).
 - 3) Install the voice recorder (M23001) (Cockpit Voice Recorder Installation, AMM TASK 23-71-01-400-801).
 - 4) Do the steps in the Initial Evaluation.
 - a) If you see the STATUS or TEST light come on, you corrected the problem.



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F. Repair Confirmation

- (1) Do this task: Cockpit Voice Recorder System - System Test, AMM TASK 23-71-00-730-801.

———— **END OF TASK** ————

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811. VIDEO CAMERA FAIL Fault Message - Fault Isolation

A. Description

- (1) This task gives the steps to correct the Electronic Flight Bag (EFB) fault log message:
 - (a) VIDEO CAMERA FAIL
- (2) This fault message shows on the FAULT LOG page, and on the SYSTEM PAGE (system fault log).
 - (a) The system fault log identifies which of the three cameras is unserviceable.
- (3) This fault occurs when the video server unit (VSU), can not sense a video signal from one, or more cameras.
- (4) This problem causes the captain's, and first officer's EFBs to show the same fault messages, at the same time.
 - (a) This fault can not occur one EFB side only.

B. Possible Causes

- (1) Camera
- (2) Camera control unit
- (3) Video server unit (VSU), M44232
- (4) Wiring

C. Related Data

- (1) WDM 23-70-11.
- (2) 46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, 46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303.

D. Initial Evaluation

- (1) Do a check of the FAULT LOG page as follows:
 - (a) From the MAIN MENU, push the SYSTEM PAGE button, or adjacent Line Select Key (LSK).
 - (b) Push the EFB MAINTENANCE button.
 - (c) Push the FAULT LOG button.
 - 1) Find the message VIDEO CAMERA FAIL.
NOTE: The DU shows new faults as white in color.
 - 2) Make a record each new fault, and include the time-stamp data.
- (2) Examine the operation of the EFB VIDEO application:
 - (a) Push the MENU bezel key on the captain's, or first officer's EFB Display Unit (DU).
 - (b) From the MAIN MENU, push the VIDEO button, or adjacent LSK.
NOTE: The application can take approximate five seconds to show video, and make the touchscreen buttons active.
 - (c) Make sure that the left, door, and right cameras show video on the DU.
 - 1) Make a record of the camera, or cameras that are not serviceable.
 - (d) Do the check again on the side-opposite DU.
 - 1) If the captain's, and first officer's VIDEO applications operate differently, then do the VIDEO application procedure below.

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- 2) If the captain's and first officer's VIDEO applications operate the same, then continue.
- (e) Make sure that the left, door, and right cameras show video on the DU.
 - 1) If all three video signals are not serviceable, then do the Video Server Unit (VSU) procedure below.
 - 2) If one or more video signals is serviceable, then do the camera and control unit procedure that follows.

E. Fault Isolation Procedure - Video Server Unit

- (1) Make sure that this circuit breaker is closed:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C23479	F/D VIDEO SURVEILLANCE SYSTEM-EFB

- (a) If the breaker was open, do again the initial evaluation.
- (b) If the breaker was closed, then continue.
- (2) Make sure the VSU has power as follows:
 - (a) Lower the ceiling access panel.
 - (b) Examine the POWER LED on the VSU.
 - 1) Make sure the POWER LED is green in color.
 - 2) If the POWER LED is red in color or is not on, do the steps that follow:
 - a) Open this circuit breaker and install safety tag:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C23479	F/D VIDEO SURVEILLANCE SYSTEM-EFB

- b) Disconnect connector DB44232A from the VSU.
- c) Remove the safety tag and close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C23479	F/D VIDEO SURVEILLANCE SYSTEM-EFB

- d) Examine the wiring for 115V ac (volts alternating current) on pin A10 (WDM 23-70-11).
- e) If you find 115V ac at pin A10, replace the VSU. These are the tasks:
Video Server Unit Removal, AMM TASK 23-75-09-000-801 and
Video Server Unit Installation, AMM TASK 23-75-09-400-801.
- f) If you do not find 115V ac at pin A10, examine and repair the wiring between the circuit breaker and the VSU.
- 3) Do again the check of the VIDEO application.
 - a) If the DU shows video from the left, door, and right cameras, you have corrected the problem.



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F. Fault Isolation Procedure - Camera and Camera Control Unit

- (1) Replace the applicable camera. These are the tasks:
Video Camera Removal, AMM TASK 23-75-01-000-808-001 and
Video Camera Installation, AMM TASK 23-75-01-400-808-001.
 - (a) Do again the check of the VIDEO application.
 - 1) If the DU shows video from the left, door, and right cameras and the fault message(s) do not show with a new date/time stamp, then you corrected the fault.
 - 2) If the fault continues, go to the next step.
- (2) Replace the applicable CCU. These are the tasks:
Camera Control Unit Removal, AMM TASK 23-75-07-000-802 and
Camera Control Unit Installation, AMM TASK 23-75-07-400-802.
 - (a) Do again the check of the VIDEO application.
 - 1) If the DU shows video from the left, door, and right cameras and the fault message(s) do not show with a new date/time stamp, then you corrected the fault.

G. Fault Isolation Procedure - VIDEO Application

- (1) Install the VIDEO application. This is the task:
Electronic Unit Software Installation Using Portable Data Loader, AMM TASK 46-11-03-470-802.

46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, (46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303).

H. Repair Confirmation

- (1) If the VIDEO application operates correctly, then you corrected the problem. This is the task:
System Test, AMM TASK 23-75-00-730-801.

————— END OF TASK —————

812. VIDEO SYSTEM UNAVAILABLE Problems - Fault Isolation

A. Description

- (1) This task gives the steps to correct the video problem on EFB as follows:
 - (a) The words NO VIDEO shows on the VIDEO SURVEILLANCE page.
 - (b) The functions on the VIDEO SURVEILLANCE page are disabled.
- (2) This problem occurs after the video signal from the video server unit (VSU) to the EFB is unserviceable for five seconds.
NOTE: The VSU transmits video to the two EUs as digital data over Ethernet.
- (3) This problem can show on the captains or first officer's EFB, or the two at the same time.
- (4) After this problem occurs, the video application automatically connects again to the VSU. If successful, the application initiates a 10 second buffer of the signal, before video can show again on the DU. This 10 second interval is its normal operation.
- (5) This problem does not cause a FAULT LOG message.

B. Possible Causes

- (1) Video server unit, M44232.
- (2) Wiring.

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- (3) Software.
- (4) EU-L, N46102, or EU-R, N46202.

C. Related Data

- (1) WDM 23-70-11.
- (2) 46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, 46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303.

D. Initial Evaluation

- (1) On the captain's and first officer's EFB, examine the SYSTEM FAULT LOG on the SYSTEM page.

NOTE: If the problem shows on the captain's and first officer's DUs, then the problem is likely to be the VSU. If the problem shows only on one DU, then the problem is likely to be the EU software.

- (a) Push the MENU bezel key.
- (b) Push the SYSTEM PAGE button, or adjacent LSK.
- (c) Find the message VIDEO SYSTEM UNAVAILABLE.
 - 1) Make a record of the time-stamp data.
- (2) Do a check of the VIDEO application as follows:
 - (a) From the EFB MAIN MENU, push the VIDEO button, or adjacent LSK.

NOTE: The application can take approximately 10 seconds to show the video signal.

 - 1) If the DU shows continuous video, and all three cameras operate correctly, then the problem is intermittent.
 - 2) If the VIDEO SURVEILLANCE page shows the words NO VIDEO, and the functions do not operate, do as follows:
 - a) If the captain's and F/O's EFB each have the problem, do the Fault Isolation Procedure - Two EFBs With Video Unserviceable, that follows.
 - b) If only one EFB shows the problem, do the Fault Isolation Procedure - One EFB Video Unserviceable, that follows.

E. Fault Isolation Procedure - Two EFBs With Video Unserviceable

- (1) Open and close this circuit breaker:

Right Power Management Panel, P210

Row	Col	Number	Name
A	2	C23479	F/D VIDEO SURVEILLANCE SYSTEM-EFB

- (a) Let the VSU operate for approximately one minute.

NOTE: A serviceable VSU takes approximately one minute to reboot.
- (b) Do a check of the VIDEO application on EFB.
 - 1) If the VIDEO application operates correctly, then the problem is intermittent.
 - 2) If the VIDEO application does not operate, or the message NO VIDEO shows again, then continue.
- (2) Restart the applicable EFB as follows:
 - (a) Push the MENU bezel key.

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- (b) Push the SYSTEM PAGE button, or adjacent LSK.
- (c) Push the RESTART button.
 - 1) Let the EFB boot up again, and show the MAIN MENU.
NOTE: To restart the EFB can take approximately eight minutes.
- (d) From the MAIN MENU, push the VIDEO button.
 - 1) If the VIDEO application operates correctly, then you corrected the problem.
 - 2) If the VIDEO application does not operate correctly, then continue.
- (3) Examine the LED lamps on the Video Server Unit.
 - (a) Open the ceiling access panel adjacent to the VSU.
 - (b) With the VSU energized, make sure that the four LED indicator lamps show green in color:
 - POWER (electrical input)
 - HDD (hard disk drive condition)
 - ENET (Ethernet activity)
 - BITE (camera condition).
 - 1) Make sure that the four lamps (HDD, ENET, AND BITE) show green in color. If one or more LEDs is red, replace the VSU. Do these tasks:
Video Server Unit Removal, AMM TASK 23-75-09-000-801
Video Server Unit Installation, AMM TASK 23-75-09-400-801
 - 2) If the POWER LED does not show (red or green), then continue.
- (4) Open this circuit breaker and install safety tag:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	2	C23479	F/D VIDEO SURVEILLANCE SYSTEM-EFB

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Breaker C23479	VSU, M44232
D21010P	DB44232A
21	A10 0

- (a) If you find a problem, repair the applicable wiring and connectors.
(SWPM 20-10-13).

F. Fault Isolation Procedure - One EFB Video Unserviceable

- (1) Restart the applicable EFB as follows:
 - (a) Push the MENU bezel key.
 - (b) Push the SYSTEM PAGE button, or adjacent LSK.
 - (c) Push the RESTART button.
 - 1) Let the EFB boot-up again, and show the MAIN MENU.
NOTE: The EFB start-up sequence can take approximately eight minutes.
 - (d) From the MAIN MENU, push the VIDEO button.
 - 1) If the VIDEO application operates correctly, then you corrected the problem.

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- 2) If the VIDEO application does not operate correctly, then continue.
- (2) Install the VIDEO application. This is the task:
Electronic Unit Software Installation Using Portable Data Loader, AMM TASK 46-11-03-470-802.
46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, (46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303).
 - (a) Make sure that the VIDEO application operates correctly.
 - (b) Make sure that there is no new faults in the EFB fault log.
 - (c) If VIDEO operates correctly, then you have corrected the problem.
 - (d) If the problem remains, then continue.
- (3) Do a check of the EFB software. Do this task:
Electronic Unit - Software Check, AMM TASK 46-11-03-860-803
 - (a) If the FVUSUPC or FVUUSRC files is missing or unserviceable, then install them again.
This is the task:
Electronic Unit Software Installation Using Portable Data Loader, AMM TASK 46-11-03-470-802.
 - (b) If the If the FVUSUPC or FVUUSRC files show white in color, contact your EFB software support. They must make sure that the file is serviceable.

G. Repair Confirmation

- (1) If the VIDEO application operates correctly, then you corrected the problem. This is the task:
System Test, AMM TASK 23-75-00-730-801.

————— END OF TASK —————

813. FVUSUPC MISSING OR INVALID Fault Message - Fault Isolation

A. Description

- (1) This task gives the steps to correct the EFB fault log message:
 - (a) FVUSUPC MISSING OR INVALID
NOTE: FVUSUPC refers to flight video unit-supplier configuration.
- (2) This fault message shows on the EFB FAULT LOG page, and on the SYSTEM PAGE maintenance message log.
- (3) This fault causes the VIDEO button on the EFB MAIN MENU to be unserviceable (grayed out).
- (4) This fault occurs when the VIDEO application senses that the data files FVUSUPC is missing or unserviceable.

B. Possible Causes

- (1) Software

C. Related Data

- (1) 46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, 46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303.

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D. Initial Evaluation

- (1) Do a check of the EFB fault log as follows:
 - (a) From the MAIN MENU, push the SYSTEM PAGE button, or adjacent LSK.
 - (b) Push the EFB MAINTENANCE button.
 - (c) Push the FAULT LOG button.
 - 1) Make a record each new fault, and include the time-stamp data.
NOTE: The DU shows new faults as white in color.
- (2) Do a check of the SYSTEM CONFIG page as follows:
 - (a) Push the BACK (<=) bezel key to show again the EFB MAINTENANCE page.
 - (b) From the EFB MAINTENANCE page, push the SYSTEM CONFIG button.
 - 1) If the software parts identified as FVUSUPC is missing, then do the fault isolation procedure that follows.
 - 2) If the software part FVUSUPC shows amber or cyan in color, then do the fault isolation procedure that follows.
NOTE: If the part shows amber in color, or stays cyan in color for more than two minutes, then the part is unserviceable.
 - 3) If FVUSUPC shows white in color, then tell your EFB software support group about the fault. They must make sure that the part is serviceable.

E. Fault Isolation Procedure

- (1) Install the VIDEO application. This is the task:
Electronic Unit Software Installation Using Portable Data Loader, AMM TASK 46-11-03-470-802.
46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, (46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303).
 - (a) Make sure that the VIDEO application operates correctly.
 - (b) Make sure that there is no new faults in the EFB fault log.

F. Repair Confirmation

- (1) If the VIDEO application operates correctly, then you corrected the problem. This is the task:
System Test, AMM TASK 23-75-00-730-801.

————— END OF TASK —————

814. FVUUSRC MISSING OR INVALID Fault Message - Fault Isolation

A. Description

- (1) This task gives the steps to correct the EFB fault log message:
 - (a) FVUUSRC MISSING OR INVALID
NOTE: FVUUSRC refers to flight video unit-user configuration.
- (2) This fault message shows on the EFB FAULT LOG page, and on the SYSTEM PAGE maintenance message log.
- (3) This fault causes the VIDEO button on the EFB MAIN MENU to be unserviceable (grayed out).
- (4) This fault occurs when the VIDEO application senses that the data files FVUUSRC is missing or unserviceable.

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B. Possible Causes

- (1) Software.

C. Related Data

- (1) 46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, 46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303.

D. Initial Evaluation

- (1) Do a check of the EFB fault log as follows:
 - (a) From the MAIN MENU, push the SYSTEM PAGE button, or adjacent LSK.
 - (b) Push the EFB MAINTENANCE button.
 - (c) Push the FAULT LOG button.
 - 1) Make a record each new fault, and include the time-stamp data.

NOTE: The DU shows new faults as white in color.
- (2) Do a check of the SYSTEM CONFIG page as follows:
 - (a) Push the BACK (<=) bezel key to show again the EFB MAINTENANCE page.
 - (b) From the EFB MAINTENANCE page, push the SYSTEM CONFIG button.
 - 1) If the software parts identified as FVUUSRC is missing, then do the fault isolation procedure that follows.
 - 2) If the software part FVUUSRC shows amber or cyan in color, then do the fault isolation procedure that follows.

NOTE: If the part shows amber in color, or stays cyan in color for more than two minutes, then the part is unserviceable.

 - 3) If FVUUSRC shows white in color, then tell your EFB software support group about the fault. They must make sure that the part is serviceable.

E. Fault Isolation Procedure

- (1) Install the VIDEO application. This is the task:

Electronic Unit Software Installation Using Portable Data Loader, AMM TASK 46-11-03-470-802.

46-11 Crew Information System - Task Support, PAGEBLOCK 46-11-00/301, (46-11 TASK SUPPORT Figure 301 or 46-11 TASK SUPPORT Figure 302 or 46-11 TASK SUPPORT Figure 303).

 - (a) Make sure that the VIDEO application operates correctly.
 - (b) Make sure that there is no new faults in the EFB fault log.

F. Repair Confirmation

- (1) If the VIDEO application operates correctly, then you corrected the problem. This is the task:

System Test, AMM TASK 23-75-00-730-801.

————— END OF TASK —————

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801. Flight Compartment Outlet Unit LED Problems - Fault Isolation

A. General

- (1) Use this task when the PC Power System outlet unit (OU) status LED is red in color or does not come on.

NOTE: Normal operation is when the OU status LED is green in color. This indicates power is available and the outlet is enabled. If the OU status LED is red in color or does not come on, this indicates that power is not available for use or a fault exists in the OU or ISPS. In case the power is not available because the system has reached the defined maximum power-use limit, the new user must wait for another user to disconnect. At that time, the status LED will change to green in color. This is also normal operation.

B. Initial Evaluation

- (1) Make sure the power input cable is securely connected to the OU.
 - (a) Test the system again by cycling the applicable circuit breaker.
 - (b) If the LED is green in color, there was an intermittent fault.
 - (c) If the LED does not come on or is red in color, do the fault isolation task below.

C. Fault Isolation Procedure

- (1) If the OU status LED does not come on or is red in color, do the steps that follow:
 - (a) Examine all OU status LEDs in the flight compartment.
 - (b) If only one OU status LED in the flight compartment does not come on or is red in color, then do the steps that follow:
 - 1) Replace the applicable OU. These are the tasks:
Outlet Unit Removal, AMM TASK 23-82-01-000-801,
Outlet Unit Installation, AMM TASK 23-82-01-400-801.
 - 2) If the OU status LED changes to green in color, then you corrected the fault.
 - 3) If the problem continues, examine the wiring harness between the ISPS and the OU.
 - a) If you find a problem, repair or replace the applicable harness.
 - 4) If the OU status LED changes to green in color, then you corrected the fault.
 - (c) If all the OU status LEDs in the flight compartment do not come on or are red in color, then do the steps that follow:
 - 1) Replace the ISPS for the seat group. These are the tasks:
In-Seat Power Supply Removal, AMM TASK 23-82-03-000-801,
In-Seat Power Supply Installation, AMM TASK 23-82-03-400-801.
 - 2) If the OU status LEDs change to green in color, then you corrected the fault.

————— **END OF TASK** —————

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801. Flight Controls 629 Bus-L is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81001.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Remove the cover on the P112 panel.
- (2) Inspect the ARINC 629 bus on the P112 panel for damage.
- (3) If you find damage, then do these steps;
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P112 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (4) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR
P	25	C34617	ADIRU PRI PWR L
P	26	C24673	L PSA TRU PWR

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	10	C22603	AFDC-L
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C
P	3	C24672	R PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	3	C34604	ADIRU BAT PWR R
M	4	C24675	L PSA BAT PWR
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

- (5) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L
F	7	C31631	FMC CDU-C

- (6) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (7) If maintenance messages 31-69101, 31-69102, and 34-29101 are shown on the MAT, do these steps:

- (a) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

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Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (b) If maintenance message 23-81001 is not shown on the MAT, do this step:
 - 1) Do the tasks for maintenance messages 31-69101, 31-69102, and 34-29101.
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81001 is shown on the MAT, then continue.
- (d) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (e) If maintenance messages 27-19101, 31-69102, and 34-29101 do not show on the MAT, do the task for message 31-69101.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 27-19101, 31-69102, and 34-29101, are shown on the MAT, continue.
- (g) Remove the safety tags and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (i) If maintenance messages 27-19101, 31-69101, and 34-29101 do not show on the MAT, do the task for message 31-69102.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (j) If maintenance messages 27-19101, 31-69101, and 34-29101 show on the MAT, then continue.

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- (k) Remove the safety tags and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (l) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (m) If maintenance messages 27-19101, 31-69101, and 31-69102, do not show on the MAT, do the task for message 34-29101.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (n) If maintenance messages 27-19101, 31-69101, and 31-69102 show on the MAT, then continue.

- (o) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (p) If maintenance message 23-81001 no longer shows on the MAT, then do the tasks for each message shown on the MAT.

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- 1) Close the circuit breakers that you opened one at a time.
- 2) Do the tasks for each maintenance message that shows on the MAT.
- (q) If maintenance message 23-81001 shows on the MAT, then replace the left flight control bus, P112 (SWPM 20-11-11).
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (8) If maintenance messages, 31-69101, 31-69102, and 34-29101 are not shown on the MAT, then do these steps:
 - (a) Do the tasks for the messages that are shown on the MAT.
 - (b) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (c) If maintenance message 23-81001, is shown on the MAT, then do these steps.
 - 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR
C	7	CBC7-L	PITOT ADM
D	2	CBD2-L	PFC LANE 1
D	4	CBD4-L	PFC LANE 2
D	6	CBD6-L	PFC LANE 3

- 2) If maintenance message 23-81001 is shown on the MAT, then replace the PSA-L, M24101.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,

Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81001 is not shown on the MAT, then do the following:

Remove the safety tags and close these circuit breakers:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	2	CBD2-L	PFC LANE 1
D	4	CBD4-L	PFC LANE 2
D	6	CBD6-L	PFC LANE 3

- 4) If maintenance message 23-81001 is shown on the MAT, then replace the PFC-L, M27106.

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These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81001 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR

- 6) If maintenance message 23-81001 is shown on the MAT, then replace the ACE-L1, M27121.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 7) If maintenance message 23-81001 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	CBC7-L	PITOT ADM

- 8) If maintenance message 23-81001 is shown on the MAT, then replace the ADMP-L, M34102.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 9) If maintenance message 23-81001 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	9	CBC9-L	STATIC ADM

- 10) If maintenance message 23-81001 is shown on the MAT, then replace the ADMS-L, M34101.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

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- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 11) If maintenance message 23-81001 is not shown on the MAT, then continue.
- (d) Remove the safety tag and close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	3	C24672	R PSA TRU PWR

- (e) If maintenance message 23-81001, is shown on the MAT, then do these steps.
- 1) Open this circuit breaker and install safety tag:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR

- 2) If maintenance message 23-81001, is shown on the MAT, then replace the PFC-R, M27206.

These are the tasks:

Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801,

Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81001 is not shown on the MAT, then do the following:
- a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR

- 4) If maintenance message 23-81001, is shown on the MAT, then replace the ACE-R, M27221.

These are the tasks:

Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801,

Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81001 is not shown on the MAT, then continue.
- (f) If maintenance message 23-81001 is not shown on the MAT, then continue.
- (g) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

- (h) If maintenance message 23-81001, is shown on the MAT, then do these steps.

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- 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR
C	3	CBC3-C	SAARU (C)

- 2) If maintenance message 23-81001, is shown on the MAT, then replace the PFC-C, M27306.

These are the tasks:

Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801,

Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81001, is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR

- 4) If maintenance message 23-81001, is shown on the MAT, then replace the ACE-C, M27321.

These are the tasks:

Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801,

Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81001 is not shown on the MAT, then continue.
- 6) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	3	CBC3-C	SAARU (C)

- 7) If maintenance message 23-81001, is shown on the MAT, then replace the SAARU, M34002.

These are the tasks:

Secondary Attitude Air Data Reference Unit Removal, AMM TASK 34-21-02-000-801,

Secondary Attitude Air Data Reference Unit Installation, AMM TASK 34-21-02-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 8) If maintenance message 23-81001 is not shown on the MAT, then continue.
- (i) If maintenance message 23-81001 is not shown on the MAT, then continue.

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- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C22603	AFDC-L

- (k) If maintenance message 23-81001, is shown on the MAT, then replace the Autopilot Flight Director Computer.

These are the tasks:

Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (l) If maintenance message 22-19101 is shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (m) If maintenance message 22-19101 is not shown, then continue.
- (n) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C22602	AFDC-R

- (o) If maintenance message 23-81001, is shown on the MAT, then replace the AFDC-R, M22201.

These are the tasks:

Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (p) If maintenance message 22-19103 is shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (q) If maintenance message 22-19103 is not shown, then continue.
- (r) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	24	C22604	AFDC-C

- (s) If maintenance message 23-81001, is shown on the MAT, then replace the AFDC, M22301.

These are the tasks:

Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

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- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (t) If maintenance message 22-19102 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (u) If maintenance message 22-19102 is not shown, then continue.
- (v) Remove the safety tag and close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR

- (w) If maintenance message 23-81001, is shown on the MAT, then replace the ACE-L2, M27122.

These are the tasks:

Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00,
Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00.

 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (x) If maintenance message 27-13053 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (y) If maintenance message 27-13053 is not shown, then continue.
- (z) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L

- (aa) If maintenance message 23-81001, is shown on the MAT, then replace the CDU-L, N34103.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,
Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ab) If maintenance message 34-69401 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ac) If maintenance message 34-69402 is not shown, then continue.

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- (ad) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	7	C31631	FMC CDU-C

- (ae) If maintenance message 23-81001, is shown on the MAT, then replace the CDU-C.

These are the tasks:

Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801,

Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (af) If maintenance message 34-69106 is shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

802. Flight Controls 629 Bus-C is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81002.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Remove the cover on the P312 panel.
- (2) Inspect the ARINC 629 bus on the P312 panel for damage.
- (3) If you find damage, then do these steps;
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P312 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (4) Turn "OFF" the ADIRU ON/OFF switch (M27042) on the P5 overhead panel.
- (5) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR
P	25	C34617	ADIRU PRI PWR L
P	26	C24673	L PSA TRU PWR

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Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	10	C22603	AFDC-L
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C
P	3	C24672	R PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	2	C34605	ADIRU BAT PWR C
K	3	C34604	ADIRU BAT PWR R
M	4	C24675	L PSA BAT PWR
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

- (6) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	2	C34605	ADIRU BAT PWR C
K	3	C34604	ADIRU BAT PWR R

- (7) Turn "ON" the ADIRU ON/OFF switch (M27042) in the P5 overhead panel.
- (8) If maintenance messages 31-69201, 31-69202, and 34-29201 are shown on the MAT, do these steps:
- (a) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (b) If maintenance message 23-81002 is not shown on the MAT, do this step:
- 1) Do the tasks for maintenance messages 31-69201, 31-69202, and 34-29201.
- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81002 is shown on the MAT, then continue.
- (d) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (e) If maintenance messages 27-19201, 31-69202, and 34-29201 do not show on the MAT, do the task for message 31-69201.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 27-19201, 31-69202, and 34-29201, are shown on the MAT, continue.
- (g) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

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- (h) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (i) If maintenance messages 27-19201, 31-69201, and 34-29201 do not show on the MAT, do the task for message 31-69202.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (j) If maintenance messages 27-19201, 31-69201, and 34-29201 show on the MAT, then continue.
- (k) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (l) Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (m) If maintenance messages 27-19201, 31-69201, and 31-69202, do not show on the MAT, do the task for message 34-29201.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) If maintenance messages 27-19201, 31-69201, and 31-69202 show on the MAT, then continue.

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- (o) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (p) If maintenance message 23-81002 no longer shows on the MAT, then do the tasks for each message shown on the MAT.
- 1) Close the circuit breakers that you opened one at a time.
 - 2) Do the tasks for each maintenance message that shows on the MAT.
- (q) If maintenance message 23-81002 shows on the MAT, then replace the center flight control bus, P312 (SWPM 20-11-11).
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (9) If maintenance messages, 31-69201, 31-69202, and 34-29201 are not shown on the MAT, then do these steps:
- (a) Do the tasks for the messages that are shown on the MAT.
 - (b) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (c) If maintenance message 23-81002, is shown on the MAT, then do these steps.
- 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR
C	7	CBC7-L	PITOT ADM
C	9	CBC9-L	STATIC ADM

- 2) If maintenance message 23-81002 is shown on the MAT, then replace the PFC-L, M27106.

These are the tasks:

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Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81002 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR

- 4) If maintenance message 23-81002 is shown on the MAT, then replace the ACE-L1, M27121.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81002 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	CBC7-C	PITOT ADM

- 6) If maintenance message 23-81002 is shown on the MAT, then replace the ADMP-C, M34302.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 7) If maintenance message 23-81002 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	9	CBC9-C	STATIC ADM

- 8) If maintenance message 23-81002 is shown on the MAT, then replace the ADMS-C, M34301.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,
Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- 9) If maintenance message 23-81002 is not shown on the MAT, then continue.
- (d) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	3	C24672	R PSA TRU PWR

- (e) If maintenance message 23-81002, is shown on the MAT, then do these steps.

- 1) Open this circuit breaker and install safety tag:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR

- 2) If maintenance message 23-81002, is shown on the MAT, then replace the PFC-R, M27206.

These are the tasks:

Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801,

Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81002 is not shown on the MAT, then do the following:
- a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR

- 4) If maintenance message 23-81002, is shown on the MAT, then replace the ACE-R, M27221.

These are the tasks:

Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801,

Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81002 is not shown on the MAT, then continue.
- (f) If maintenance message 23-81002 is not shown on the MAT, then continue.
- (g) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

- (h) If maintenance message 23-81002, is shown on the MAT, then do these steps.

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- 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR
C	3	CBC3-C	SAARU (C)
D	2	CBD2-C	PFC LANE 1
D	4	CBD4-C	PFC LANE 2
D	6	CBD6-C	PFC LANE 3

- 2) If maintenance message 23-81002, is shown on the MAT, then replace the PSA-C, M24301.

These are the tasks:

Power Supply Assembly Removal, AMM TASK 24-35-01-000-801,

Power Supply Assembly Installation, AMM TASK 24-35-01-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81002, is not shown on the MAT, then do the following:
 - a) Remove the safety tags and close these circuit breakers:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	2	CBD2-R	PFC LANE 1
D	4	CBD4-R	PFC LANE 2
D	6	CBD6-R	PFC LANE 3

- 4) If maintenance message 23-81002, is shown on the MAT, then replace the PFC-C, M27306.

These are the tasks:

Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801,

Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81002, is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR

- 6) If maintenance message 23-81002, is shown on the MAT, then replace the ACE-C, M27321.

These are the tasks:

Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801,

Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- 7) If maintenance message 23-81002 is not shown on the MAT, then continue.
- 8) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	3	CBC3-C	SAARU (C)

- 9) If maintenance message 23-81002, is shown on the MAT, then replace the SAARU, M34002.

These are the tasks:

Secondary Attitude Air Data Reference Unit Removal, AMM
TASK 34-21-02-000-801,

Secondary Attitude Air Data Reference Unit Installation, AMM
TASK 34-21-02-400-801.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- 10) If maintenance message 23-81002 is not shown on the MAT, then continue.
- (i) If maintenance message 23-81002 is not shown on the MAT, then continue.
- (j) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C22603	AFDC-L

- (k) If maintenance message 23-81002, is shown on the MAT, then replace the AFDC-L, M22101.

These are the tasks:

Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (l) If maintenance message 22-19201 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (m) If maintenance message 22-19201 is not shown, then continue.
- (n) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C22602	AFDC-R

- (o) If maintenance message 23-81002, is shown on the MAT, then AFDC-R, M22201.

These are the tasks:

Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

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- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (p) If maintenance message 22-19203 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (q) If maintenance message 22-19203 is not shown, then continue.
- (r) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	24	C22604	AFDC-C

- (s) If maintenance message 23-81002, is shown on the MAT, then replace the AFDC-C, M22301.

These are the tasks:
Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801,
Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801.

 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (t) If maintenance message 22-19202 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (u) If maintenance message 22-19202 is not shown, then continue.
- (v) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR

- (w) If maintenance message 23-81002, is shown on the MAT, then replace the left 2 ACE.

These are the tasks:
Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00,
Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00.

 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (x) If maintenance message 27-13054 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

803. Flight Controls 629 Bus-R is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81003.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Remove the cover on the P212 panel.
- (2) Inspect the ARINC 629 bus on the P212 panel for damage.
- (3) If you find damage, then do these steps;
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P212 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (4) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR
P	25	C34617	ADIRU PRI PWR L
P	26	C24673	L PSA TRU PWR

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	10	C22603	AFDC-L
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C
P	3	C24672	R PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R
M	4	C24675	L PSA BAT PWR
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

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Open this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C31630	FMC CDU-R

- (5) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (6) If maintenance messages 31-69301, 31-69302, and 34-29301 are shown on the MAT, do these steps:

- (a) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (b) If maintenance message 23-81003 is not shown on the MAT, do this step:

- 1) Do the tasks for maintenance messages 31-69301, 31-69302, and 34-29301.

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (c) If maintenance message 23-81003 is shown on the MAT, then continue.

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- (d) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (e) If maintenance messages 27-19301, 31-69302, and 34-29301 do not show on the MAT, do the task for message 31-69301.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 27-19301, 31-69302, and 34-29301, are shown on the MAT, continue.
- (g) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (i) If maintenance messages 27-19301, 31-69301, and 34-29301 do not show on the MAT, do the task for message 31-69302.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (j) If maintenance message 23-81003 shows on the MAT, then continue.
- (k) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

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- (l) Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (m) If maintenance messages 27-19301, 31-69301, and 31-69302, do not show on the MAT, do the task for message 34-29301.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) If maintenance messages 27-19301, 31-69301, and 31-69302 show on the MAT, then continue.
- (o) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	25	C34617	ADIRU PRI PWR L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	2	C34618	ADIRU PRI PWR R
N	3	C34619	ADIRU PRI PWR C

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	1	C34603	ADIRU BAT PWR L
K	3	C34604	ADIRU BAT PWR R

- (p) If maintenance message 23-81003 no longer shows on the MAT, then do the tasks for each message shown on the MAT.
- 1) Close the circuit breakers that you opened one at a time.
 - 2) Do the tasks for each maintenance message that shows on the MAT.
- (q) If maintenance message 23-81003 shows on the MAT, then replace the right flight controls bus, P212 (SWPM 20-11-11).
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (7) If maintenance messages, 31-69301, 31-69302, and 34-29301 are not shown on the MAT, then do these steps:

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- (a) Do the tasks for the messages that are shown on the MAT.
- (b) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	26	C24673	L PSA TRU PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	4	C24675	L PSA BAT PWR

- (c) If maintenance message 23-81003, is shown on the MAT, then do these steps.

- 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR
C	7	CBC7-L	PITOT ADM
C	9	CBC9-L	STATIC ADM

- 2) If maintenance message 23-81001 is shown on the MAT, then replace the PFC-L, M27106. These are the tasks:

- Power Supply Assembly Removal, AMM TASK 24-35-01-000-801
- Power Supply Assembly Installation, AMM TASK 24-35-01-400-801

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- 3) If maintenance message 23-81001 is not shown on the MAT, then do the following:

- a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-L	ACE PWR

- 4) If maintenance message 23-81003 is shown on the MAT, then replace the ACE-L1, M27121. These are the tasks:

- Power Supply Assembly Removal, AMM TASK 24-35-01-000-801
- Power Supply Assembly Installation, AMM TASK 24-35-01-400-801

- a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- 5) If maintenance message 23-81003 is not shown on the MAT, then do the following:

- a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	CBC7-L	PITOT ADM

- 6) If maintenance message 23-81003 is shown on the MAT, then replace the ADMP-R, M34202. These are the tasks:

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- Power Supply Assembly Removal, AMM TASK 24-35-01-000-801
 - Power Supply Assembly Installation, AMM TASK 24-35-01-400-801
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 7) If maintenance message 23-81003 is not shown on the MAT, then do the following:
- a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Left, M24101

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	9	CBC9-L	STATIC ADM

- 8) If maintenance message 23-81003 is shown on the MAT, then replace the ADMS-R, M34201. These are the tasks:
- Power Supply Assembly Removal, AMM TASK 24-35-01-000-801
 - Power Supply Assembly Installation, AMM TASK 24-35-01-400-801
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 9) If maintenance message 23-81003 is not shown on the MAT, then continue.
- (d) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	3	C24672	R PSA TRU PWR

- (e) If maintenance message 23-81003, is shown on the MAT, then do these steps:
- 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR
D	2	CBD2-R	PFC LANE 1
D	4	CBD4-R	PFC LANE 2
D	6	CBD6-R	PFC LANE 3

- 2) If maintenance message 23-81003, is shown on the MAT, then replace the PSA-R, M24201. These are the tasks:
- Power Supply Assembly Removal, AMM TASK 24-35-01-000-801
 - Power Supply Assembly Installation, AMM TASK 24-35-01-400-801
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 3) If maintenance message 23-81003, is not shown on the MAT, then do the following:
- a) Remove the safety tags and close these circuit breakers:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	2	CBD2-R	PFC LANE 1
D	4	CBD4-R	PFC LANE 2

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Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	CBD6-R	PFC LANE 3

- 4) If maintenance message 23-81003, is shown on the MAT, then replace the PFC-R, M27206. These are the tasks:
 - Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801
 - Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81003 is not shown on the MAT, then do the following:
 - a) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Right, M24201

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-R	ACE PWR

- 6) If maintenance message 23-81003, is shown on the MAT, then replace the ACE-R, M27221. These are the tasks:
 - Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801
 - Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 7) If maintenance message 23-81003 is not shown on the MAT, then continue.
- (f) If maintenance message 23-81003 is not shown on the MAT, then continue.
- (g) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	5	C24676	C PSA BAT PWR
M	15	C24674	C PSA TRU PWR

- (h) If maintenance message 23-81003, is shown on the MAT, then do these steps:
 - 1) Open these circuit breakers and install safety tags:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR
C	3	CBC3-C	SAARU (C)

- 2) If maintenance message 23-81003, is shown on the MAT, then replace the PFC-C, M27306. These are the tasks:
 - Primary Flight Computer (PFC) Removal, AMM TASK 27-02-01-000-801
 - Primary Flight Computer (PFC) Installation, AMM TASK 27-02-01-400-802
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- 3) If maintenance message 23-81003, is not shown on the MAT, then do the following:
- Open this circuit breaker and install safety tag:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	CBA1-C	ACE PWR

- 4) If maintenance message 23-81003, is shown on the MAT, then replace the ACE-C, M27321. These are the tasks:
- Actuator Control Electronics (ACE) Removal, AMM TASK 27-02-02-000-801
 - Actuator Control Electronics (ACE) Installation, AMM TASK 27-02-02-400-803
- If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 5) If maintenance message 23-81003 is not shown on the MAT, then continue.
- 6) Remove the safety tag and close this circuit breaker:

Power Supply Assembly Center, M24301

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	3	CBC3-C	SAARU (C)

- 7) If maintenance message 23-81003, is shown on the MAT, then replace the SAARU, M34002. These are the tasks:
- Secondary Attitude Air Data Reference Unit Removal, AMM TASK 34-21-02-000-801
 - Secondary Attitude Air Data Reference Unit Installation, AMM TASK 34-21-02-400-801
- If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- 8) If maintenance message 23-81003 is not shown on the MAT, then continue.
- (i) If maintenance message 23-81003 is not shown on the MAT, then continue.
- (j) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C22603	AFDC-L

- (k) If maintenance message 23-81003, is shown on the MAT, then replace the AFDC-L, M22101. These are the tasks:
- Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
 - Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801
- If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (l) If maintenance message 22-19301 is shown on the MAT, then do the task for that message.
- If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (m) If maintenance message 22-19301 is not shown, then continue.

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- (n) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C22602	AFDC-R

- (o) If maintenance message 23-81003, is shown on the MAT, then replace the AFDC-R, M22201. These are the tasks:
- Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
 - Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (p) If maintenance message 22-19303 is shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (q) If maintenance message 22-19303 is not shown, then continue.
- (r) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	24	C22604	AFDC-C

- (s) If maintenance message 23-81003, is shown on the MAT, then replace the AFDC-C, M22301. These are the tasks:
- Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
 - Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (t) If maintenance message 22-19302 is shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (u) If maintenance message 22-19302 is not shown, then continue.
- (v) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	28	C27608	ACE-L2 PWR

- (w) If maintenance message 23-81003, is shown on the MAT, then replace the ACE-L2, M27122. These are the tasks:
- Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00
 - Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (x) If maintenance message 27-13055 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (y) If maintenance message 27-13055 is not shown, then continue.
- (z) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C31630	FMC CDU-R

- (aa) If maintenance message 23-81003, is shown on the MAT, then replace the CDU-R, N34203. These are the tasks:
 - Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ab) If maintenance message 34-69305 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ac) If maintenance message 34-69305 is not shown, then continue.

————— **END OF TASK** —————

804. System 629 Bus-L is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81004.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE with the maintenance message, then continue.

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- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE with the maintenance message, then continue.
- (3) Remove the cover on the P111 panel.
- (4) Inspect the ARINC 629 bus on the P111 panel for damage.
- (5) If you find damage, then do these steps
- (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
- (b) Re-install the cover on the P111 panel.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) If you do not find damage, do this check of the wiring.
- (a) Disconnect connector D3007P at the P111 panel.
- (b) Remove the cargo liner to get access to the P115 panel.
- (c) Disconnect connector D3009P at the P115 panel.
- (d) Do a wiring check between these pins of connector D3007P at the P111 panel and connector D3009P at the P115 panel (WDM 23-91-11):
- | | | |
|---------------|-------|---------------|
| D3007P | | D3009P |
| pin 1 | ..... | pin 1 |
| pin 2 | ..... | pin 2 |
- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-connect connectors D3007P and D3009P.
- 3) Re-install the cover on the P111 panel and the cargo liner over the P115 panel.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you did not find a problem with the wiring, then continue.
- (g) Re-connect connectors D3007P and D3009P.
- (7) Inspect the bus on the P115 panel for damage.
- (8) If you find damage, do these steps:
- (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
- (b) Re-install the cover on the P115 panel.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (9) If you do not find damage, then continue.

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(10) Open these circuit breakers:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	7	C28603	RFLNG CTRL GND

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	17	C73601	L EDIU 2A
M	18	C73603	L EDIU 1B

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C28625	FUEL QTY 1

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	3	C27601	FSEU 1
E	1	C73605	L EDIU 1A
G	10	C28624	FUEL QTY 2
J	8	C28600	RFLNG CTRL
J	11	C28623	RFLNG QTY

Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	3	C21433	L CTC CHAN 2 (AC)
H	24	C21647	L CTC CHAN 2 (DC)
H	25	C21641	L CTC CHAN 1 (DC)
H	26	C32600	PSEU 1 PRI PWR
J	23	C24618	P210 PSU B ALTN
J	24	C24617	P110 PSU A PRI
M	23	C32621	LG BRAKE CONTROL-BITE/L-COMM
P	15	C24655	P110 PSU B PRI

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Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	2	C24602	R IDG DISC
J	3	C24624	P110 PSU B ALTN
J	6	C24658	P110 PSU A ALTN
J	9	C24684	L GCU/BPCU
L	13	C32601	PSEU 2 PRI PWR

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU
B	9	C24600	R GCU
D	1	C32603	PSEU 1 ALTN PWR
D	2	C32624	PSEU 2 ALTN PWR
H	7	C24606	APU GCU

Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	19	C32617	LG TIRE PRESSURE INDICATOR
N	27	C32619	LG MAIN GEAR STEERING
N	28	C32618	LG BRAKE TEMP MONITOR
P	16	C24657	P210 PSU A ALTN

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L
C	20	C31630	FMC CDU-R
F	7	C31631	FMC CDU-C
F	10	C22603	AFDC-L

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI
P	12	C36612	AIR SPLY R PRI

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
B	10	C24649	BPCU DC
C	1	C36611	AIR SPLY L PRI

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	2	C36613	AIR SPLY L BACKUP
C	7	C24641	P310 PSU A PRI
C	8	C31653	WEU L1
C	9	C31655	WEU L2
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

Open these circuit breakers:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C49602	APUC 2

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	23	C77403	L ENG VIB MON
H	2	C21431	L CTC CHAN 1 (AC)

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	23	C23646	INTERPHONE-STBY F/O
B	25	C23627	INTERPHONE-CAPTAIN
B	26	C23629	INTERPHONE-F/OBS
C	25	C23628	INTERPHONE-F/O

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	13	C36614	AIR SPLY R BACKUP

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	8	C27513	SNSR EXC 1
B	6	C49601	APUC 1
F	6	C23632	PAX ADRS CTRL PRI
F	7	C23633	PAX ADRS CTRL SEC

- (11) Set the A18 S2 and S5 switches on the Left Systems Cardfile (LSCF), P85, to the OFF position.
- (12) Set the A18 S2 and S5 switches on the right Systems Cardfile (RSCF), P84, to the OFF position.
- (13) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2

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Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (14) If maintenance messages 24-39401, 31-69401, and 31-69402 are shown on the MAT, do these steps:

- (a) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C31653	WEU L1
C	9	C31655	WEU L2

- (b) If maintenance message 23-81004 is not shown on the MAT, do this step:
- 1) Do the tasks for maintenance messages 24-39401, 31-69401, and 31-69402.
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81004 is shown on the MAT, then continue.
- (d) Open these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (e) If maintenance messages 31-69401, 31-79401 and 31-69402 do not show on the MAT, do the task for maintenance message 24-39401.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 31-69401, 31-69402, and 31-79401 are shown on the MAT, continue.

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- (g) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (i) If maintenance messages 31-69402, 31-79401, and 24-39401 do not show on the MAT, do the task for message 31-69401.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (j) If maintenance messages 31-69401, 31-79401, and 24-39401 are shown on the MAT, continue.

- (k) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (l) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (m) If maintenance messages 31-69401, 31-79401, and 24-39401 do not show on the MAT, do the task for message 31-69402.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (n) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (o) If maintenance message 23-81004 shows on the MAT, then do the task for message 31-69401.
- 1) If maintenance message 23-81004 no longer shows on the MAT, then do the tasks for each message shown on the MAT.
 - a) Close the circuit breakers that you opened one at a time.
 - b) Do the tasks for each maintenance message that shows on the MAT.
 - 2) If maintenance message 23-81004 shows on the MAT, then replace the left system bus (SWPM 20-11-11).
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (15) If maintenance messages 24-39401, 31-69401, and 31-69402 are not shown on the MAT, then do these steps:
- (a) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C31653	WEU L1
C	9	C31655	WEU L2

- (b) If maintenance message 23-81004, is shown on the MAT, then replace the WEU-L, M31107. These are the tasks:
- Warning Electronic Unit Removal, AMM TASK 31-51-01-000-801
 - Warning Electronic Unit Installation, AMM TASK 31-51-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance messages 31-79401 or 31-79402 are shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (d) If these messages are not shown, then continue.
- (e) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	2	C24602	R IDG DISC

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Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	9	C24600	R GCU

- (f) If maintenance messages 23-81004 or 24-39402 are shown on the MAT, then do the task for 24-39402.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	7	C24606	APU GCU

- (h) If maintenance messages 23-81004 or 24-39403 are shown on the MAT, then do the task for 24-39403.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (i) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C23601	VHF COMM L
D	6	C23603	OPAS 1

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C73605	L EDIU 1A

- (j) If maintenance message 23-81004, is shown on the MAT, then replace the EDIU-L. These are the tasks:
- Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00
 - Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (k) If maintenance messages 73-09401 or 73-09403 are shown on the MAT, then do the task for that message.
- (l) Close these circuit breakers:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	7	C28603	RFLNG CTRL GND

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C28625	FUEL QTY 1

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Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	10	C28624	FUEL QTY 2
J	8	C28600	RFLNG CTRL
J	11	C28623	RFLNG QTY

- (m) If maintenance message 23-81004, is shown on the MAT, then replace the FQPU, M28002. These are the tasks:
- Fuel Quantity Processor Unit (FQPU) - Removal, AMM TASK 28-41-01-000-801
 - Fuel Quantity Processor Unit (FQPU) - Installation, AMM TASK 28-41-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) If maintenance messages 28-29401 is shown on the MAT, then do the task for that message.
- (o) Close these circuit breakers:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C49602	APUC 2

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	6	C49601	APUC 1

- (p) If maintenance message 23-81004, is shown on the MAT, then replace the APUC, M49002. These are the tasks:
- APU Controller (APUC) Removal, AMM TASK 49-61-05-000-801
 - APU Controller (APUC) Installation, AMM TASK 49-61-05-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (q) If maintenance messages 49-19411 is shown on the MAT, then do the task for that message.
- (r) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	8	C27513	SNSR EXC 1
D	3	C27601	FSEU 1

- (s) If maintenance message 23-81004, is shown on the MAT, then replace the FSEU-1. These are the tasks:
- Flap/Slat Electronics Unit (FSEU) Removal, AMM TASK 27-51-01-000-801
 - Flap/Slat Electronics Unit (FSEU) Installation, AMM TASK 27-51-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (t) If maintenance messages 27-21241 is shown on the MAT, then do the task for that message.

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- (u) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	24	C24617	P110 PSU A PRI
P	15	C24655	P110 PSU B PRI

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	3	C24624	P110 PSU B ALTN
J	6	C24658	P110 PSU A ALTN

- (v) If maintenance message 23-81004, is shown on the MAT, then do a check of the computing and communications unit, M24502. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (w) If maintenance messages 24-18841 is shown on the MAT, then do the task for that message.
- (x) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	23	C24618	P210 PSU B ALTN
P	16	C24657	P210 PSU A ALTN

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI

- (y) If maintenance message 23-81004, is shown on the MAT, then do a check of the computing and communications unit, M24506. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (z) If maintenance messages 24-18842 is shown on the MAT, then do the task for that message.
- (aa) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

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- (ab) If maintenance message 23-81004, is shown on the MAT, then do a check of the computing and communications unit, M24510. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ac) If maintenance messages 24-18843 is shown on the MAT, then do the task for that message.
- (ad) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	10	C24649	BPCU DC

- (ae) If maintenance message 23-81004, is shown on the MAT, then replace the BPCU, M24002. These are the tasks:
- BPCU Removal, AMM TASK 24-41-05-000-801
 - BPCU Installation, AMM TASK 24-41-05-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (af) If maintenance messages 24-29400 is shown on the MAT, then do the task for that message.
- (ag) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	6	C24671	BACKUP CONVERTER CONTROL

- (ah) If maintenance message 23-81004, is shown on the MAT, then replace the converter, M24008. These are the tasks:
- Backup Generator Converter Removal, AMM TASK 24-25-09-000-801
 - Backup Generator Converter Installation, AMM TASK 24-25-09-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ai) If maintenance messages 24-49401 is shown on the MAT, then do the task for that message.
- (aj) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	1	C36611	AIR SPLY L PRI
C	2	C36613	AIR SPLY L BACKUP

- (ak) If maintenance message 23-81004, is shown on the MAT, then replace the ASCPC-L, M36111. These are the tasks:
- ASCPC Removal, AMM TASK 36-11-20-000-801
 - ASCPC Installation, AMM TASK 36-11-20-400-801

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- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (al) If maintenance messages 36-19401 is shown on the MAT, then do the task for that message.
- (am) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	12	C36612	AIR SPLY R PRI
P	13	C36614	AIR SPLY R BACKUP

- (an) If maintenance message 23-81004, is shown on the MAT, then replace the ASCPC-R, M36112. These are the tasks:
 - ASCPC Removal, AMM TASK 36-11-20-000-801
 - ASCPC Installation, AMM TASK 36-11-20-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ao) If maintenance messages 36-19402 is shown on the MAT, then do the task for that message.
- (ap) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	27	C32619	LG MAIN GEAR STEERING

- (aq) If maintenance message 23-81004, is shown on the MAT, then replace the MGSCU, M32037. These are the tasks:
 - Main Landing Gear Steering Control Unit (MGSCU) Removal, AMM TASK 32-53-02-020-801
 - Main Landing Gear Steering Control Unit (MGSCU) Installation, AMM TASK 32-53-02-420-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ar) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	23	C77403	L ENG VIB MON

- (as) If maintenance message 23-81004, is shown on the MAT, then replace the AVM-L, M77102. These are the tasks:
 - Airborne Vibration Monitor (AVM) Signal Conditioner Unit Removal, AMM TASK 77-31-03-000-803-H00
 - Airborne Vibration Monitor (AVM) Signal Conditioner Unit Installation, AMM TASK 77-31-03-400-804-H00
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (at) Set the A18 S2 switch on the (LSCF), P85, to the ON position.

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- (au) If maintenance message 23-81004, is shown on the MAT, then replace the ASG-L card in the LSCF, P085A12. These are the tasks:
- ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801
 - ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (av) If maintenance messages 31-18841 is shown on the MAT, then do the task for that message.
- (aw) Set the A18 S2 switch on the (RSCF), P84, to the ON position.
- (ax) If maintenance message 31-81004, is shown on the MAT, then replace the ASG-L card in the RSCF, P084A12. These are the tasks:
- ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801
 - ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ay) If maintenance messages 23-18842 is shown on the MAT, then do the task for that message.
- (az) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	23	C23646	INTERPHONE-STBY F/O
B	25	C23627	INTERPHONE-CAPTAIN
B	26	C23629	INTERPHONE-F/OBS
C	25	C23628	INTERPHONE-F/O

- (ba) If maintenance message 23-81004, is shown on the MAT, then replace the AMU, M23008. These are the tasks:
- Audio Management Unit (AMU) Removal, AMM TASK 23-51-04-000-801
 - Audio Management Unit (AMU) Installation, AMM TASK 23-51-04-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bb) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	6	C23632	PAX ADRS CTRL PRI
F	7	C23633	PAX ADRS CTRL SEC

- (bc) If maintenance message 23-81004, is shown on the MAT, then replace the PA/CI, M23016. These are the tasks:
- Passenger Address/Cabin Interphone Controller (PA/CI) Removal, AMM TASK 23-39-03-000-801
 - Passenger Address/Cabin Interphone Controller (PA/CI) Installation, AMM TASK 23-39-03-400-801

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- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bd) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	10	C22603	AFDC-L

(be) If maintenance message 23-81004, is shown on the MAT, then These are the tasks:

- Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
- Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bf) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	2	C21431	L CTC CHAN 1 (AC)
H	3	C21433	L CTC CHAN 2 (AC)
H	24	C21647	L CTC CHAN 2 (DC)
H	25	C21641	L CTC CHAN 1 (DC)

(bg) If maintenance message 23-81004, is shown on the MAT, then replace the CTC-L, M21631. These are the tasks:

- Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801
- Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bh) If maintenance messages 21-29401 is shown on the MAT, then do the task for that message.

(bi) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	27	C21434	R CTC CHAN 2 (AC)
G	28	C21432	R CTC CHAN 1 (AC)
H	2	C21642	R CTC CHAN 1 (DC)
H	3	C21648	R CTC CHAN 2 (DC)

(bj) If maintenance message 23-81004, is shown on the MAT, then replace the CTC-R, M21632. These are the tasks:

- Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801
- Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bk) If maintenance messages 21-29402 is shown on the MAT, then do the task for that message.

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- (bl) Close this circuit breaker:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	23	C32621	LG BRAKE CONTROL-BITE/L-COMM

- (bm) If maintenance message 23-81004, is shown on the MAT, then replace the BSCU, M32017. These are the tasks:

- Brake System Control Unit (BSCU) Removal, AMM TASK 32-42-01-000-801
 - Brake System Control Unit (BSCU) Installation, AMM TASK 32-42-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bn) If maintenance messages 32-39401 is shown on the MAT, then do the task for that message.

- (bo) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (bp) If maintenance message 23-81004, is shown on the MAT, then replace the OPBC-L, M23112. These are the tasks:

- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801
 - Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bq) If maintenance messages 23-48841 is shown on the MAT, then do the task for that message.

- (br) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (bs) If maintenance message 23-81004, is shown on the MAT, then replace the OPBC-R, M23212. These are the tasks:

- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802
 - Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bt) If maintenance messages 23-48842 is shown on the MAT, then do the task for that message.

- (bu) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	26	C32600	PSEU 1 PRI PWR

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C32603	PSEU 1 ALTN PWR

- (bv) If maintenance message 23-81004, is shown on the MAT, then replace the PSEU-1, M32021. These are the tasks:
- Proximity Sensor Electronics Unit Removal, AMM TASK 32-08-01-000-801
 - Proximity Sensor Electronics Unit Installation, AMM TASK 32-08-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bw) If maintenance messages 32-18841 is shown on the MAT, then do the task for that message.
- (bx) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (by) If maintenance message 23-81004, is shown on the MAT, then replace the PSEU-2, M32025. These are the tasks:
- Proximity Sensor Electronics Unit Removal, AMM TASK 32-08-01-000-801
 - Proximity Sensor Electronics Unit Installation, AMM TASK 32-08-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bz) If maintenance messages 23-48842 is shown on the MAT, then do the task for that message.
- (ca) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L

- (cb) If maintenance message 23-81004, is shown on the MAT, then replace the CDU-L, M34103. These are the tasks:
- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (cc) If maintenance messages 34-69401 is shown on the MAT, then do the task for that message.
- (cd) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	7	C31631	FMC CDU-C

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- (ce) If maintenance message 23-81004, is shown on the MAT, then replace the CDU-C, M34303. These are the tasks:
- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (cf) If maintenance messages 34-69402 is shown on the MAT, then do the task for that message.
- (cg) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C31630	FMC CDU-R

- (ch) If maintenance message 23-81004, is shown on the MAT, then replace the CDU-R, M34203. These are the tasks:
- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ci) If maintenance messages 34-69403 is shown on the MAT, then do the task for that message.

————— END OF TASK —————

805. System 629 Bus-C1 is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81005.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Remove the cover on the P311 panel.
- (2) Inspect the ARINC 629 bus on the P311 panel for damage.
- (3) If you find damage, then do these steps;
- (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P311 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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(4) Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	17	C73601	L EDIU 2A

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	10	C73604	R EDIU 1B

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C73605	L EDIU 1A
E	2	C73606	R EDIU 1A
E	3	C73607	L EDIU 2B
E	4	C73608	R EDIU 2B

Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	24	C22604	AFDC-C

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	21	C27514	SNSR EXC 2
K	4	C27602	FSEU 2
M	13	C31652	WEU R1
M	14	C31654	WEU R2

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	8	C27513	SNSR EXC 1
C	8	C31653	WEU L1
D	3	C27601	FSEU 1
J	6	C31651	AIMS L

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- (5) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C31653	WEU L1
C	9	C31655	WEU L2
E	2	C73606	R EDIU 1A
E	4	C73608	R EDIU 2B

- (6) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502, 73-09504, and 73-09506 are shown on the MAT, do these steps:

- (a) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	17	C73601	L EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C73605	L EDIU 1A
E	3	C73607	L EDIU 2B

- (b) If maintenance message 23-81005 is not shown on the MAT, do this step:
- 1) Do the tasks for maintenance messages 31-79501, 31-79503, 31-69501, 31-69502, 73-09504, and 73-09506.
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81005 is shown on the MAT, then continue.
- (d) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2

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Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (e) If maintenance messages 31-79501, 31-79503, 31-69502, 73-09501, 73-09505, 73-09504, and 73-09506, do not show on the MAT, do the task for message 31-69501.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502, 73-09505, 73-09504, 73-09504, and 73-09506 are shown on the MAT, continue.
- (g) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (i) If maintenance messages 31-79501, 31-79503, 31-69501, 73-09501, 73-09505, 73-09504, and 73-09506 do not show on the MAT, do the task for message 31-69502.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (j) If maintenance message 23-81005 shows on the MAT, then continue.
- (k) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

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- (l) Open these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C73606	R EDIU 1A

- (m) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502 73-09501, and 73-09505, do not show on the MAT, do the task for message 73-09504.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502 73-09501, and 73-09505, show on the MAT, then continue.
- (o) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C73606	R EDIU 1A

- (p) Open this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	4	C73608	R EDIU 2B

- (q) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502 73-09501, and 73-09505, do not show on the MAT, do the task for message 73-09506.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (r) If maintenance messages 31-79501, 31-79503, 31-69501, 31-69502 73-09501, and 73-09505, show on the MAT, then continue.
- (s) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	4	C73608	R EDIU 2B

- (t) If maintenance message 23-81005 no longer shows on the MAT, then do the tasks for each message shown on the MAT.
- 1) Close the circuit breakers that you opened one at a time.
- 2) Do the tasks for each maintenance message that shows on the MAT.

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- (u) If maintenance message 23-81005 shows on the MAT, then replace the center 1 system bus (SWPM 20-11-11).
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (7) If maintenance messages, 31-79501, 31-79503, 31-69501, 31-69502, 73-09504, and 73-09506 are not shown on the MAT, then do these steps:
- (a) Do the tasks for the messages that are shown on the MAT.
- (b) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	13	C31652	WEU R1
M	14	C31654	WEU R2

- (c) If maintenance message 23-81005, is shown on the MAT, then replace the WEU-R, M31207. These are the tasks:
- Warning Electronic Unit Removal, AMM TASK 31-51-01-000-801
 - Warning Electronic Unit Installation, AMM TASK 31-51-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (d) If maintenance messages 31-79502 or 31-79504 are shown on the MAT, then do the task for that message.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If maintenance messages 31-79502 or 31-79594 are not shown, then continue.
- (f) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	21	C27514	SNSR EXC 2
K	4	C27602	FSEU 2

- (g) If maintenance message 23-81005, is shown on the MAT, then replace FSEU-1, M27001. These are the tasks:
- Flap/Slat Electronics Unit (FSEU) Removal, AMM TASK 27-51-01-000-801
 - Flap/Slat Electronics Unit (FSEU) Installation, AMM TASK 27-51-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If maintenance messages 27-28851 is shown on the MAT, then do the task for that message.
- (i) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	21	C27514	SNSR EXC 2
K	4	C27602	FSEU 2

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- (j) If maintenance message 23-81005, is shown on the MAT, then replace the FSEU-2, M27002. These are the tasks:
 - Flap/Slat Electronics Unit (FSEU) Removal, AMM TASK 27-51-01-000-801
 - Flap/Slat Electronics Unit (FSEU) Installation, AMM TASK 27-51-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (k) If maintenance messages 27-28852 is shown on the MAT, then do the task for that message.
- (l) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	24	C22604	AFDC-C

- (m) If maintenance message 23-81005, is shown on the MAT, then replace the AFDC-C, M22301. These are the tasks:
 - Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
 - Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

806. System 629 Bus-R is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81006.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE with the maintenance message, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE with the maintenance message, then continue.
- (3) Remove the cover on the P211 panel.
- (4) Inspect the ARINC 629 bus on the P211 panel for damage.
- (5) If you find damage, then do these steps
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P211 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) If you do not find damage, do this check of the wiring.
 - (a) Disconnect connector D3010P at the P211 panel.
 - (b) Remove the cargo liner to get access to the P215 panel.
 - (c) Disconnect connector D3012P at the P215 panel.
 - (d) Do a wiring check between these pins of connector D3010P at the P211 panel and connector D3012P at the P215 panel (WDM 23-91-11):

D3010P		D3012P
pin 1	.....	pin 1
pin 2	.....	pin 2
- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connectors D3010P and D3012P.
 - 3) Re-install the cover on the P211 panel and the cargo liner over the p215 panel.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you did not find a problem with the wiring, then continue.
- (g) Re-connect connectors D3010P and D3012P.
- (7) Inspect the bus on the P215 panel for damage.
- (8) If you find damage, do these steps:
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P215 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (9) If you do not find damage, then continue.
- (10) Open these circuit breakers:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	7	C28603	RFLNG CTRL GND

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C28625	FUEL QTY 1
N	9	C73602	R EDIU 2A
N	10	C73604	R EDIU 1B

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C73606	R EDIU 1A
G	10	C28624	FUEL QTY 2
J	8	C28600	RFLNG CTRL
J	11	C28623	RFLNG QTY

Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT
H	2	C21431	L CTC CHAN 1 (AC)
H	3	C21433	L CTC CHAN 2 (AC)
H	24	C21647	L CTC CHAN 2 (DC)
H	25	C21641	L CTC CHAN 1 (DC)
H	26	C32600	PSEU 1 PRI PWR
M	23	C32621	LG BRAKE CONTROL-BITE/L-COMM

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	2	C24602	R IDG DISC
J	9	C24684	L GCU/BPCU
L	13	C32601	PSEU 2 PRI PWR

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU
B	9	C24600	R GCU
D	1	C32603	PSEU 1 ALTN PWR
D	2	C32624	PSEU 2 ALTN PWR
H	7	C24606	APU GCU

Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	23	C24618	P210 PSU B ALTN
J	24	C24617	P110 PSU A PRI
P	15	C24655	P110 PSU B PRI
P	16	C24657	P210 PSU A ALTN

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	3	C24624	P110 PSU B ALTN
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI
J	6	C24658	P110 PSU A ALTN

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
B	10	C24649	BPCU DC
C	7	C24641	P310 PSU A PRI
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

Open these circuit breakers:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C49602	APUC 2

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L
C	20	C31630	FMC CDU-R
F	4	C22601	MCP-L
F	7	C31631	FMC CDU-C

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	6	C77400	R ENG VIB MON
F	21	C27514	SNSR EXC 2

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	4	C27602	FSEU 2
M	13	C31652	WEU R1
M	14	C31654	WEU R2
P	12	C36612	AIR SPLY R PRI
P	13	C36614	AIR SPLY R BACKUP

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	6	C49601	APUC 1
C	1	C36611	AIR SPLY L PRI
C	2	C36613	AIR SPLY L BACKUP
F	6	C23632	PAX ADRS CTRL PRI
F	7	C23633	PAX ADRS CTRL SEC

- (11) Set the A18 S2 and S5 switches on the Left Systems Cardfile (LSCF), P85, to the OFF position.
- (12) Set the A18 S2 and S5 switches on the right Systems Cardfile (RSCF), P84, to the OFF position.
- (13) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (14) If maintenance messages 24-39601, 31-69601, and 31-69602 are shown on the MAT, do these steps:
 - (a) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	8	C31653	WEU L1

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	9	C31655	WEU L2

- (b) If maintenance message 23-81006 is not shown on the MAT, do this step:
- 1) Do the tasks for maintenance messages 24-39601, 31-69601, and 31-69602.
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81006 is shown on the MAT, then continue.
- (d) Open these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (e) If maintenance messages 31-69601 and 31-69602 do not show on the MAT, do the task for maintenance message 24-39601.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages 31-69601 and 31-69602 are shown on the MAT, continue.
- (g) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	9	C24684	L GCU/BPCU

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	8	C24601	L GCU

- (i) If maintenance messages 31-69602 and 24-39601 do not show on the MAT, do the task for message 31-69601.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (j) If maintenance messages 31-69601 and 24-39601 are shown on the MAT, continue.
- (k) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (l) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (m) If maintenance messages 31-69601 and 24-39601 do not show on the MAT, do the task for message 31-69602.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (o) If maintenance message 23-81006 shows on the MAT, then do the task for message 31-69601
 - 1) If maintenance message 23-81006 no longer shows on the MAT, then do the tasks for each message shown on the MAT.
 - a) Close the circuit breakers that you opened one at a time.
 - b) Do the tasks for each maintenance message that shows on the MAT.
 - 2) If maintenance message 23-81006 shows on the MAT, then replace the right system bus (SWPM 20-11-11).
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (15) If maintenance messages 24-39601, 31-69601, and 31-69602 are not shown on the MAT, then do these steps:

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- (a) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	13	C31652	WEU R1
M	14	C31654	WEU R2

- (b) If maintenance message 23-81006, is shown on the MAT, then replace the WEU-R, M31207. These are the tasks:

- Warning Electronic Unit Removal, AMM TASK 31-51-01-000-801
- Warning Electronic Unit Installation, AMM TASK 31-51-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (c) If maintenance messages 31-79603 or 31-79604 are shown on the MAT, then do the task for that message.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (d) If maintenance messages 31-79603 or 31-79604 are not shown, then continue.

- (e) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	2	C24602	R IDG DISC

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	9	C24600	R GCU

- (f) If maintenance message 23-81006, is shown on the MAT, then replace the GCU-R, M24205. These are the tasks:

- Generator Control Unit Removal, AMM TASK 24-22-02-000-801
- Generator Control Unit Installation, AMM TASK 24-22-02-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If maintenance message 24-39602 is shown on the MAT, then do the task for that message.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (h) If maintenance message 24-39602 is not shown, then continue.

- (i) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	7	C24606	APU GCU

- (j) If maintenance message 23-81006, is shown on the MAT, then replace the AGCU, M24305. These are the tasks:

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- Generator Control Unit Removal, AMM TASK 24-22-02-000-801
- Generator Control Unit Installation, AMM TASK 24-22-02-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (k) If maintenance message 24-39603 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (l) If maintenance message 24-39603 is not shown, then continue.
- (m) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A
N	10	C73604	R EDIU 1B

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C73606	R EDIU 1A

- (n) If maintenance message 23-81006, is shown on the MAT, then replace the EDIU-R. These are the tasks:
 - Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00
 - Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (o) If maintenance messages 73-09602 or 73-09604 are shown on the MAT, then do the task for that message.
- (p) Close these circuit breakers:

Ground Service/Handling Power Panel, P320

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	7	C28603	RFLNG CTRL GND

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C28625	FUEL QTY 1

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	10	C28624	FUEL QTY 2
J	8	C28600	RFLNG CTRL
J	11	C28623	RFLNG QTY

- (q) If maintenance message 23-81006, is shown on the MAT, then replace the FQPU, M28002. These are the tasks:
 - Fuel Quantity Processor Unit (FQPU) - Removal, AMM TASK 28-41-01-000-801

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- Fuel Quantity Processor Unit (FQPU) - Installation, AMM TASK 28-41-01-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (r) If maintenance messages 28-29601 is shown on the MAT, then do the task for that message.
- (s) Close these circuit breakers:

APU Auxiliary Panel, P49

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C49602	APUC 2

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	6	C49601	APUC 1

- (t) If maintenance message 23-81006, is shown on the MAT, then replace the APUC, M49002. These are the tasks:
 - APU Controller (APUC) Removal, AMM TASK 49-61-05-000-801
 - APU Controller (APUC) Installation, AMM TASK 49-61-05-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (u) If maintenance messages 49-19611 is shown on the MAT, then do the task for that message.
- (v) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	21	C27514	SNSR EXC 2
K	4	C27602	FSEU 2

- (w) If maintenance message 23-81006, is shown on the MAT, then replace the FSEU-2, M27002. These are the tasks:
 - Flap/Slat Electronics Unit (FSEU) Removal, AMM TASK 27-51-01-000-801
 - Flap/Slat Electronics Unit (FSEU) Installation, AMM TASK 27-51-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (x) If maintenance messages 27-21242 is shown on the MAT, then do the task for that message.
- (y) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	24	C24617	P110 PSU A PRI
P	15	C24655	P110 PSU B PRI

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	3	C24624	P110 PSU B ALTN
J	6	C24658	P110 PSU A ALTN

- (z) If maintenance message 23-81006, is shown on the MAT, then do a check of the computing and communications unit, M24502. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (aa) If maintenance messages 24-18861 is shown on the MAT, then do the task for that message.
- (ab) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	23	C24618	P210 PSU B ALTN
P	16	C24657	P210 PSU A ALTN

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
J	4	C24625	P210 PSU B PRI
J	5	C24656	P210 PSU A PRI

- (ac) If maintenance message 23-81006, is shown on the MAT, then do a check of the computing and communications unit, M24506. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ad) If maintenance messages 24-18862 is shown on the MAT, then do the task for that message.
- (ae) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	4	C24635	P310 PSU B PRI
C	7	C24641	P310 PSU A PRI
J	5	C24640	P310 PSU B ALTN
K	5	C24633	P310 PSU A ALTN

- (af) If maintenance message 23-81006, is shown on the MAT, then do a check of the computing and communications unit, M24510. This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (ag) If maintenance messages 24-18863 is shown on the MAT, then do the task for that message.
- (ah) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	10	C24649	BPCU DC

- (ai) If maintenance message 23-81006, is shown on the MAT, then replace the BPCU. These are the tasks:
- BPCU Removal, AMM TASK 24-41-05-000-801
 - BPCU Installation, AMM TASK 24-41-05-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (aj) If maintenance messages 24-19600 is shown on the MAT, then do the task for that message.
- (ak) Close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	6	C24671	BACKUP CONVERTER CONTROL

- (al) If maintenance message 23-81006, is shown on the MAT, then replace the converter, M24008. These are the tasks:
- Backup Generator Converter Removal, AMM TASK 24-25-09-000-801
 - Backup Generator Converter Installation, AMM TASK 24-25-09-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (am) If maintenance messages 24-49601 is shown on the MAT, then do the task for that message.
- (an) Close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	1	C36611	AIR SPLY L PRI
C	2	C36613	AIR SPLY L BACKUP

- (ao) If maintenance message 23-81006, is shown on the MAT, then replace the ASCPC-L, M36111. These are the tasks:
- ASCPC Removal, AMM TASK 36-11-20-000-801
 - ASCPC Installation, AMM TASK 36-11-20-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (ap) If maintenance messages 36-19601 is shown on the MAT, then do the task for that message.

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- (aq) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
P	12	C36612	AIR SPLY R PRI
P	13	C36614	AIR SPLY R BACKUP

- (ar) If maintenance message 23-81006, is shown on the MAT, then replace the ASCPC-R, M36112. These are the tasks:

- ASCPC Removal, AMM TASK 36-11-20-000-801
 - ASCPC Installation, AMM TASK 36-11-20-400-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (as) If maintenance messages 36-19602 is shown on the MAT, then do the task for that message.

- (at) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	16	C23400	CAB SYS MGMT UNIT

- (au) If maintenance message 23-81006, is shown on the MAT, then replace the CMSU, M23061. These are the tasks:

- Main Landing Gear Steering Control Unit (MGSCU) Removal, AMM TASK 32-53-02-020-801
 - Main Landing Gear Steering Control Unit (MGSCU) Installation, AMM TASK 32-53-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (av) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	6	C77400	R ENG VIB MON

- (aw) If maintenance message 23-81006, is shown on the MAT, then replace the AVM-R, M77202. These are the tasks:

- Airborne Vibration Monitor (AVM) Signal Conditioner Unit Removal, AMM TASK 77-31-03-000-803-H00
 - Airborne Vibration Monitor (AVM) Signal Conditioner Unit Installation, AMM TASK 77-31-03-400-804-H00
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (ax) Set the A18 S5 switch on the (LSCF), P85, to the ON position.

- (ay) If maintenance message 23-81006, is shown on the MAT, then replace the ASG-R in the LSFC. These are the tasks:

- ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801

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- ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (az) If maintenance messages 31-18863 is shown on the MAT, then do the task for that message.
- (ba) Set the A18 S5 switch on the (RSCF), P84, to the ON position.
- (bb) If maintenance message 23-81006, is shown on the MAT, then replace the ASG-R card in the RSCF, P084A12. These are the tasks:
 - ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801
 - ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bc) If maintenance messages 31-18864 is shown on the MAT, then do the task for that message.
- (bd) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	24	C22602	AFDC-R

- (be) If maintenance message 23-81006, is shown on the MAT, then replace the AFDC-R, M22201. These are the tasks:
 - Autopilot Flight Director Computer Removal, AMM TASK 22-11-01-000-801
 - Autopilot Flight Director Computer Installation, AMM TASK 22-11-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bf) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	2	C21431	L CTC CHAN 1 (AC)
H	3	C21433	L CTC CHAN 2 (AC)
H	24	C21647	L CTC CHAN 2 (DC)
H	25	C21641	L CTC CHAN 1 (DC)

- (bg) If maintenance message 23-81006, is shown on the MAT, then replace the CTC-L, M21631. These are the tasks:
 - Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801
 - Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (bh) If maintenance messages 21-29601 is shown on the MAT, then do the task for that message.

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- (bi) Close these circuit breakers:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	27	C21434	R CTC CHAN 2 (AC)
G	28	C21432	R CTC CHAN 1 (AC)
H	2	C21642	R CTC CHAN 1 (DC)
H	3	C21648	R CTC CHAN 2 (DC)

- (bj) If maintenance message 23-81004, is shown on the MAT, then replace the CTC-R, M21632. These are the tasks:

- Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801
- Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bk) If maintenance messages 21-29602 is shown on the MAT, then do the task for that message.

- (bl) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	23	C32621	LG BRAKE CONTROL-BITE/L-COMM

- (bm) If maintenance message 23-81006, is shown on the MAT, then replace the BSCU, M32017. These are the tasks:

- Brake System Control Unit (BSCU) Removal, AMM TASK 32-42-01-000-801
- Brake System Control Unit (BSCU) Installation, AMM TASK 32-42-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bn) If maintenance messages 32-39601 is shown on the MAT, then do the task for that message.

- (bo) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (bp) If maintenance message 23-81006, is shown on the MAT, then replace the OPBC-L, M23112. These are the tasks:

- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801
- Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (bq) If maintenance messages 23-48861 is shown on the MAT, then do the task for that message.

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(br) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

(bs) If maintenance message 23-81006, is shown on the MAT, then replace the OPBC-R, M23212. These are the tasks:

- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802
- Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802

1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bt) If maintenance messages 23-48862 is shown on the MAT, then do the task for that message.

(bu) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	26	C32600	PSEU 1 PRI PWR

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C32603	PSEU 1 ALTN PWR

(bv) If maintenance message 23-81006, is shown on the MAT, then replace the PSEU-L, M32021. These are the tasks:

- Proximity Sensor Electronics Unit Removal, AMM TASK 32-08-01-000-801
- Proximity Sensor Electronics Unit Installation, AMM TASK 32-08-01-400-801

1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bw) If maintenance messages 32-18861 is shown on the MAT, then do the task for that message.

(bx) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

(by) If maintenance message 23-81006, is shown on the MAT, then replace the PSEU-R, M32025. These are the tasks:

- Proximity Sensor Electronics Unit Removal, AMM TASK 32-08-01-000-801
- Proximity Sensor Electronics Unit Installation, AMM TASK 32-08-01-400-801

1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

(bz) If maintenance messages 23-48862 is shown on the MAT, then do the task for that message.

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- (ca) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	7	C31629	FMC CDU-L

- (cb) If maintenance message 23-81006, is shown on the MAT, then replace the CDU-L, N34103. These are the tasks:

- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (cc) If maintenance messages 34-69601 is shown on the MAT, then do the task for that message.

- (cd) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	7	C31631	FMC CDU-C

- (ce) If maintenance message 23-81006, is shown on the MAT, then replace the CDU-C, N34303. These are the tasks:

- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (cf) If maintenance messages 34-69602 is shown on the MAT, then do the task for that message.

- (cg) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	20	C31630	FMC CDU-R

- (ch) If maintenance message 23-81006, is shown on the MAT, then replace the CDU-R, N34203. These are the tasks:

- Control Display Unit (CDU) Removal, AMM TASK 34-61-02-020-801
 - Control Display Unit (CDU) Installation, AMM TASK 34-61-02-420-801
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (ci) If maintenance messages 34-69603 is shown on the MAT, then do the task for that message.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

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807. System 629 Bus-C2 is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-81007.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Remove the cover on the P313 panel.
- (2) Inspect the ARINC 629 bus on the P313 panel for damage.
- (3) If you find damage, then do these steps;
 - (a) Repair the ARINC 629 wiring (SWPM 20-11-11).
 - (b) Re-install the cover on the P313 panel.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (4) Open these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	17	C73601	L EDIU 2A
M	18	C73603	L EDIU 1B

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C73605	L EDIU 1A
E	2	C73606	R EDIU 1A
E	3	C73607	L EDIU 2B
E	4	C73608	R EDIU 2B

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- (5) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

- (6) If maintenance messages 31-69701, 31-69702, and 73-09702 are shown on the MAT, do these steps:

- (a) Close this circuit breaker:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	18	C73603	L EDIU 1B

- (b) If maintenance message 23-81007 is not shown on the MAT, do this step:
- Do the tasks for maintenance messages 31-69701, 31-69702, and 73-09702.
 - If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (c) If maintenance message 23-81007 is shown on the MAT, then continue.

- (d) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (e) If maintenance messages 31-69702, 73-09702 and 73-09703, do not show on the MAT, do the task for message 31-69701.
- If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If maintenance messages, 31-69702, 73-09702, 73-09703, are shown on the MAT, continue.

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- (g) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	12	C31609	AIMS L-1
B	13	C31611	AIMS L-2
B	14	C31617	AIMS L-3
B	15	C31619	AIMS L-4

- (h) Open these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (i) If maintenance messages 31-69701, 73-09702 and 73-09703, do not show on the MAT, do the task for message 31-69702.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (j) If maintenance message 23-81007 shows on the MAT, then continue.
- (k) Close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
F	12	C31610	AIMS R-1
F	13	C31612	AIMS R-2
F	14	C31618	AIMS R-3
F	15	C31620	AIMS R-4

- (l) Open this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

- (m) If maintenance messages 31-69701, 31-69702, and 73-09703 do not show on the MAT, do the task for message 73-09702.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (n) If maintenance messages 31-69701, 31-69702, and 73-09703 show on the MAT, then continue.
- (o) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

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- (p) Open this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

- (q) If maintenance messages 31-69701, 31-69702, and 73-09703 do not show on the MAT, do the task for message 73-09702.

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (r) If maintenance messages 31-69701, 31-69702, and 73-09703 show on the MAT, then continue.

- (s) Close this circuit breaker:

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	9	C73602	R EDIU 2A

- (t) If maintenance message 23-81007 no longer shows on the MAT, then do the tasks for each message shown on the MAT.

- 1) Close the circuit breakers that you opened one at a time.
- 2) Do the tasks for each maintenance message that shows on the MAT.

- (u) If maintenance message 23-81007 shows on the MAT, then replace the center 2 system bus (SWPM 20-11-11).

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (7) If maintenance messages, 31-69701, 31-69702, and 73-09702 are not shown on the MAT, then do these steps:

- (a) Do the tasks for the messages that are shown on the MAT.

- (b) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	18	C73603	L EDIU 1B

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C73606	R EDIU 1A
E	3	C73607	L EDIU 2B

- (c) If maintenance message 23-81007, is shown on the MAT, then replace the EDIU-L, M73103. These are the tasks:

- Warning Electronic Unit Removal, AMM TASK 31-51-01-000-801
- Warning Electronic Unit Installation, AMM TASK 31-51-01-400-801

- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (d) If maintenance message 73-09703 or 73-09705 is shown on the MAT, then do the task for that message.

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- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If maintenance message 73-09703 or 73-09705 is not shown, then continue.
- (f) Close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	17	C73601	L EDIU 2A

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C73605	L EDIU 1A
E	4	C73608	R EDIU 2B

- (g) If maintenance message 23-81007, is shown on the MAT, then replace the EDIU-R.
These are the tasks:
 - Engine Data Interface Unit (EDIU) Removal, AMM TASK 73-21-22-000-804-H00
 - Engine Data Interface Unit (EDIU) Installation, AMM TASK 73-21-22-400-808-H00
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If maintenance message 73-09702 or 73-09706 is shown on the MAT, then do the task for that message.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

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801. OPAS Switch and Left-A1 Card Signal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-41050, 23-41070, 23-41110, 23-41130, 23-41160, 23-41170, 23-41200, 23-41220, 23-41240, 23-41250, 23-41260, 23-41270, 23-41300, 23-41310, 23-41320, 23-41330, 23-41350, 23-41360, 23-41370, 23-41390, 23-41400, 23-41410, 23-41420, 23-41430, 23-41440, 23-41450, 23-41460, 23-41470, 23-41480, 23-41490, 23-41500, 23-41530, 23-41540, 23-41550, 23-41560, 23-41580, 23-41670, 23-41680, 23-41690, 23-41710, 23-41740, 23-41940, 23-41960, 23-41970, 23-41980, 23-47010.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
 - (a) Do the resistance checks for each position of each selector in the table follows.
 - (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

(c) Reconnect J2, J3 and J4 to the PDCU.

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- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the left-A1 overhead panel interface card, M23117A1.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left overhead panel bus controller M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left overhead panel cardfile, M23117.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

802. OPAS Switch and Left-A2 Card Signal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-42025, 23-42050, 23-42070, 23-42110, 23-42130, 23-42160, 23-42170, 23-42200, 23-42220, 23-42240, 23-42250, 23-42260, 23-42270, 23-42300, 23-42310, 23-42320, 23-42330, 23-42350, 23-42360, 23-42370, 23-42390, 23-42400, 23-42410, 23-42420, 23-42430, 23-42440, 23-42450, 23-42460, 23-42470, 23-42480, 23-42490, 23-42500, 23-42530, 23-42540, 23-42550, 23-42560, 23-42580, 23-42670, 23-42680, 23-42690, 23-42710, 23-42740, 23-42940, 23-42945, 23-42955, 23-42960, 23-42970, 23-42980, 23-47020.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
- (a) Do the resistance checks for each position of each selector in the table follows.
- (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the left-A2 overhead panel interface card, M23117A2.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel bus controller M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left overhead panel cardfile, M23117.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

803. OPAS Switch and Right-A1 Card Signal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-41010, 23-41020, 23-41025, 23-41030, 23-41040, 23-41060, 23-41080, 23-41090, 23-41095, 23-41100, 23-41105, 23-41120, 23-41140, 23-41150, 23-41180, 23-41190, 23-41230, 23-41280, 23-41290, 23-41340, 23-41380, 23-41510, 23-41520, 23-41660, 23-41700, 23-41720, 23-41730, 23-41750, 23-41760, 23-41770, 23-41780, 23-41790, 23-41800, 23-41810, 23-41820, 23-41830, 23-41840, 23-41850, 23-41860, 23-41870, 23-41880, 23-41890, 23-41900, 23-41910, 23-41930, 23-41945, 23-41950, 23-41955, 23-41990, 23-48010.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right-A1 overhead panel interface card, M23217A1.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,

Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
 - (a) Do the resistance checks for each position of each selector in the table follows.
 - (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

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Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the left overhead panel bus controller, M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel cardfile, M23217.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

804. OPAS Switch and Right-A2 Card Signal Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-42010, 23-42020, 23-42030, 23-42040, 23-42060, 23-42080, 23-42090, 23-42095, 23-42100, 23-42105, 23-42120, 23-42140, 23-42150, 23-42180, 23-42190, 23-42230, 23-42280, 23-42290, 23-42340, 23-42380, 23-42510, 23-42520, 23-42660, 23-42700, 23-42720, 23-42730, 23-42750, 23-42760, 23-42770, 23-42780, 23-42790, 23-42800, 23-42810, 23-42820, 23-42830, 23-42840, 23-42850, 23-42860, 23-42870, 23-42880, 23-42890, 23-42900, 23-42910, 23-42930, 23-42950, 23-42990, 23-48020.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right-A1 overhead panel interface card, M23217A1.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,

Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
- (a) Do the resistance checks for each position of each selector in the table follows.
- (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

(c) Reconnect J2, J3 and J4 to the PDCU.

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- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the right overhead panel bus controller, M23212.
- These are the tasks:
- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel cardfile, M23217.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

806. Right Overhead Panel Bus Controller Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-46010, 23-48802.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
- (a) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (b) If the maintenance message shows on the ground test display, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (a) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (b) if the maintenance message shows on the ground test display, then continue.
- (3) Replace the right overhead panel bus controller, M23212.
- These are the tasks:
- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.

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- (b) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— END OF TASK —————

807. OPBC-L No Input from AIMS-L on Systems Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-49403, 23-49404.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31112, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (6) Do this check of the wiring from the AIMS-L cabinet to the coupler:
- (a) Remove the IOM(M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801
 - (b) Disconnect connector DB31112 from the coupler, B31112.
 - (c) Do a wiring check between these pins of connector J420-B at the left AIMS cabinet and connector DB31112 at the P111 panel (WDM 31-41-25):

J420-B	DB31112
pin G3	pin 5
pin G4	pin 4
pin G1	pin 2
pin G2	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31112.
 - 3) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31112.
- (g) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

808. OPBC-L No Input from AIMS-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-49405, 23-49406.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the right AIMS cabinet.

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These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31116, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (b) Disconnect connector DM23112B from the left OPBC, M23112.
 - (c) Disconnect connector DB23126 from the coupler B23126.
 - (d) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B	DB23126
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.



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- 3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (f) If you do not find a problem with the wiring, then continue.

- (g) Re-connect connectors D23112B and DB23126.

- (h) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (i) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (j) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (6) Do this check of the wiring from the AIMS-R cabinet to the coupler:

- (a) Remove the IOM(M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Disconnect connector DB31116 from the coupler B31116.

- (c) Do a wiring check between these pins of connector J420-B at the right AIMS cabinet and connector DB31116 at the P111 panel (WDM 31-41-26):

J420-B	DB31116
pin G3	pin 5
pin G4	pin 4
pin G1	pin 2
pin G2	pin 1

- (d) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

- 2) Re-connect connector DB31116.

- 3) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

- (e) If you do not find a problem with the wiring, then continue.

- (f) Re-connect connector DB31116.

- (g) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

———— **END OF TASK** ————

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809. OPBC-L No Input from ASCPC-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49407.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left air supply cabin pressure controller (ASCPC), M36111.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36233, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left ASCPC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112B and DB23126.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the ASCPC to the coupler:
- (a) Remove the ASCPC, M36111. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
- (b) Disconnect connector DB36233 from the coupler B36233.

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- (c) Do a wiring check between these pins of connector DM36111AA at the E1-2 shelf and connector DB36233 at the P111 panel (WDM 36-21-11):

DM36111AA	DB36233
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36233.
 - 3) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36233.
- (g) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

810. OPBC-L No Input from ASG-L (LSCF) on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-49411, 23-49412.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left ARINC signal gateway card, (ASG-L) (P085A12) in the left system cardfile (LSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

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ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31101, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the LSCF to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.

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- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the LSCF to the coupler:
 - (a) Remove the ASG-L card, A12, from the LSCF P85. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31101 from the coupler, B31101, in the P111 panel.
 - (c) Do a wiring check between these pins of socket XA12 at the P85 panel and connector DB31101 on the P111 panel (WDM 31-09-12):

XA12		DB31101
pin 10	.....	pin 5
pin 7	.....	pin 4
pin 9	.....	pin 2
pin 6	.....	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31101.
 - 3) Re-install the ASG-L card, A12, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31101.
- (g) Re-install the ASG-L card, A12, in the LSCF P85 . To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

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- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

811. OPBC-L No Input from Converter on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49416.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the converter, M24008.

These are the tasks:

Backup Generator Converter Removal, AMM TASK 24-25-09-000-801,

Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the converter to the Systems 629 Bus-L.



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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (6) Do this check of the wiring from the converter to the coupler:
- (a) Remove the converter, M24008. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB24102 from the coupler, B24102, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24008A at the E4-4 shelf and connector DB24102 at the P111 panel (WDM 24-25-33):

DM24008A	DB24102
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
- (g) Connect connector DB24102 to coupler, B24102, in the P111 panel.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

812. OPBC-L No Input from CTC-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49419.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left cabin temperature controller (CTC).

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These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,
Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21631, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left CTC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 P111 panel (WDM 23-93-11):

DM23112B	DB23126
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

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- 2) Re-connect connectors D23112B and DB23126.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left CTC to the coupler:
 - (a) Remove the left CTC, M21631. To remove it, do this task: Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801.
 - (b) Disconnect connector DB21631 from the coupler, B21631, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM21631AD at E1-2 shelf and connector DB21631 on the P111 panel (WDM 21-61-11):

DM21631A	DB21631
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00)
 - 2) Re-connect DB21631.
 - 3) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21631.
- (g) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

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- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

814. OPBC-L No Input from GCU-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49429.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left generator control unit (GCU), M24105.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (4) Replace the ARINC 629 coupler, B24103, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left GCU to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (6) Do this check of the wiring from the left GCU to the coupler:
- (a) Remove the left GCU, M24105. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24103 from the coupler, B24103, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24105AB at E1-1 shelf and connector DB24103 on the P111 panel (WDM 24-28-11):

DM24105AB	DB24103
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24103.
 - 3) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24103.
- (g) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

815. OPBC-L No Input from AGCU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49433.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Replace the APU generator control unit (AGCU) in the E2-3 shelf.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE:** This coupler connects the left OPBC to the Systems 629 Bus-L.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24105, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE:** This coupler connects the AGCU to the Systems 629 Bus-L.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:
- Overhead Circuit Breaker Panel, P11**
- | <u>Row</u> | <u>Col</u> | <u>Number</u> | <u>Name</u> |
|------------|------------|---------------|-------------|
| D | 6 | C23603 | OPAS 1 |
- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):
- | DM23112B | | DB23126 |
|-----------------|-------|----------------|
| pin 5 | ..... | pin 5 |
| pin 4 | ..... | pin 4 |
| pin 2 | | pin 2 |
| pin 1 | | pin 1 |
- (f) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112B and DB23126.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AGCU to the coupler:
- (a) Remove the AGCU, M24305. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24105 from the coupler, B24105, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24305AB at E1-1 shelf and connector DB24105 on the P111 panel (WDM 24-28-31):

DM24305AB	DB24105
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24105.
 - 3) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24105.

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- (g) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

END OF TASK

816. OPBC-L, No Input from OPIC Left-A1 - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-91010.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
 - (a) Do the resistance checks for each position of each selector in the table that follows.
 - (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less then 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3
First Officer Inboard Display Select	MFD	DM23197D	10	26	Less than 3
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	More than 100,000
	EICAS	DM23197D	10	26	More than 100,000
		DM23197D	11	26	Less than 3
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	More than 100,000
	NAV	DM23197D	10	26	More than 100,000
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	Less than 3
		DM23197D	25	26	More than 100,000
	PFD	DM23197D	10	26	More than 100,000
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the left-A1 overhead panel interface card (OPIC), M23117A1.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (4) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Replace the left overhead panel cardfile (OPCF), M23217.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (6) Do this check of the wiring from the left OPCF to the OPBC:

- (a) Loosen the captive screws in the P11 panel forward of the left OPCF.
- (b) Push the button between the screws and open the panel.
- (c) Disconnect connector DM23117D from the left OPCF, M23117.
- (d) Remove the access panel for the left OPBC. To remove it, (AMM TASK 23-93-01-000-801).
- (e) Disconnect connector DM23112D from the left OPBC, M23112.
- (f) Do a wiring check between these pins of connector DM23117D at the left OPCF and connector DM23112D at the OPBC (WDM 23-93-11):

DM23117D

pin 1
pin 2
pin 3
pin 4

DM23112D

pin 1
pin 2
pin 3
pin 4

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DM23112D to the OPBC.
 - 3) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Re-connect connector DM23117D to the OPCF.
 - 5) Close the P11 panel.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (i) Re-connect connector DM23112D to the OPBC.
- (j) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

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- (k) Re-connect connector DM23117D to the OPCF.
- (l) Close the P11 panel.
- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

817. No Output from Master Brightness Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-41590.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the master bright control card, M33004.

These are the tasks:

Master Bright Control - Card Removal, AMM TASK 33-13-01-000-801,

Master Bright Control - Card Installation, AMM TASK 33-13-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring from the master dim and test (MD&T) cardfile, P29, to the left overhead panel cardfile (OPCF), M23117.
 - (a) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	23	C33613	MASTER BRT CTRL & MASTER BRT OVRD RLY

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

- (b) Loosen the captive screws in the left half of the overhead circuit breaker panel, P11.
- (c) Push the button between the screws and open the panel.
- (d) Disconnect connector DM23117N from the OPCF.
- (e) Disconnect connector DP29E from the MD&T cardfile.
- (f) Do a wiring check between these pins of connector DP29E at the MD&T cardfile, P29, and connector DM23117N (J13) at the OPCF (WDM 33-16-12):

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DP29E

pin 25 pin B1
pin 26 pin B2

DM23117N

- (g) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connectors DM23117N and DP29E.
 - 3) Close the P11 panel.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	23	C33613	MASTER BRT CTRL & MASTER BRT OVRD RLY

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (i) Re-connect connectors DM23117N and DP29E.
- (j) Close the P11 panel.
- (k) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	23	C33613	MASTER BRT CTRL & MASTER BRT OVRD RLY

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

- (3) Replace the left-A2 overhead panel interface card, M23117A2.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left-A1 overhead panel interface card, M23117A1.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,

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Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left overhead panel bus controller, M23112.
- These are the tasks:
- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the right overhead panel bus controller, M23212.
- These are the tasks:
- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the left OPCF, M23117.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

818. No Output from Master Dim and Test Dimmer Card (1) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-41600.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the Master Dim and Test (MD&T) card (1), M33001.

These are the tasks:

Master Dim and Test - Card Removal, AMM TASK 33-16-00-000-801,

Master Dim and Test - Card Installation, AMM TASK 33-16-00-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring from the MD&T cardfile, P29 to the Overhead Panel Cardfile (OPCF).

- (a) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	24	C33607	MD & T CHANNEL 2
N	25	C33605	MD & T CHANNEL 1

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

- (b) Loosen the captive screws in the left half of the P11 panel.
- (c) Push the button between the screws and open the panel.
- (d) Disconnect connector DM23117N from the OPCF.
- (e) Disconnect connector DP29A from the MD&T cardfile.
- (f) Do a wiring check between these pins of connector DP29A at the MD&T cardfile, P29, and connector DM23117N (J13) at the OPCF (WDM 33-16-12):

DP29A	DM23117N
pin 14	pin B3
pin 15	pin B4

- (g) If you find a problem with the wiring, then do this step:
- 1) Repair the wiring.
 - 2) Re-connect connectors DM23117N and DP29A.
 - 3) Close the P11 panel.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	24	C33607	MD & T CHANNEL 2
N	25	C33605	MD & T CHANNEL 1

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (3) Replace the left-A1 Overhead Panel Interface Card (OPIC), M23117A1.
- These are the tasks:

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Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left-A2 Overhead Panel Interface Card (OPIC), M23117A2.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left Overhead Panel Bus Controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the right Overhead Panel Bus Controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the left Overhead Panel Card File (OPCF), M23117.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

819. OPBC-L Systems 629 Bus-L Communications Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-41001, 23-48841.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (c) Disconnect connector DM23112B from the left OPBC, M23112.

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- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DB23126	DB23112
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23112B and DB23126.
 - 3) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23112B and DB23126.
- (i) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

820. OPBC-R No Input from AIMS-L on Systems Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

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Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31112, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

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DM23212B

pin 5
pin 4
pin 2
pin 1

DB23127

pin 5
pin 4
pin 2
pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (WDM 23-93-21).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AIMS-L cabinet to the coupler:
- (a) Remove the IOM(M009) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
 - (b) Disconnect connector DB31112 from the coupler, B31112.
 - (c) Do a wiring check between these pins of connector J420-B at the left AIMS cabinet and connector DB31112 at the P111 panel (WDM 31-41-25):

J420-B

pin G3
pin G4
pin G1
pin G2

DB31112

pin 5
pin 4
pin 2
pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31112.

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- 3) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31112.
- (g) Re-install the IOM(M009) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

821. OPBC-R No Input from AIMS-R on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M009) module in the right AIMS cabinet.
These are the tasks:
Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31116, in the P111 panel.

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These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
 - (b) Disconnect connector DM23212B from the right OPBC, M23212.
 - (c) Disconnect connector DB23127 from the coupler B23127.
 - (d) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connectors D23212B and DB23127.
- (h) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (i) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (j) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AIMS-R cabinet to the coupler:

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- (a) Remove the IOM(M009) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Disconnect connector DB31116 from the coupler B31116.
- (c) Do a wiring check between these pins of connector J420-B at the right AIMS cabinet and connector DB31116 at the P111 panel (WDM 31-41-26):

J420-B	DB31116
pin G3	pin 5
pin G4	pin 4
pin G1	pin 2
pin G2	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31116.
 - 3) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31116.
- (g) Re-install the IOM(M009) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

END OF TASK

822. OPBC-R No Input from ASCPC-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49408.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left air supply cabin pressure controller (ASCPC), M36111.

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These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,
ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36233, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left ASCPC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

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- 2) Re-connect connectors D23212B and DB23127.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the ASCPC-L to the coupler:
- (a) Remove the left ASCPC, M36111. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
 - (b) Disconnect connector DB36233 from the coupler B36233.
 - (c) Do a wiring check between these pins of connector DM36111AA at the E1-2 shelf and connector DB36233 at the P111 panel (WDM 36-21-11):

DM36111AA	DB36233
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36233.
 - 3) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36233.
- (g) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.

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- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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823. OPBC-L No Input from ASCPC-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49409.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right air supply cabin pressure controller (ASCPC), M36112.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36232, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right ASCPC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (6) Do this check of the wiring from the ASCPC-R to the coupler:
- (a) Remove the right ASCPC, M36112. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
 - (b) Disconnect connector DB36232 from the coupler B36232.
 - (c) Do a wiring check between these pins of connector DM36112AA at the E1-2 shelf and connector DB36232 at the P111 panel (WDM 36-21-12):

DM36112AA	DB36232
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36232.
 - 3) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36232.
- (g) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

824. OPBC-R No Input from ASCPC-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49410.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Replace the right air supply cabin pressure controller (ASCPC), M36112.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B36232, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right ASCPC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2		pin 2
pin 1		pin 1

- (f) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23212B and DB23127.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the ASCPC-R to the coupler:
 - (a) Remove the right ASCPC, M36112. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
 - (b) Disconnect connector DB36232 from the coupler B36232.
 - (c) Do a wiring check between these pins of connector DM36112AA at the E1-2 shelf and connector DB36232 at the P111 panel (WDM 36-21-12):

DM36112AA	DB36232
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36232.
 - 3) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36232.

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- (g) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

825. OPBC-R No Input from ASG-L (LSCF) on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left ARINC signal gateway card, (ASG-L) (P085A12) in the left system cardfile (LSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31101, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the LSCF to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the LSCF to the coupler:

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- (a) Remove the ASG-L card, A12, from the LSCF P85. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
- (b) Disconnect connector DB31101 from the coupler, B31101, in the P111 panel.
- (c) Do a wiring check between these pins of socket XA12 at the P85 panel and connector DB31101 on the P111 panel (WDM 31-09-12):

XA12	DB31101
pin 10	pin 5
pin 7	pin 4
pin 9	pin 2
pin 6	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31101.
 - 3) Re-install the ASG-L card, A12, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31101.
- (g) Re-install the ASG-L card, A12, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

END OF TASK

826. OPBC-L No Input from ASG-L (RSCF) on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49413.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Replace the left ARINC signal gateway card, (ASG-L) (P084A12) in the right system cardfile (RSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31201, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the RSCF to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

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DM23112B

pin 5
pin 4
pin 2
pin 1

DB23126

pin 5
pin 4
pin 2
pin 1

- (f) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the RSCF to the coupler:
- (a) Remove the ASG-L card, A12, from the RSCF P84. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31201 from the coupler, B31201, in the P111 panel.
 - (c) Do a wiring check between these pins of socket XA12 at the P84 panel and connector DB31201 on the P111 panel (WDM 31-09-22):

XA12

pin 10
pin 7
pin 9
pin 6

DB31201

pin 5
pin 4
pin 2
pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31201.

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- 3) Re-install the ASG-L card, A12, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31201.
- (g) Re-install the ASG-L card, A12, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

827. OPBC-R No Input from ASG-L (RSCF) on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49414.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left ARINC signal gateway card, (ASG-L) (P084A12) in the right system cardfile (RSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31201, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the RSCF to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the RSCF to the coupler:
- (a) Remove the ASG-L card, A12, from the RSCF P84. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31201 from the coupler, B31201, in the P111 panel.
 - (c) Do a wiring check between these pins of socket XA12 at the P84 panel and connector DB31201 on the P111 panel (WDM 31-09-22):

XA12		DB31201
pin 10	.....	pin 5
pin 7	.....	pin 4
pin 9	.....	pin 2
pin 6	.....	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31201.
 - 3) Re-install the ASG-L card, A12, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31201.
- (g) Re-install the ASG-L card, A12, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

828. OPBC-R No Input from Converter on Systems 629 Bus-L - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the converter, M24008.

These are the tasks:

Backup Generator Converter Removal, AMM TASK 24-25-09-000-801,

Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B24102, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the converter to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.

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- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B	DB23127
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the converter to the coupler:
- (a) Remove the converter, M24008. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB24102 from the coupler, B24102, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24008A at the E4-4 shelf and connector DB24102 at the P111 panel (WDM 24-25-33):

DM24008A	DB24102
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Connect connector DB24102 to coupler, B24102, in the P111 panel.
- (g) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

829. OPBC-R No Input from CTC-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-49415, 23-49420.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left cabin temperature controller (CTC), M21631.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,
Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21631, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left CTC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left CTC to the coupler:
- (a) Remove the left CTC, M21631. To remove it, do this task: Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801.
 - (b) Disconnect connector DB21631 from the coupler, B21631, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM21631AD at E1-2 shelf and connector DB21631 on the P111 panel (WDM 21-61-11):

DM21631A	DB21631
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect DB21631.
 - 3) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21631.
- (g) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

830. OPBC-L No Input from CTC-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49421.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the right cabin temperature controller (CTC), M21632.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B21633, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right CTC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the left OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.

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- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 P111 panel (WDM 23-93-11):

DM23112B	DB23126
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.
- (i) Re-install the OPBC access panel. To install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right CTC to the coupler:
- (a) Remove the right CTC, M21632. To remove it, do this task: Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801.
 - (b) Disconnect connector DB21633 from the coupler, B21633, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM21632AA at E1-2 shelf and connector DB21633 on the P111 panel (WDM 21-61-12):

DM21632AA	DB21633
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect DB21633.
- 3) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21633.
- (g) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

831. OPBC-R No Input from CTC-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49422.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right cabin temperature controller (CTC), M21632.
These are the tasks:
Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,
Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21633, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right CTC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right CTC to the coupler:
 - (a) Remove the right CTC, M21632. To remove it, do this task: Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801.
 - (b) Disconnect connector DB21633 from the coupler, B21633, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM21632AA at E1-2 shelf and connector DB21633 on the P111 panel (WDM 21-61-12):

DM21632AA	DB21633
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect DB21633.
 - 3) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21633.
- (g) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

837. OPBC-R No Input from GCU-L on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49430.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the left generator control unit (GCU), M24105.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B24103, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left GCU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.

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- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B	DB23127
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left GCU to the coupler:
- (a) Remove the left GCU, M24105. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24103 from the coupler, B24103, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24105AB at E1-1 shelf and connector DB24103 on the P111 panel (WDM 24-22-11):

DM24105AB	DB24103
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB24103.
- 3) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24103.
- (g) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

838. OPBC-L No Input from GCU-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49431.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right generator control unit (GCU), M24205.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24104, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right GCU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right GCU to the coupler:
 - (a) Remove the right GCU, M24205. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24104 from the coupler, B24104, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24205AB at E1-1 shelf and connector DB24104 on the P111 panel (WDM 24-28-21):

DM24205AB	DB24104
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24104.
 - 3) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24104.
- (g) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

839. OPBC-R No Input from GCU-R on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49432.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the right generator control unit (GCU), M24205.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B24104, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right GCU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.

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- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B	DB23127
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right GCU to the coupler:
- (a) Remove the right GCU, M24205. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24104 from the coupler, B24104, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24205AB at E1-1 shelf and connector DB24104 on the P111 panel (WDM 24-28-21):

DM24205AB	DB24104
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB24104.
- 3) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24104.
- (g) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

840. OPBC-R No Input from AGCU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49434.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the APU generator control unit (AGCU) in the E2-3 shelf.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24105, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the AGCU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-21):

DM23212B		DB23127
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212B and DB23127.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212B and DB23127.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AGCU to the coupler:
 - (a) Remove the AGCU, M24305. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24105 from the coupler, B24105, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24305AB at E1-1 shelf and connector DB24105 on the P111 panel (WDM 24-28-31):

DM24305AB	DB24105
pin 6T	pin 5
pin 6TR	pin 4
pin 3T	pin 2
pin 3TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24105.
 - 3) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24105.
- (g) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

841. OPBC-R Systems 629 Bus-L Communications Problem- Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-42001, 23-48842.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
 - (c) Disconnect connector DM23212B from the right OPBC, M23212.
 - (d) Disconnect connector DB23127 from the coupler B23127.
 - (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-11):

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DB23127	DB23212
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23212B and DB23127.
 - 3) Re-install the right OPBC access panel.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23212B and DB23127.
- (i) Re-install the right OPBC access panel.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

842. No Output from MD and T Dimmer Card (2) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-42610.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the Master Dim and Test (MD&T) dimmer card, M33002.

These are the tasks:

Master Dim and Test - Card Removal, AMM TASK 33-16-00-000-801,

Master Dim and Test - Card Installation, AMM TASK 33-16-00-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring from the MD&T) cardfile, P29, to the left overhead panel cardfile (OPCF), M23217.

- (a) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C33610	MD & T CHANNEL 3
F	4	C33611	MD & T CHANNEL 4

- (b) Loosen the captive screws in the right half of the overhead circuit breaker panel, P11.
- (c) Push the button between the screws and open the panel.
- (d) Disconnect connector DM23217N from the OPCF.
- (e) Disconnect connector DP29B from the MD&T cardfile.
- (f) Do a wiring check between these pins of connector DP29B at the MD&T cardfile, P29, and connector DM23217N (J13) at the OPCF (WDM 33-16-12):

DP29B	DM23217N
pin 14	pin B1
pin 15	pin B2

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connectors DM23217N and DP29B.
 - 3) Close the P11 panel.
 - 4) Remove the safety tags and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C33610	MD & T CHANNEL 3
F	4	C33611	MD & T CHANNEL 4

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.

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- (3) Replace the right-A2 Overhead Panel Interface Card (OPIC), M23217A2.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right-A1 Overhead Panel Interface Card (OPIC), M23217A1.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left Overhead Panel Bus Controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the right Overhead Panel Bus Controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the right Overhead Panel Card File (OPCF), M23217.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

843. No Output from MD and T Dimmer Card (3) - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-42620.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the Master Dim and Test (MD&T) card (3), M33003.

These are the tasks:

Master Dim and Test - Card Removal, AMM TASK 33-16-00-000-801,

Master Dim and Test - Card Installation, AMM TASK 33-16-00-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring from the MD&T cardfile, P29 to the overhead panel cardfile (OPCF).
 - (a) Open these circuit breakers and install safety tags:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	3	C33604	MD & T CHANNEL 5
M	4	C33606	MD & T CHANNEL 6

- (b) Loosen the captive screws in the right half of the P11 panel.
 - (c) Push the button between the screws and open the panel.
 - (d) Disconnect connector DM23217N from the OPCF.
 - (e) Disconnect connector DP29C from the MD&T cardfile.
 - (f) Do a wiring check between these pins of connector DP29C at the MD&T cardfile, P29, and connector DM23217N (J13) at the OPCF (WDM 33-16-12):

DP29C	DM23217N
pin 14	pin B3
pin 15	pin B4

- (g) If you find a problem with the wiring, then do this step:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23217N and DP29C.
 - 3) Close the P11 panel.

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- 4) Remove the safety tags and close these circuit breakers:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
G	20	C23602	OPAS 2

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
M	3	C33604	MD & T CHANNEL 5
M	4	C33606	MD & T CHANNEL 6

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (3) Replace the right-A1 Overhead Panel Interface Card (OPIC), M23217A1
- These are the tasks:
- Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right-A2 Overhead Panel Interface Card (OPIC), M23217A2.
- These are the tasks:
- Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left Overhead Panel Bus Controller (OPBC) M23112.
- These are the tasks:
- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the right Overhead Panel Bus Controller (OPBC) M23212.
- These are the tasks:
- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (7) Replace the right Overhead Panel Cardfile (OPCF), M23217.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

844. OPBC-L Systems 629 Bus-R Communications Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-41002, 23-48861.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DB23226		DB23112C	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23112C and DB23226.
 - 3) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23112B and DB23226 .
- (i) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

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- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

845. OPBC-R Systems 629 Bus-R Communications Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-42002, 23-48862.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DB23227		DB23212C	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23212C and DB23227.
 - 3) Re-install the right OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23212B and DB23227.
- (i) Re-install the right OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

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846. OPBC-L No Input from AIMS-L on Systems Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49603.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M004) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31211, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C	DB23226
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112C and DB23226.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AIMS-L cabinet to the coupler:
- (a) Remove the IOM(M004) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Disconnect connector DB31211 from the coupler, B31211.

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- (c) Do a wiring check between these pins of connector J250-B at the left AIMS cabinet and connector DB31211 at the P211 panel (WDM 31-41-25):

J250-B	DB31211
pin G3	pin 5
pin G4	pin 4
pin G1	pin 2
pin G2	pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31211.
 - 3) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31211.
- (g) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

847. OPBC-R No Input from AIMS-L on Systems Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49604.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M004) module in the left AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31211, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C		DB23227
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.

- (h) Re-connect connectors D23212B and DB23127.

- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (6) Do this check of the wiring from the AIMS-L cabinet to the coupler:

- (a) Remove the IOM(M004) module from the left AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Disconnect connector DB31211 from the coupler, B31211.

- (c) Do a wiring check between these pins of connector J250-B at the left AIMS cabinet and connector DB31211 at the P211 panel (WDM 31-41-25):

J250-B		DB31211
pin G3	.....	pin 5
pin G4	.....	pin 4
pin G1	.....	pin 2
pin G2	.....	pin 1

- (d) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

- 2) Re-connect connector DB31211.

- 3) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

- (e) If you do not find a problem with the wiring, then continue.

- (f) Re-connect connector DB31211.

- (g) Re-install the IOM(M004) module in the left AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

———— **END OF TASK** ————

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848. OPBC-L No Input from AIMS-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49605.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M004) module in the right AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,

Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31214, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112C and DB23226.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AIMS-R cabinet to the coupler:
- (a) Remove the IOM(M004) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.
- (b) Disconnect connector DB31214 from the coupler B31214.

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- (c) Do a wiring check between these pins of connector J250-B at the right AIMS cabinet and connector DB31214 at the P211 panel (WDM 31-41-26):

J250-B	DB31214
pin G3	pin 5
pin G4	pin 4
pin G1	pin 2
pin G2	pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31214.
 - 3) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31214.
- (g) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

849. **OPBC-R No Input from AIMS-R on Systems 629 Bus-R - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49606.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the IOM(M004) module in the right AIMS cabinet.

These are the tasks:

Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801,
Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31214, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right AIMS cabinet to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C		DB23227
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.

- (h) Re-connect connectors D23212C and DB23227.

- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (6) Do this check of the wiring from the AIMS-R cabinet to the coupler:

- (a) Remove the IOM(M004) module from the right AIMS cabinet. To remove it, do this task: Input/Output Module (IOM) Removal, AMM TASK 31-41-11-000-801.

- (b) Disconnect connector DB31214 from the coupler B31214.

- (c) Do a wiring check between these pins of connector J250-B at the right AIMS cabinet and connector DB31214 at the P211 panel (WDM 31-41-26):

J250-B		DB31214
pin G3	.....	pin 5
pin G4	.....	pin 4
pin G1	.....	pin 2
pin G2	.....	pin 1

- (d) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB31214.
- 3) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

- (e) If you do not find a problem with the wiring, then continue.

- (f) Re-connect connector DB31214.

- (g) Re-install the IOM(M004) module in the right AIMS cabinet. To install it, do this task: Input/Output Module (IOM) Installation, AMM TASK 31-41-11-400-801.

- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

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850. OPBC-L No Input from ASCPC-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49607.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left air supply cabin pressure controller (ASCPC), M36111.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36234, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left ASCPC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112C and DB23226.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the ASCPC to the coupler:
- (a) Remove the ASCPC, M36111. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
- (b) Disconnect connector DB36234 from the coupler B36234.

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- (c) Do a wiring check between these pins of connector DM36111AB at the E1-2 shelf and connector DB36234 at the P211 panel (WDM 36-21-11):

DM36111AB	DB36234
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36234.
 - 3) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36234.
- (g) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

851. OPBC-R No Input from ASCPC-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49608.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left air supply cabin pressure controller (ASCPC), M36111.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36234, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left ASCPC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C		DB23227
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.

- (h) Re-connect connectors D23212C and DB23227.

- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (6) Do this check of the wiring from the ASCPC-L to the coupler:

- (a) Remove the left ASCPC, M36111. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.

- (b) Disconnect connector DB36234 from the coupler B36234.

- (c) Do a wiring check between these pins of connector DM36111AB at the E1-2 shelf and connector DB36234 at the P211 panel (WDM 36-21-11):

DM36111AB		DB36234
pin 2T	.....	pin 5
pin 2TR	.....	pin 4
pin 1T	.....	pin 2
pin 1TR	.....	pin 1

- (d) If you find a problem with the wiring, then do this step:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

- 2) Re-connect connector DB36234.

- 3) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (e) If you do not find a problem with the wiring, then continue.

- (f) Re-connect connector DB36234.

- (g) Re-install the ASCPC, M36111. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.

- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

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852. OPBC-L No Input from ASCPC-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49609.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right air supply cabin pressure controller (ASCPC), M36112.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,

ASCPC Installation, AMM TASK 36-11-20-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36231, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right ASCPC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors D23112C and DB23226.
- 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the ASCPC-R to the coupler:
- (a) Remove the right ASCPC, M36112. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.
- (b) Disconnect connector DB36232 from the coupler B36232.

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- (c) Do a wiring check between these pins of connector DM36112AB at the E1-2 shelf and connector DB36231 at the P211 panel (WDM 36-21-12):

DM36112AB	DB36231
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB36231.
 - 3) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB36231.
- (g) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

853. OPBC-R No Input from ASCPC-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49610.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right air supply cabin pressure controller (ASCPC), M36112.

These are the tasks:

ASCPC Removal, AMM TASK 36-11-20-000-801,
ASCPC Installation, AMM TASK 36-11-20-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B36231, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right ASCPC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-11):

DM23212C		DB23227
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (g) If you do not find a problem with the wiring, then continue.

- (h) Re-connect connectors D23212C and DB23227.

- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (6) Do this check of the wiring from the ASCPC-R to the coupler:

- (a) Remove the right ASCPC, M36112. To remove it, do this task: ASCPC Removal, AMM TASK 36-11-20-000-801.

- (b) Disconnect connector DB36231 from the coupler B36231.

- (c) Do a wiring check between these pins of connector DM36112AB at the E1-2 shelf and connector DB36231 at the P211 panel (WDM 36-21-12):

DM36112AB		DB36231
pin 2T	.....	pin 5
pin 2TR	.....	pin 4
pin 1T	.....	pin 2
pin 1TR	.....	pin 1

- (d) If you find a problem with the wiring, then do this step:

- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

- 2) Re-connect connector DB36231.

- 3) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

- (e) If you do not find a problem with the wiring, then continue.

- (f) Re-connect connector DB36231.

- (g) Re-install the ASCPC, M36112. To install it, do this task: ASCPC Installation, AMM TASK 36-11-20-400-801.

- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

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854. OPBC-L No Input from ASG-R (LSCF) on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-49611, 23-49613.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right ARINC signal gateway card, (ASG-R) (P085A15) in the left system cardfile (LSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31102, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the LSCF to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:

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- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the LSCF to the coupler:
- (a) Remove the ASG-R card, A15, from the LSCF P85. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31102 from the coupler, B31102, in the P211 panel.

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- (c) Do a wiring check between these pins of socket XA15 at the P85 panel and connector DB31102 on the P211 panel (WDM 31-09-12):

XA15	DB31102
pin 10	pin 5
pin 7	pin 4
pin 9	pin 2
pin 6	pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31102.
 - 3) Re-install the ASG-L card, A15, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31102.
- (g) Re-install the ASG-L card, A15, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

855. OPBC-R No Input from ASG-R (LSCF) on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49612.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right ARINC signal gateway card, (ASG-R) (P085A15) in the left system cardfile (LSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

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ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31102, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the LSCF to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C		DB23227
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.

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- 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the LSCF to the coupler:
 - (a) Remove the ASG-R card, A15, from the LSCF P85. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31102 from the coupler, B31102, in the P211 panel.
 - (c) Do a wiring check between these pins of socket XA15 at the P85 panel and connector DB31102 on the P211 panel (WDM 31-09-12):

XA15	DB31102
pin 10	pin 5
pin 7	pin 4
pin 9	pin 2
pin 6	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31102.
 - 3) Re-install the ASG-R card, A15, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31102.
- (g) Re-install the ASG-R card, A15, in the LSCF P85. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

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- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

856. OPBC-L No Input from ASG-R (RSCF) on Systems 629 Bus-R - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right ARINC signal gateway card, (ASG-R) (P084A15) in the right system cardfile (RSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,
ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31202, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the RSCF to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB2326 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do this step:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the RSCF to the coupler:

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- (a) Remove the ASG-R card, A15, from the RSCF P84. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
- (b) Disconnect connector DB31202 from the coupler, B31202, in the P211 panel.
- (c) Do a wiring check between these pins of socket XA15 at the P84 panel and connector DB31202 on the P211 panel (WDM 31-09-22):

XA15	DB31202
pin 10	pin 5
pin 7	pin 4
pin 9	pin 2
pin 6	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31201.
 - 3) Re-install the ASG-R card, A15, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB31202.
- (g) Re-install the ASG-R card, A15, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

END OF TASK

857. OPBC-R No Input from ASG-R (RSCF) on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49614.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Replace the right ARINC signal gateway card, (ASG-R) (P084A15) in the right system cardfile (RSCF).

These are the tasks:

ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801,

ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, (or if message does not show) you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B31202, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the RSCF to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C		DB23227
pin 5		pin 5
pin 4		pin 4
pin 2		pin 2
pin 1		pin 1

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- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the RSCF to the coupler:
- (a) Remove the ASG-R card, A15, from the RSCF P84. To remove it, do this task: ARINC Signal Gateway (ASG) Card Removal, AMM TASK 31-09-02-000-801.
 - (b) Disconnect connector DB31202 from the coupler, B31202, in the P211 panel.
 - (c) Do a wiring check between these pins of socket XA15 at the P84 panel and connector DB31202 on the P211 panel (WDM 31-09-22):

XA15	DB31202
pin 10	pin 5
pin 7	pin 4
pin 9	pin 2
pin 6	pin 1

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB31202.
 - 3) Re-install the ASG-R card, A15, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.

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- (f) Re-connect connector DB31202.
- (g) Re-install the ASG-R card, A15, in the RSCF P84. To install it, do this task: ARINC Signal Gateway (ASG) Card Installation, AMM TASK 31-09-02-400-802.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

858. OPBC-L No Input from Converter on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49615.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the converter, M24008.

These are the tasks:

Backup Generator Converter Removal, AMM TASK 24-25-09-000-801,

Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24202, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the converter to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

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- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the converter to the coupler:
 - (a) Remove the converter, M24008. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DM24008B from the converter.
 - (c) Disconnect connector DB24202 from the coupler, B24202, in the P211 panel.
 - (d) Do a wiring check between these pins of connector DM24008 at the E4-4 shelf and connector DB24202 at the P211 panel (WDM 24-25-33):

DM24008B	DB24202
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (e) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24202.
 - 3) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DB24202.
- (h) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
- (i) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

859. OPBC-R No Input from Converter on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49616.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the converter, M24008.

These are the tasks:

Backup Generator Converter Removal, AMM TASK 24-25-09-000-801,

Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24202, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the converter to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

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DM23212C

pin 5 pin 5
pin 4 pin 4
pin 2 pin 2
pin 1 pin 1

DB23227

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the converter to the coupler:
- (a) Remove the converter, M24008. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DM24008B from the converter.
 - (c) Disconnect connector DB24202 from the coupler, B24202, in the P211 panel.
 - (d) Do a wiring check between these pins of connector DM24008B at the E4-4 shelf and connector DB24102 at the P111 panel (WDM 24-25-33):

DM24008B

pin 5 pin 5
pin 4 pin 4
pin 2 pin 2
pin 1 pin 1

DB24102

- (e) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).

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- 2) Re-connect connector DB24202.
- 3) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring, then continue.
- (g) Re-connect connector DB24202.
- (h) Re-install the converter, M24008. To install it, do this task: Backup Generator Converter Installation, AMM TASK 24-25-09-400-801.
- (i) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

860. OPBC-L No Input from CTC-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49619.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left cabin temperature controller (CTC).

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21631, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left CTC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left CTC to the coupler:
- (a) Remove the left CTC, M21631. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB21632 from the coupler, B21632, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM21631AD at E1-2 shelf and connector DB21632 on the P211 panel (WDM 21-61-11):

DM21632AA	DB21632
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect DB21632.
 - 3) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21632.
- (g) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

861. OPBC-R No Input from CTC-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49620.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the left cabin temperature controller (CTC), M21631.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B21632, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left CTC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.

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- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C	DB23227
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left CTC to the coupler:
- (a) Remove the left CTC, M21631. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB21632 from the coupler, B21632, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM21631AA at E1-2 shelf and connector DB21632 on the P211 panel (WDM 21-61-11):

DM21631AA	DB21632
pin 2T	pin 5
pin 2TR	pin 4
pin 1T	pin 2
pin 1TR	pin 1

- (d) If you find a problem with the wiring, then do this step:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect DB21632.
- 3) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21632.
- (g) Re-install the left CTC, M21631. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

862. OPBC-L No Input from CTC-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49621.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right cabin temperature controller (CTC), M21632.
These are the tasks:
Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,
Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B21634, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right CTC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler, B23226, in the P211 panel.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right CTC to the coupler:
 - (a) Remove the right CTC, M21632. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB21634 from the coupler, B21634, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM21632AD at E1-2 shelf and connector DB21634 on the P211 panel (WDM 21-61-12):

DM21632A	DB21632
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect DB21634.
 - 3) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21634.
- (g) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

863. OPBC-R No Input from CTC-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49622.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the right cabin temperature controller (CTC), M21632.

These are the tasks:

Cabin Temperature Controller (CTC) Removal, AMM TASK 21-61-01-000-801,

Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B21634, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right CTC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.

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- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C	DB23227
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right CTC to the coupler:
- (a) Remove the right CTC, M21632. To remove it, do this task: Backup Generator Converter Removal, AMM TASK 24-25-09-000-801.
 - (b) Disconnect connector DB21634 from the coupler, B21634, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM21632AD at E1-2 shelf and connector DB21634 on the P211 panel (WDM 21-61-12):

DM21632AD	DB21634
pin 1T	pin 5
pin 1TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do this step:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect DB21634.
- 3) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect DB21634.
- (g) Re-install the right CTC, M21632. To install it, do this task: Cabin Temperature Controller (CTC) Installation, AMM TASK 21-61-01-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

870. OPBC-L No Input from GCU-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49629.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left generator control unit (GCU), M24105.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24203, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left GCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler, B23226, in the P211 panel.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 the P211 panel (WDM 23-93-11):

DM23112C		DB23226
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left GCU to the coupler:
- (a) Remove the left GCU, M24105. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24203 from the coupler, B24203, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM24105AC at E1-1 shelf and connector DB24203 on the P211 panel (WDM 24-28-11):

DM24105AC	DB24203
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24203.
 - 3) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24203.
- (g) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

871. OPBC-R No Input from GCU-L on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49630.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the left generator control unit (GCU), M24105.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B24203, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left GCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.

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- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C	DB23227
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the left GCU to the coupler:
- (a) Remove the left GCU, M24105. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24203 from the coupler, B24203, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM24105AC at E1-1 shelf and connector DB24203 on the P111 panel (WDM 24-28-11):

DM24105AC	DB24203
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB24203.
- 3) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24203.
- (g) Re-install the left GCU, M24105. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

872. OPBC-L No Input from GCU-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49631.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right generator control unit (GCU), M24205.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24204, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right GCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler, B23226, in the P211 panel.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 the P211 panel (WDM 23-93-11):

DM23112C		DB23226
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112C and DB23226.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right GCU to the coupler:
 - (a) Remove the right GCU, M24205. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24204 from the coupler, B24204, in the P111 panel.
 - (c) Do a wiring check between these pins of connector DM24205AC at E1-1 shelf and connector DB24204 on the P211 panel (WDM 24-28-21):

DM24205AC	DB24204
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24204.
 - 3) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24204.
- (g) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

873. OPBC-R No Input from GCU-R on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49632.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (2) Replace the right generator control unit (GCU), M24205.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Replace the ARINC 629 coupler, B24204, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right GCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (5) Do this check of the wiring from the right OPBC to the coupler:

- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.

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- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C	DB23227
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the right GCU to the coupler:
- (a) Remove the right GCU, M24205. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24204 from the coupler, B24204, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM24205AC at E1-1 shelf and connector DB24204 on the P211 panel (WDM 24-28-21):

DM24205AC	DB24104
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB24204.
- 3) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24204.
- (g) Re-install the left GCU, M24205. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

874. OPBC-L No Input from AGCU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49633.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the APU generator control unit (AGCU) in the E2-3 shelf.
These are the tasks:
Generator Control Unit Removal, AMM TASK 24-22-02-000-801,
Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24105, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the AGCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler, B23126, in the P111 panel.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DM23112B		DB23126
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112B and DB23126.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23112B and DB23126.

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- (i) Re-install the OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AGCU to the coupler:
- (a) Remove the AGCU, M24305. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24205 from the coupler, B24205, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM24305AC at E1-1 shelf and connector DB24205 on the P211 panel (WDM 24-28-31):

DM24305AC	DB24205
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connector DB24205.
 - 3) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24205.
- (g) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

875. OPBC-R No Input from AGCU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49634.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the APU generator control unit (AGCU) in the E2-3 shelf.

These are the tasks:

Generator Control Unit Removal, AMM TASK 24-22-02-000-801,

Generator Control Unit Installation, AMM TASK 24-22-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24205, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the AGCU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.

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- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DM23212C	DB23227
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors D23212C and DB23227.
- (i) Re-install the OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
G	20	C23602	OPAS 2

- (k) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (6) Do this check of the wiring from the AGCU to the coupler:
- (a) Remove the AGCU, M24305. To remove it, do this task: Generator Control Unit Removal, AMM TASK 24-22-02-000-801.
 - (b) Disconnect connector DB24205 from the coupler, B24205, in the P211 panel.
 - (c) Do a wiring check between these pins of connector DM24305AC at E1-1 shelf and connector DB24205 on the P211 panel (WDM 24-22-31):

DM24305AC	DB24205
pin 5T	pin 5
pin 5TR	pin 4
pin 2T	pin 2
pin 2TR	pin 1

- (d) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connector DB24205.
- 3) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Re-connect connector DB24205.
- (g) Re-install the AGCU, M24305. To install it, do this task: Generator Control Unit Installation, AMM TASK 24-22-02-400-801.
- (h) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

876. Left OPCF, OPIC Problems - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the applicable overhead panel interface card, M23117A1 or 23117A2, in the left Overhead Panel Cardfile (OPCF).

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

————— END OF TASK —————

877. Right OPCF, OPIC Problems - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the applicable overhead panel interface card, M23217A1 or 23217A2, in the right Overhead Panel Cardfile (OPCF).

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

————— END OF TASK —————

878. OPBC-R, No Input from OPIC Left-A1 - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-91020.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Disconnect J2, J3 and J4 of the left PDCU.
 - (a) Do the resistance checks for each position of each selector in the table follows.
 - (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (3) Replace the left-A1 overhead panel interface card (OPIC), M23117A1.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel bus controller (OPBC), M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the left overhead panel cardfile (OPCF), M23117.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do this check of the wiring from the left OPCF to the right OPBC:
 - (a) Loosen the captive screws in the P11 panel forward of the left OPCF.
 - (b) Push the button between the screws and open the panel.

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- (c) Disconnect connector DM23117F from the left OPCF, M23117.
- (d) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (e) Disconnect connector DM23212D from the right OPBC, M23212.
- (f) Do a wiring check between these pins of connector DM23117F at the left OPCF and connector DM23212D at the right OPBC (WDM 23-93-21):

DM23117F		DM23212D	
pin 4	.....	pin 1	
pin 5	.....	pin 2	
pin 1	.....	pin 3	
pin 2	.....	pin 4	

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DM23212D to the right OPBC.
 - 3) Re-install the access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Re-connect connector DM23117F to the left OPCF.
 - 5) Close the P11 panel.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (i) Re-connect connector DM23212D to the right OPBC.
- (j) Re-install the access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (k) Re-connect connector DM23117F to the left OPCF.
- (l) Close the P11 panel.
- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

879. OPBC-L No Input from OPIC Right-A2 - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-92010.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Disconnect J2, J3 and J4 of the left PDCU.
 - (a) Do the resistance checks for each position of each selector in the table follows.
 - (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (2) Replace the right-A2 overhead panel interface card (OPIC), M23217A2.
These are the tasks:
Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel cardfile (OPCF), M23217.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPCF to the left OPBC:
 - (a) Loosen the captive screws in the P11 panel forward of the right OPCF.
 - (b) Push the button between the screws and open the panel.
 - (c) Disconnect connector DM23217D from the right OPCF, M23217.
 - (d) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (e) Disconnect connector DM23112E from the left OPBC, M23112.
 - (f) Do a wiring check between these pins of connector DM23117D at the right OPCF and connector DM23112E at the left OPBC (WDM 23-93-11):

DM23217D	DM23112E
pin 1	pin 4
pin 2	pin 5
pin 3	pin 1
pin 4	pin 2

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring (SWPM 20-13-00).
 - 2) Re-connect connector DM23112E to the OPBC.
 - 3) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Re-connect connector DM23217D to the OPCF.
 - 5) Close the P11 panel.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (i) Re-connect connector DM23112E to the OPBC.
- (j) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (k) Re-connect connector DM23217D to the OPCF.
- (l) Close the P11 panel.

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- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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880. OPBC-R, No Input from OPIC Right-A2 - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-92020.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Disconnect J2, J3 and J4 of the left PDCU.
- (a) Do the resistance checks for each position of each selector in the table follows.
- (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (2) Replace the right-A2 overhead panel interface card (OPIC), M23217A2.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,

Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the right overhead panel bus controller (OPBC) M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the right overhead panel cardfile (OPCF), M23217.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPCF to the right OPBC:
 - (a) Loosen the captive screws in the P11 panel forward of the right OPCF.
 - (b) Push the button between the screws and open the panel.
 - (c) Disconnect connector DM23217F from the right OPCF, M23217.
 - (d) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
 - (e) Disconnect connector DM23212E from the right OPBC, M23212.
 - (f) Do a wiring check between these pins of connector DM23217F at the right OPCF and connector DM23212E at the right OPBC (WDM 23-93-21):

DM23217F	DM23212E
pin 1	pin 1
pin 2	pin 2
pin 4	pin 4
pin 4	pin 5

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM23212E to the OPBC.
 - 3) Re-install the access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Re-connect connector DM23217F to the OPCF.
 - 5) Close the P11 panel.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.

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- (i) Re-connect connector DM23212E to the OPBC.
- (j) Re-install the access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (k) Re-connect connector DM23217F to the OPCF.
- (l) Close the P11 panel.
- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

881. Left Overhead Panel Bus Controller Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-45010, 23-48801.

B. Fault Isolation Procedure

- (1) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (a) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Open this circuit breaker for five (5) seconds and then close it.

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (a) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (3) Replace the left overhead panel bus controller, M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- (b) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— END OF TASK —————

882. OPBC-L Systems 629 Bus-L Communications Problem - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.

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- (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112B from the left OPBC, M23112.
- (d) Disconnect connector DB23126 from the coupler B23126.
- (e) Do a wiring check between these pins of connector DM23112B at the left OPBC and connector DB23126 at the P111 panel (WDM 23-93-11):

DB23126		DB23112
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2		pin 2
pin 1		pin 1

- (f) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors DM23112B and DB23126.
- 3) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- 6) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23112B and DB23126 .
- (i) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (k) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- (l) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— **END OF TASK** —————

883. OPBC-R Systems 629 Bus-L Communications Problem- Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

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- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23127 from the coupler B23127.
- (e) Do a wiring check between these pins of connector DM23212B at the right OPBC and connector DB23127 at the P111 panel (WDM 23-93-11):

DB23127		DB23212
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2	.....	pin 2
pin 1	.....	pin 1

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23212B and DB23127 .
 - 3) Re-install the right OPBC access panel.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.

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- 6) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23212B and DB23127 .
- (i) Re-install the right OPBC access panel.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
- (l) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— **END OF TASK** —————

884. OPBC-L, No Input from OPIC Left-A2 - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the left-A2 overhead panel interface card (OPIC), M23117A2.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801,
Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the left overhead panel cardfile (OPCF), M23117.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring from the left OPCF to the left OPBC:
 - (a) Loosen the captive screws in the P11 panel forward of the left OPCF.
 - (b) Push the button between the screws and open the panel.
 - (c) Disconnect connector DM23117F from the left OPCF, M23117.
 - (d) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (e) Disconnect connector DM23112D from the left OPBC, M23112.
 - (f) Do a wiring check between these pins of connector DM23117F at the left OPCF and connector DM23112D at the left OPBC (WDM 23-93-21):

DM23117F		DM23112D
pin 4	.....	pin 1
pin 5	.....	pin 2
pin 1	.....	pin 3
pin 2	.....	pin 4

- (g) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM23112D to the left OPBC.
 - 3) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Re-connect connector DM23117F to the left OPCF.
 - 5) Close the P11 panel.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (h) If you do not find a problem with the wiring, then continue.
- (i) Re-connect connector DM23112D to the left OPBC.
- (j) Re-install the access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (k) Re-connect connector DM23117F to the left OPCF.
- (l) Close the P11 panel.
- (m) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

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885. OPBC-L Systems 629 Bus-R Communications Problem - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

 - (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the ARINC 629 coupler, B23226, in the P211 panel

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

 - (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and install safety tag:
Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
 - (b) Remove the access panel for the left OPBC. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (c) Disconnect connector DM23112B from the left OPBC, M23112.
 - (d) Disconnect connector DB23226 from the coupler B23226.

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- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DB23226	DB23112C
pin 5	pin 5
pin 4	pin 4
pin 2	pin 2
pin 1	pin 1

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors DM23112C and DB23226.
 - 3) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- 5) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
 - 6) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23112B and DB23226.
- (i) Re-install the left OPBC access panel. To re-install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- (k) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- (l) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— END OF TASK —————

886. OPBC-R Systems 629 Bus-R Communications Problem - Fault Isolation

A. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.

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- (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

B. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the ARINC 629 coupler, B23227, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Right Overhead Panel ARINC 629 System.
 - (b) If the maintenance message does not show on the ground test display, then you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212B from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-21):

DB23227		DB23212C
pin 5	.....	pin 5
pin 4	.....	pin 4
pin 2		pin 2
pin 1		pin 1

- (f) If you find a problem with the wiring, then do these steps:

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- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
- 2) Re-connect connectors DM23212C and DB23227.
- 3) Re-install the right OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- 4) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- 6) If the maintenance message does not show on the ground test display, then you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
- (h) Re-connect connectors DM23212B and DB23227.
- (i) Re-install the right OPBC access panel. To re-install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (j) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (k) Do this ground test on the MAT: 23 Overhead Panel ARINC 629 System, System Test, Left Overhead Panel ARINC 629 System.
- (l) If the maintenance message does not show on the ground test display, then you corrected the fault.

————— END OF TASK —————

887. Left Panel Data Concentrator Unit Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-41570.

B. General Information

- (1) This task has two different fault isolation procedures. Use the alternate procedure if time allows. Also, use the alternate procedure if the fault isolation procedure that immediately follows did not correct the fault.
 - (a) Use the alternate procedure when an unserviceable selector switch is possible.

C. Fault Isolation Procedure

- (1) If time allows, do this task:
(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).
NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.
 - (a) If these status messages show, then use the instructions in the task above to do only a test of the Left OPAS:
 - OPBC L

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- PDCU L
 - OPIC LA1
 - OPIC RA1
- (b) If these status messages show, then do a test only for the Right OPAS:
- OPBC R
 - PDCU R
 - OPIC LA2
 - OPIC RA2
- (c) When the test is complete, make sure that PASSED shows adjacent to TEST CONDITION on the MAT.
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
 - 2) If the maintenance message still shows, then continue.
- (2) If time allows, do this check of input monitoring to make sure that AIMS gets the correct switch position data from all control and inboard display select switches.
- (a) Open this circuit breaker and install safety tag:
- Overhead Circuit Breaker Panel, P11**
- | <u>Row</u> | <u>Col</u> | <u>Number</u> | <u>Name</u> |
|------------|------------|---------------|-------------|
| B | 7 | C23605 | OPAS 3 |
- (b) Use the information in the tables below and the instructions in “How to Select a Signal to Monitor by Direct Entry” in this task: (How to Use Input Monitoring, AMM TASK 45-10-00-760-801).
- (c) Set up Input Monitoring to do a check for Parameter Validity Bits associated with PDCU data. Use one of these eight signal specifications.
- 1) L/629/SYS L/DFE/1/1-1/2-0
 - 2) L/629/SYS L/DFE/2/1-1/2-0
 - 3) L/629/SYS R/DFE/1/1-1/2-0
 - 4) L/629/SYS R/DFE/2/1-1/2-0
 - 5) R/629/SYS L/DFE/1/1-1/2-0
 - 6) R/629/SYS L/DFE/2/1-1/2-0
 - 7) R/629/SYS R/DFE/1/1-1/2-0
 - 8) R/629/SYS R/DFE/2/1-1/2-0
- NOTE:** If the OPBC L status message shows, then use one of these four signal specification steps above: 2), 4), 6), or 8). If the OPBC R status message shows, then use one of these four signal specification steps above: 1), 3), 5), or 7).
- (d) If bit 0 in the monitored word has the value of 1, it is possible that the problem is one of the Captain’s switches. It is possible to identify the bad switch with more input monitoring.
- 1) Use the same signal specification from the step above, except replace the “1-1” with “2-2”.
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

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PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
Capt ATC ACPT		2/0 = 1			
Capt ATC RJCT		2/1 = 1			
Capt ATC CNCL		2/15 = 1			
Capt AIR DATA	ALTN	2/2 = 1	2/3 = 0		
"	AUTO	2/2 = 0	2/3 = 1		
Capt DSPL CTRL	ALTN	2/4 = 1	2/5 = 0		
"	AUTO	2/4 = 0	2/5 = 1		
Capt INBOARD DSPL	MFD	2/9 = 1	2/10 = 0	2/11 = 0	2/12 = 0
"	EICAS	2/9 = 0	2/10 = 1	2/11 = 0	2/12 = 0
"	NAV	2/9 = 0	2/10 = 0	2/11 = 1	2/12 = 0
"	PFD	2/9 = 0	2/10 = 0	2/11 = 0	2/12 = 1
Capt NAV	CDU	2/14 = 1	2/13 = 0		
"	AUTO	2/14 = 0	2/13 = 1		

NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the Captain's Inboard DSPL Selector and finish with the Captain's ATC switches. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches: (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (e) If bit 1 in the monitored word has the value 1, it is possible that the problem is one of the First Officer's switches.
 - 1) Use the same signal specification from the step above, except replace the "1-1" with "3-3."
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
F. O. ATC ACPT		3/0 = 1			
F.O. ATC RJCT		3/1 = 1			
F.O. ATC CNCL		3/15 = 1			
F.O. AIR DATA	ALTN	3/2 = 1	3/3 = 0		
"	AUTO	3/2 = 0	3/3 = 1		

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PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches (Continued)

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
F.O. DSPL CTRL	ALTN	3/4 = 1	3/5 = 0		
"	AUTO	3/4 = 0	3/5 = 1		
F.O. INBOARD DSPL	MFD	3/9 = 1	3/10 = 0	3/11 = 0	3/12 = 0
"	EICAS	3/9 = 0	3/10 = 1	3/11 = 0	3/12 = 0
"	NAV	3/9 = 0	3/10 = 0	3/11 = 1	3/12 = 0
"	PFD	3/9 = 0	3/10 = 0	3/11 = 0	3/12 = 1
F.O. NAV	CDU	3/14 = 1	3/13 = 0		
"	AUTO	3/14 = 0	3/13 = 1		

NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the First Officer's Inboard DSPL Selector and finish with the First Officer's ATC switches. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (f) If bit 2 in the monitored word has the value 1, it is possible that the problem is the Center DSP Control switch or the DSP panel.
 - 1) Replace the Center DSP Control switch.
 - 2) If the fault continues, replace the DSP.
- (g) If bit 3 in the monitored word has the value 1, it is possible that the problem is one of the switches that follows or the DSP panel.
 - 1) Use the same signal specification from the step above, except replace the "1-1" with "5-5".
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
HEADING REFERENCE	TRUE	5/13 = 1	5/12 = 0		
"	NORM	5/13 = 0	5/12 = 1		
FMC MASTER SELECTOR	RIGHT	5/8 = 0	5/9 = 0	5/10 = 1	
"	LEFT	5/8 = 0	5/9 = 1	5/10 = 0	
"	AUTO	5/8 = 1	5/9 = 0	5/10 = 0	

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NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the FMC Master Selector and finish with the DSP. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches: (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).
- (h) If you do not find a problem with switch input monitoring, do these steps:
 - 1) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	7	C23605	OPAS 3

- 2) Continue with the fault isolation steps that follow.
- (3) Replace the left panel data concentrator unit (PDCU), M23197.
These are the tasks:
Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801,
Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (4) Do this check of the wiring:
 - (a) Remove the left PDCU, M23197. To remove it, do this task: Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801.
 - (b) Remove the left OPBC, M23112. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
 - (c) Do a wiring check between these pins of connector DM23197A at the PDCU and connector DM23112F at the OPBC (WDM 23-93-11):

DM23197A	DM23112F
pin 5	pin 1
pin 6	pin 2

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Install the left PDCU, M23197. To install it, do this task: Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - 3) Install the left OPBC, M23112. To install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Install the left OPBC, M23112. To install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (g) Remove the right OPBC, M23212. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.

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- (h) Do a wiring check between these pins of connector DM23197A at the PDCU and connector DM23212G at the OPBC (WDM 23-93-21):

DM23197A	DM23212G
pin 9	pin 7
pin 10	pin 8

- (i) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Install the left PDCU, M23197. To install it, do this task: Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - 3) Install the right OPBC, M23212. To install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

D. General Information

- (1) You can use the alternate fault isolation procedure that follows if time allows. Also, use the alternate procedure that follows if the fault isolation procedure above did not correct the fault.
- (a) It is possible that the airplane has a high resistance path through a switch. The Panel Data Concentrator Unit (PDCU) may report itself as failed if the switch input toggle test fails. This is because of a high resistance path through one of the switch circuits.

E. Alternate Fault Isolation Procedure

- (1) If the MAT continues to show ACTIVE for the maintenance message, then do the steps that follow.
- (a) Record the position of each of the three rotary selector switches (CAPT Inboard Display selector, F.O. Inboard Display selector, and the FMC selector). If it is possible, ask the flight crew if the position of any selector was changed during the previous flight leg.

NOTE: The requested information should include the "from" and "to" position of any selector that was changed during the flight leg.

- (2) Move the Left PDCU to the First Officer's position and move the Right PDCU to the Captain's position.

These are the tasks:

Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801,

Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.

- (3) Do this test.
(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (a) If the Left PDCU internal fault maintenance message 23-41570 does not show, but now the right PDCU internal fault maintenance message 23-42920 shows, the PDCU has a fault. Replace the unserviceable PDCU in the right position.
- (b) If the left PDCU maintenance message 23-41570 still shows, it is possible that the fault is in one of the switches.
- 1) Continue with one of the steps that follow.

NOTE: Do one of the steps that follow to find the unserviceable selector switch. It is not necessary to do the two steps.

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- (4) Disconnect J2, J3 and J4 of the left PDCU.
- (a) Do the resistance checks for each position of each selector in the table that follows.
- (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23197B	3	4	More than 100,000
	pulled	DM23197B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23197B	5	6	More than 100,000
	pulled	DM23197B	5	6	Less than 3
Captain ATC Accept	normal	DM23197C	13	27	More than 100,000
	pressed	DM23197C	13	27	Less than 3
Captain ATC Reject	normal	DM23197C	28	48	More than 100,000
	pressed	DM23197C	28	48	Less than 3
Captain ATC Cancel	normal	DM23197C	29	50	More than 100,000
	pressed	DM23197C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23197C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23197C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23197C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23197C	3	7	More than 100,000
			4	7	Less than 3
Captain NAV	auto	DM23197C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23197C	5	7	More than 100,000
			6	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain Inboard Display Select	MFD	DM23197C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23197C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23197C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23197C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23197C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23197C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23197C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23197C	54	55	More than 100,000
	pressed	DM23197C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23197D	16	34	More than 100,000
	pressed	DM23197D	16	34	Less than 3
DSP Checklist Page	normal	DM23197D	17	34	More than 100,000
	pressed	DM23197D	17	34	Less than 3
DSP Comm Page	normal	DM23197D	18	34	More than 100,000
	pressed	DM23197D	18	34	Less than 3
DSP Doors Page	normal	DM23197D	19	34	More than 100,000
	pressed	DM23197D	19	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Environmental Page	normal	DM23197D	37	34	More than 100,000
	pressed	DM23197D	37	34	Less than 3
DSP Electrical Page	normal	DM23197D	36	34	More than 100,000
	pressed	DM23197D	36	34	Less than 3
DSP Engine Page	normal	DM23197D	35	34	More than 100,000
	pressed	DM23197D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23197D	33	34	More than 100,000
	pressed	DM23197D	33	34	Less than 3
DSP Fuel Page	normal	DM23197D	32	34	More than 100,000
	pressed	DM23197D	32	34	Less than 3
DSP Gear Page	normal	DM23197D	54	34	More than 100,000
	pressed	DM23197D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23197D	55	34	More than 100,000
	pressed	DM23197D	55	34	Less than 3
DSP LWR CTR	normal	DM23197D	56	34	More than 100,000
	pressed	DM23197D	56	34	Less than 3
DSP L INBD	normal	DM23197D	57	34	More than 100,000
	pressed	DM23197D	57	34	Less than 3
DSP NAV Page	normal	DM23197D	58	34	More than 100,000
	pressed	DM23197D	58	34	Less than 3
DSP R INBD	normal	DM23197D	59	34	More than 100,000
	pressed	DM23197D	59	34	Less than 3
DSP STATUS Page	normal	DM23197D	60	34	More than 100,000
	pressed	DM23197D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23197D	61	34	More than 100,000
	pressed	DM23197D	61	34	Less than 3
First Officer ATC Accept	normal	DM23197D	28	48	More than 100,000
	pressed	DM23197D	28	48	Less than 3
First Officer ATC Reject	normal	DM23197D	13	27	More than 100,000
	pressed	DM23197D	13	27	Less than 3
First Officer ATC Cancel	normal	DM23197D	50	49	More than 100,000
	pressed	DM23197D	50	49	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATT/ADC	alternate	DM23197D	1	7	Less than 3
		DM23197D	2	7	More than 100,000
	normal	DM23197D	1	7	More than 100,000
		DM23197D	2	7	Less than 3
First Officer DSP	alternate	DM23197D	3	7	Less than 3
		DM23197D	4	7	More than 100,000
	auto	DM23197D	3	7	More than 100,000
		DM23197D	4	7	Less than 3
First Officer NAV	auto	DM23197D	5	7	Less than 3
		DM23197D	6	7	More than 100,000
	CDU	DM23197D	5	7	More than 100,000
		DM23197D	6	7	Less than 3
FMC Master	AUTO	DM23197D	45	26	Less than 3
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
	LEFT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	Less than 3
		DM23197D	47	26	More than 100,000
	RIGHT	DM23197D	45	26	More than 100,000
		DM23197D	46	26	More than 100,000
		DM23197D	47	26	More than 100,000
		DM23197D	47	26	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer Inboard Display Select	MFD	DM23197D	10	26	Less than 3
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	More than 100,000
	EICAS	DM23197D	10	26	More than 100,000
		DM23197D	11	26	Less than 3
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	More than 100,000
	NAV	DM23197D	10	26	More than 100,000
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	Less than 3
		DM23197D	25	26	More than 100,000
	PFD	DM23197D	10	26	More than 100,000
		DM23197D	11	26	More than 100,000
		DM23197D	12	26	More than 100,000
		DM23197D	25	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (5) Do the OPAS test again. Make sure you do a check through each position of each selector. The test should be run once in each selector position (a total of 11 times).
(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).
- (a) If the test fails after moving any selector to a new position, replace the selector.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.

————— **END OF TASK** —————

888. Right Panel Data Concentrator Unit Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-42920.

B. General Information

- (1) This task has two different fault isolation procedures. Use the alternate procedure if time allows. Also, use the alternate procedure if the fault isolation procedure that immediately follows did not correct the fault.
- (a) Use the alternate procedure when an unserviceable selector switch is possible.

C. Fault Isolation Procedure

- (1) If time allows, do this task:

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(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (a) If these status messages show, then use the instructions in the task above to do only a test of the Left OPAS:
 - OPBC L
 - PDCU L
 - OPIC LA1
 - OPIC RA1
- (b) If these status messages show, then do a test only for the Right OPAS:
 - OPBC R
 - PDCU R
 - OPIC LA2
 - OPIC RA2
- (c) When the test is complete, make sure that PASSED shows adjacent to TEST CONDITION on the MAT.
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
 - 2) If the maintenance message still shows, then continue.
- (2) If time allows, do this check of input monitoring to make sure that AIMS gets the correct switch position data from all control and inboard display select switches.
 - (a) Open this circuit breaker and install safety tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1
 - (b) Use the information in the tables below and the instructions in "How to Select a Signal to Monitor by Direct Entry" in this task: (How to Use Input Monitoring, AMM TASK 45-10-00-760-801).
 - (c) Set up Input Monitoring to do a check for Parameter Validity Bits associated with PDCU data. Use one of these eight signal specifications.
 - 1) L/629/SYS L/DFE/1/1-1/2-0
 - 2) L/629/SYS L/DFE/2/1-1/2-0
 - 3) L/629/SYS R/DFE/1/1-1/2-0
 - 4) L/629/SYS R/DFE/2/1-1/2-0
 - 5) R/629/SYS L/DFE/1/1-1/2-0
 - 6) R/629/SYS L/DFE/2/1-1/2-0
 - 7) R/629/SYS R/DFE/1/1-1/2-0
 - 8) R/629/SYS R/DFE/2/1-1/2-0

NOTE: If the OPBC L status message shows, then use one of these four signal specification steps above: 2), 4), 6), or 8). If the OPBC R status message shows, then use one of these four signal specification steps above: 1), 3), 5), or 7).

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- (d) If bit 0 in the monitored word has the value of 1, it is possible that the problem is one of the Captain's switches. It is possible to identify the bad switch with more input monitoring.
- 1) Use the same signal specification from the step above, except replace the "1-1" with "2-2".
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
Capt ATC ACPT		2/0 = 1			
Capt ATC RJCT		2/1 = 1			
Capt ATC CNCL		2/15 = 1			
Capt AIR DATA	ALTN	2/2 = 1	2/3 = 0		
"	AUTO	2/2 = 0	2/3 = 1		
Capt DSPL CTRL	ALTN	2/4 = 1	2/5 = 0		
"	AUTO	2/4 = 0	2/5 = 1		
Capt INBOARD DSPL	MFD	2/9 = 1	2/10 = 0	2/11 = 0	2/12 = 0
"	EICAS	2/9 = 0	2/10 = 1	2/11 = 0	2/12 = 0
"	NAV	2/9 = 0	2/10 = 0	2/11 = 1	2/12 = 0
"	PFD	2/9 = 0	2/10 = 0	2/11 = 0	2/12 = 1
Capt NAV	CDU	2/14 = 1	2/13 = 0		
"	AUTO	2/14 = 0	2/13 = 1		

NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the Captain's Inboard DSPL Selector and finish with the Captain's ATC switches. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (e) If bit 1 in the monitored word has the value 1, it is possible that the problem is one of the First Officer's switches.
- 1) Use the same signal specification from the step above, except replace the "1-1" with "3-3."
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

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PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
F. O. ATC ACPT		3/0 = 1			
F.O. ATC RJCT		3/1 = 1			
F.O. ATC CNCL		3/15 = 1			
F.O. AIR DATA	ALTN	3/2 = 1	3/3 = 0		
"	AUTO	3/2 = 0	3/3 = 1		
F.O. DSPL CTRL	ALTN	3/4 = 1	3/5 = 0		
"	AUTO	3/4 = 0	3/5 = 1		
F.O. INBOARD DSPL	MFD	3/9 = 1	3/10 = 0	3/11 = 0	3/12 = 0
"	EICAS	3/9 = 0	3/10 = 1	3/11 = 0	3/12 = 0
"	NAV	3/9 = 0	3/10 = 0	3/11 = 1	3/12 = 0
"	PFD	3/9 = 0	3/10 = 0	3/11 = 0	3/12 = 1
F.O. NAV	CDU	3/14 = 1	3/13 = 0		
"	AUTO	3/14 = 0	3/13 = 1		

NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the First Officer's Inboard DSPL Selector and finish with the First Officer's ATC switches. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches: (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (f) If bit 2 in the monitored word has the value 1, it is possible that the problem is the Center DSP Control switch or the DSP panel.
 - 1) Replace the Center DSP Control switch.
 - 2) If the fault continues, replace the DSP.
- (g) If bit 3 in the monitored word has the value 1, it is possible that the problem is one of the switches that follows or the DSP panel.
 - 1) Use the same signal specification from the step above, except replace the "1-1" with "5-5".
 - 2) The correct display of bit values shows in the table that follows. If the value that shows does not agree with the data in the table, then replace the applicable switch.

PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
HEADING REFERENCE	TRUE	5/13 = 1	5/12 = 0		

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PDCU Input Monitoring for DSPL Control and Inboard Display Select Switches (Continued)

Switch	Switch Position	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit	Label DFE, word/bit
"	NORM	5/13 = 0	5/12 = 1		
FMC MASTER SELECTOR	RIGHT	5/8 = 0	5/9 = 0	5/10 = 1	
"	LEFT	5/8 = 0	5/9 = 1	5/10 = 0	
"	AUTO	5/8 = 1	5/9 = 0	5/10 = 0	

NOTE: A 'zero (0)' in a bit position indicates that the circuit is open with the switch in that position.

- 3) If you do not find a problem, replace the switches in this sequence. Start with the FMC Master Selector and finish with the DSP. Do the OPAS initiated test after each switch replacement to see if you corrected the fault. Make sure that you do this test before you replace more switches: (Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).
- (h) If you do not find a problem with switch input monitoring, do these steps:
 - 1) Remove the safety tag and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

Row	Col	Number	Name
D	6	C23603	OPAS 1

- 2) Continue with the fault isolation steps that follow.
- (3) Replace the right panel data concentrator unit (PDCU), M23297.
These are the tasks:
Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801,
Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
 - (b) If the maintenance message still shows on the MAT, then continue.
- (4) Do this check of the wiring:
 - (a) Remove the right PDCU, M23297. To remove it, do this task: Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801.
 - (b) Remove the right OPBC, M23212. To remove it, do this task: Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
 - (c) Do a wiring check between these pins of connector DM23297A at the PDCU and connector DM23212F at the OPBC (WDM 23-93-21):

DM23297A	DM23212F
pin 5	pin 1
pin 6	pin 2

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Install the right PDCU, M23297. To install it, do this task: Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - 3) Install the right OPBC, M23212. To install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (f) Install the right OPBC, M23212. To install it, do this task: Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (g) Remove the left OPBC, M23112. To remove it, do this task: Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (h) Do a wiring check between these pins of connector DM23297A at the PDCU and connector DM23112G at the OPBC (WDM 23-93-21):

DM23297A	DM23112G
pin 9	pin 7
pin 10	pin 8

- (i) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Install the right PDCU, M23297. To install it, do this task: Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
 - 3) Install the left OPBC, M23112. To install it, do this task: Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

D. General Information

- (1) You can use the alternate fault isolation procedure that follows if time allows. Also, use the alternate procedure that follows if the fault isolation procedure above did not correct the fault.
- (a) It is possible that the airplane has a high resistance path through a switch. The Panel Data Concentrator Unit (PDCU) may report itself as failed if the switch input toggle test fails. This is because of a high resistance path through one of the switch circuits.

E. Alternate Fault Isolation Procedure

- (1) If the MAT continues to show ACTIVE for the maintenance message, then do the steps that follow.
- (a) Record the position of each of the three rotary selector switches (CAPT Inboard Display selector, F.O. Inboard Display selector, and the FMC selector). If it is possible, ask the flight crew if the position of any selector was changed during the previous flight leg.
- NOTE:** The requested information should include the "from" and "to" position of any selector that was changed during the flight leg.
- (2) Move the Left PDCU to the First Officer's position and move the Right PDCU to the Captain's position.

These are the tasks:

Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801,

Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.

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- (3) Do this test.

(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).

NOTE: It is not necessary to do the complete task. Only do the Left or Right OPAS test.

- (a) If the right PDCU internal fault maintenance message 23-42920 does not show but now the Left PDCU internal fault maintenance message 23-41570 shows, the PDCU has a fault. Replace the unserviceable PDCU in the left position.
- (b) If the right PDCU maintenance message 23-42920 still shows, it is possible that the fault is in one of the switches.
- 1) Continue with one of the steps that follow.

NOTE: Do one of the steps that follow to find the unserviceable selector switch. It is not necessary to do the two steps.

- (4) Disconnect J2, J3 and J4 of the right PDCU.

- (a) Do the resistance checks for each position of each selector in the table that follows.
- (b) Replace the selector (switch) if the measured resistance is more than 3 Ohms. Do this only for resistance checks where the table shows correct resistance as "Less than 3" Ohms.

Alternate Fault Isolation Procedure Resistance Checks

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Left Engine Fire Shutoff Switch	normal	DM23297B	3	4	More than 100,000
	pulled	DM23297B	3	4	Less than 3
Right Engine Fire Shutoff Switch	normal	DM23297B	5	6	More than 100,000
	pulled	DM23297B	5	6	Less than 3
Captain ATC Accept	normal	DM23297C	13	27	More than 100,000
	pressed	DM23297C	13	27	Less than 3
Captain ATC Reject	normal	DM23297C	28	48	More than 100,000
	pressed	DM23297C	28	48	Less than 3
Captain ATC Cancel	normal	DM23297C	29	50	More than 100,000
	pressed	DM23297C	29	50	Less than 3
Captain ATT/ADC	alternate	DM23297C	1	7	Less than 3
			2	7	More than 100,000
	normal	DM23297C	1	7	More than 100,000
			2	7	Less than 3
Captain DSP	alternate	DM23297C	3	7	Less than 3
			4	7	More than 100,000
	auto	DM23297C	3	7	More than 100,000
			4	7	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
Captain NAV	auto	DM23297C	5	7	Less than 3
			6	7	More than 100,000
	CDU	DM23297C	5	7	More than 100,000
			6	7	Less than 3
Captain Inboard Display Select	MFD	DM23297C	9	24	Less than 3
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	More than 100,000
	EICAS	DM23297C	9	24	More than 100,000
			10	24	Less than 3
			11	24	More than 100,000
			25	24	More than 100,000
	NAV	DM23297C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	Less than 3
			25	24	More than 100,000
	PFD	DM23297C	9	24	More than 100,000
			10	24	More than 100,000
			11	24	More than 100,000
			25	24	Less than 3
Heading Reference	NORM	DM23297C	43	24	Less than 3
			44	24	More than 100,000
	TRUE	DM23297C	43	24	More than 100,000
			44	24	Less than 3
EICAS DSP	alternate	DM23297C	32	55	Less than 3
			33	55	More than 100,000
	auto	DM23297C	32	55	More than 100,000
			33	55	Less than 3
DSP Event Record	normal	DM23297C	54	55	More than 100,000
	pressed	DM23297C	54	55	Less than 3
DSP Message Cancel/Recall	normal	DM23297D	16	34	More than 100,000
	pressed	DM23297D	16	34	Less than 3
DSP Checklist Page	normal	DM23297D	17	34	More than 100,000
	pressed	DM23297D	17	34	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
DSP Comm Page	normal	DM23297D	18	34	More than 100,000
	pressed	DM23297D	18	34	Less than 3
DSP Doors Page	normal	DM23297D	19	34	More than 100,000
	pressed	DM23297D	19	34	Less than 3
DSP Environmental Page	normal	DM23297D	37	34	More than 100,000
	pressed	DM23297D	37	34	Less than 3
DSP Electrical Page	normal	DM23297D	36	34	More than 100,000
	pressed	DM23297D	36	34	Less than 3
DSP Engine Page	normal	DM23297D	35	34	More than 100,000
	pressed	DM23297D	35	34	Less than 3
DSP Flight CNTLS Page	normal	DM23297D	33	34	More than 100,000
	pressed	DM23297D	33	34	Less than 3
DSP Fuel Page	normal	DM23297D	32	34	More than 100,000
	pressed	DM23297D	32	34	Less than 3
DSP Gear Page	normal	DM23297D	54	34	More than 100,000
	pressed	DM23297D	54	34	Less than 3
DSP Hydraulics Page	normal	DM23297D	55	34	More than 100,000
	pressed	DM23297D	55	34	Less than 3
DSP LWR CTR	normal	DM23297D	56	34	More than 100,000
	pressed	DM23297D	56	34	Less than 3
DSP L INBD	normal	DM23297D	57	34	More than 100,000
	pressed	DM23297D	57	34	Less than 3
DSP NAV Page	normal	DM23297D	58	34	More than 100,000
	pressed	DM23297D	58	34	Less than 3
DSP R INBD	normal	DM23297D	59	34	More than 100,000
	pressed	DM23297D	59	34	Less than 3
DSP STATUS Page	normal	DM23297D	60	34	More than 100,000
	pressed	DM23297D	60	34	Less than 3
DSP CAM Page (777-300 only)	normal	DM23297D	61	34	More than 100,000
	pressed	DM23297D	61	34	Less than 3
First Officer ATC Accept	normal	DM23297D	28	48	More than 100,000
	pressed	DM23297D	28	48	Less than 3
First Officer ATC Reject	normal	DM23297D	13	27	More than 100,000
	pressed	DM23297D	13	27	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer ATC Cancel	normal	DM23297D	50	49	More than 100,000
	pressed	DM23297D	50	49	Less than 3
First Officer ATT/ADC	alternate	DM23297D	1	7	Less than 3
		DM23297D	2	7	More than 100,000
	normal	DM23297D	1	7	More than 100,000
		DM23297D	2	7	Less than 3
First Officer DSP	alternate	DM23297D	3	7	Less than 3
		DM23297D	4	7	More than 100,000
	auto	DM23297D	3	7	More than 100,000
		DM23297D	4	7	Less than 3
First Officer NAV	auto	DM23297D	5	7	Less than 3
		DM23297D	6	7	More than 100,000
	CDU	DM23297D	5	7	More than 100,000
		DM23297D	6	7	Less than 3
FMC Master	AUTO	DM23297D	45	26	Less than 3
		DM23297D	46	26	More than 100,000
		DM23297D	47	26	More than 100,000
	LEFT	DM23297D	45	26	More than 100,000
		DM23297D	46	26	Less than 3
		DM23297D	47	26	More than 100,000
	RIGHT	DM23297D	45	26	More than 100,000
		DM23297D	46	26	More than 100,000
		DM23297D	47	26	Less than 3

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Alternate Fault Isolation Procedure Resistance Checks (Continued)

Switch	Switch Position	Connector	From Pin	To Pin	Resistance (Ohms)
First Officer Inboard Display Select	MFD	DM23297D	10	26	Less than 3
		DM23297D	11	26	More than 100,000
		DM23297D	12	26	More than 100,000
		DM23297D	25	26	More than 100,000
	EICAS	DM23297D	10	26	More than 100,000
		DM23297D	11	26	Less than 3
		DM23297D	12	26	More than 100,000
		DM23297D	25	26	More than 100,000
	NAV	DM23297D	10	26	More than 100,000
		DM23297D	11	26	More than 100,000
		DM23297D	12	26	Less than 3
		DM23297D	25	26	More than 100,000
	PFD	DM23297D	10	26	More than 100,000
		DM23297D	11	26	More than 100,000
		DM23297D	12	26	More than 100,000
		DM23297D	25	26	Less than 3

- (c) Reconnect J2, J3 and J4 to the PDCU.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.
- (5) Do the OPAS test again. Make sure you do a check through each position of each selector. The test should be run once in each selector position (a total of 11 times).
(Overhead Panel ARINC 629 System - Operational Test, AMM TASK 23-93-00-730-801).
 - (a) If the test fails after moving any selector to a new position, replace the selector.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), then you corrected the fault.

————— **END OF TASK** —————

889. IFE/PASS SEATS Switch - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43945.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do these steps:
 - (a) Monitor the maintenance message on the maintenance access terminal (MAT).

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- (b) Push the IFE/PASS SEATS switch, on the overhead panel P5, to the ON and to the OFF positions.

NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.

- (c) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then do the Fault Isolation procedure below.
- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the IFE/PASS SEATS switch S14 (WDM 24-51-24). To replace the switch, do this task: Integral Panel Light - Pushbutton Switch Replacement, AMM TASK 33-13-00-960-802.

- (a) Push the IFE/PASS SEATS switch to the ON and OFF positions.

NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.

- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then continue.

- (2) Do this check of the wiring:

- (a) Lower the right overhead circuit breaker panel P11, to get access to the connector DM23217G on the overhead cardfile panel (OPC) P61.
 - (b) Remove the connector DM23217G from the OPC P61 (WDM 24-51-24).
 - (c) Push the IFE/PASS SEATS switch to the ON position.
 - (d) Do this continuity check between these pins on the connector DM23217G, at the OPC P61:

DM23217G	DM23217G
pin A1	pin A3

- (e) Push the IFE/PASS SEATS switch to the OFF position.
 - (f) Do this continuity check between these pins on the connector DM23217G:

DM23217G	DM23217G
pin A2	pin A3

- (g) Repair the wiring (WDM 24-51-24).
 - (h) Push the IFE/PASS SEATS switch to the ON and OFF positions.
NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.
 - (i) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.
 - (j) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then continue.

- (3) Replace the right overhead cardfile chassis, M23217.

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These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) Push the IFE/PASS SEATS switch to the ON and OFF positions.

NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.

- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.

————— **END OF TASK** —————

890. CABIN UTILITY Switch - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43955.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then do these steps:
 - (a) Monitor the maintenance message on the maintenance access terminal (MAT).
 - (b) Push the CABIN/UTILITY switch, on the overhead panel P5, to the ON and to the OFF positions.

NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.
 - (c) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then do the Fault Isolation procedure below.
 - (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the CABIN/UTILITY switch S15 (WDM 24-51-41). To replace the switch, do this task: Integral Panel Light - Pushbutton Switch Replacement, AMM TASK 33-13-00-960-802.
 - (a) Push the CABIN/UTILITY switch to the ON and OFF positions.

NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then continue.
- (2) Do this check of the wiring:
 - (a) Lower the right overhead circuit breaker panel P11, to get access to the connector DM23217G on the overhead cardfile panel (OPC) P61.
 - (b) Remove the connector DM23217G from the OPC P61 (WDM 24-51-41).
 - (c) Push the CABIN/UTILITY switch to the ON position.

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- (d) Do this continuity check between these pins on the connector DM23217G, at the OPC P61:

DM23217G	DM23217G
pin A18	pin A20

- (e) Push the CABIN/UTILITY switch to the OFF position.
(f) Do this continuity check between these pins on the connector DM23217G:

DM23217G	DM23217G
pin A19	pin A20

- (g) Repair the wiring (WDM 24-51-41).
(h) Push the CABIN/UTILITY switch to the ON and OFF positions.
NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.
(i) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.
(j) If the MAT shows ACTIVE for the maintenance message when the switch is in the ON or OFF positions, then continue.
(3) Replace the right overhead cardfile chassis, M23217.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) Push the CABIN/UTILITY switch to the ON and OFF positions.
NOTE: Wait 15 seconds, each time the switch position is changed, for the maintenance message to show.
(b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) when the switch is in the ON or OFF positions, you corrected the fault.

————— **END OF TASK** —————

891. OPBC-L No Input from ELMS P310 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49435.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
(2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24502, in the P110 panel.
This is the task:
Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B24109, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the ELMS P310 EU to the Systems 629 Bus-L.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23126, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

END OF TASK

892. OPBC-R No Input from ELMS P310 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49436.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller M23212.
These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24510, in the P310 panel.
- This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.
- These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24109, in the P111 panel.
- These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE: This coupler connects the ELMS P310 EU to the Systems 629 Bus-L.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

893. OPBC-L No Input from ELMS P210 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49437.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller M23112.
- These are the tasks:
- Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24506, in the P210 panel.

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This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24108, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS P210 EU to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

END OF TASK

894. OPBC-R No Input from ELMS P210 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49438.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24506, in the P210 panel.

This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23127, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24108, in the P111 panel.
These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
NOTE: This coupler connects the ELMS P210 EU to the Systems 629 Bus-L.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

895. OPBC-L No Input from ELMS P110 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49635.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112.
These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24502, in the P110 panel.
This is the task:
Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B24207, in the P211 panel.
- These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE: For ELMS-1, this coupler connects the ELMS EU to the Systems 629 Bus-R.
- NOTE: For ELMS-2, this coupler connects the ELMS CCU to the Systems 629 Bus-R.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23226, in the P211 panel.
- These are the tasks:
- ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

896. OPBC-R No Input from ELMS P110 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49636.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller M23212.
- These are the tasks:
- Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24502, in the P110 panel.
- This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Replace the ARINC 629 coupler, B24207, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS EU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23227, in the P211 panel

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

———— **END OF TASK** ————

897. OPBC-L No Input from ELMS P210 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49637.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24506, in the P210 panel.
- This is the task:
- Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel.

These are the tasks:

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ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24208, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS P210 EU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

898. OPBC-R No Input from ELMS P210 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49638.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24506, in the P210 panel.

This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

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ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24208, in the P211 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS P210 EU to the Systems 629 Bus-R.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

899. OPBC-L No Input from ELMS P110 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-89423.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do a check of the Computing and Communications Unit, M24502, in the P110 panel.

This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23126, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the left OPBC to the Systems 629 Bus-L.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24107, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS EUT to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— END OF TASK —————

900. OPBC-R No Input from ELMS P110 EU on Systems 629 Bus-L - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-89424.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the Computing and Communications Unit, M24502, in the P110 panel.

This is the task:

Computing and Communication Unit - Exchange Check, AMM TASK 24-09-00-700-802-002.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the right overhead panel bus controller M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B24107, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the ELMS EUT to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B23127, in the P111 panel.

These are the tasks:

ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,

ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

NOTE: This coupler connects the right OPBC to the Systems 629 Bus-L.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

— END OF TASK —

901. OPBC-L No Input from ELMS P310 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49639.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the left overhead panel bus controller (OPBC), M23112. These are the tasks:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801,
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the computing and communications unit (CCU), M24510 in the P310 power panel. These are the tasks:
Computing and Communications Unit - Removal, AMM TASK 24-09-00-000-815-002,
Computing and Communications Unit - Installation, AMM TASK 24-09-00-400-811-002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the ARINC 629 coupler, B23226, in the P211 panel. These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24209, in the P211 panel. These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the left OPBC to the coupler:
 - (a) Open this circuit breaker and attach DO-NOT-CLOSE tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (b) Remove the access panel for the left OPBC. To remove it, do this task:
Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801.
- (c) Disconnect connector DM23112C from the left OPBC, M23112.
- (d) Disconnect connector DB23226 from the coupler B23226.
- (e) Do a wiring check between these pins of connector DM23112C at the left OPBC and connector DB23226 at the P211 panel (WDM 23-93-11):

DM23112C		DB23226	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23112C and DB23226.
 - 3) Re-install the OPBC access panel. To re-install it, do this task:
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 4) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring, then do these steps:
 - 1) Re-connect connectors D23112C and DB23226.
 - 2) Re-install the OPBC access panel. To re-install it, do this task:
Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801.
 - 3) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

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- 4) Continue with the next wiring check.
- (6) Do this check of the wiring between the CCU and the coupler as follows:
 - (a) Disconnect connector DM24510A from the P310 panel CCU, M24510.
 - (b) Disconnect connector DB24209 from ARINC coupler, B24209 in the P211 panel.
 - (c) Do a check for continuity between these pins of connector DM24510A at the CCU and connector DB24109 at the P211 panel (WDM 24-09-26):

DM24510A	DB24209
pin 123	pin 5
pin 124	pin 4
pin 126	pin 2
pin 127	pin 1

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DB24209 to coupler, B24209.
 - 3) Re-connect connector DM24510A to CCU, M24510.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

902. OPBC-R No Input from ELMS P310 EU on Systems 629 Bus-R - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-49640.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the right overhead panel bus controller (OPBC), M23212. These are the tasks:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802,
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the computing and communications unit (CCU), M24510 in the P310 power panel. These are the tasks:
Computing and Communications Unit - Removal, AMM TASK 24-09-00-000-815-002,
Computing and Communications Unit - Installation, AMM TASK 24-09-00-400-811-002.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Replace the ARINC 629 coupler, B23227, in the P211 panel. These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the ARINC 629 coupler, B24209, in the P211 panel. These are the tasks:
ARINC 629 Current-Mode Coupler Removal, AMM TASK 23-91-01-000-801,
ARINC 629 Current-Mode Coupler Installation, AMM TASK 23-91-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring from the right OPBC to the coupler:
- (a) Open this circuit breaker and attach DO-NOT-CLOSE tag:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (b) Remove the access panel for the right OPBC. To remove it, do this task:
Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802.
- (c) Disconnect connector DM23212C from the right OPBC, M23212.
- (d) Disconnect connector DB23227 from the coupler B23227.
- (e) Do a wiring check between these pins of connector DM23212C at the right OPBC and connector DB23227 at the P211 panel (WDM 23-93-11):

DM23212C		DB23227	
pin 5	.....	pin 5	
pin 4	.....	pin 4	
pin 2	.....	pin 2	
pin 1	.....	pin 1	

- (f) If you find a problem with the wiring, then do these steps:
- 1) Replace the ARINC 629 wiring (SWPM 20-13-00).
 - 2) Re-connect connectors D23212C and DB23227.
 - 3) Re-install the OPBC access panel. To re-install it, do this task:
Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802.
 - 4) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

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- (g) If you do not find a problem with the wiring, then do these steps:
- 1) Re-connect connectors D23212C and DB23227.
 - 2) Re-install the OPBC access panel. To re-install it, do this task:
Right Overhead Panel Bus Controller (OPBC) Installation, AMM
TASK 23-93-01-400-802.

- 3) Close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- 4) Continue with the next wiring check.
- (6) Do this check of the wiring between the CCU and the coupler as follows:
- (a) Disconnect connector DM24510A from the P310 panel CCU, M24510.
 - (b) Disconnect connector DB24209 from ARINC coupler, B24209 in the P211 panel.
 - (c) Do a check for continuity between these pins of connector DM24510A at the CCU and connector DB24109 at the P211 panel (WDM 24-09-26):

DM24510A	DB24209
pin 123	pin 5
pin 124	pin 4
pin 126	pin 2
pin 127	pin 1

- (c) Do a check for continuity between these pins of connector DM24510A at the CCU and connector DB24109 at the P211 panel (WDM 24-09-26):
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DB24209 to coupler, B24209.
 - 3) Re-connect connector DM24510A to CCU, M24510.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if message does not show), you corrected the fault.

————— **END OF TASK** —————

914. **NO PASSENGER ELEC Sign Signal Is Invalid - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance message: 23-41675.

B. Possible Causes

- (1) Overhead Panel Interface Card (right A1), M23217A1.
- (2) Overhead Panel Bus Controller (L), M23112 (P11).
- (3) Overhead Panel Card File Chassis (right), M23217.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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D. Fault Isolation Procedure

- (1) Open and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C23603	OPAS 1

- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
- (3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the Right-A1 Overhead Panel Interface Card, M23217A1.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801

Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801

- (5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the Left Overhead Panel Bus Controller, M23112.

These are the tasks:

Left Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-801

Left Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-801

- (8) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (9) If the MAT shows ACTIVE for the maintenance message, then continue.
- (10) Replace the Right Overhead Panel Card File chassis, M23217.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802

- (11) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— **END OF TASK** —————

919. NO PASSENGER ELEC Sign Signal Is Invalid - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-42675.

B. Possible Causes

- (1) Overhead Panel Interface Card (right) A2, M23217A2.
- (2) Overhead Panel Bus Controller (R), M23212 (P11).
- (3) Overhead Panel Card File Chassis (right), M23217.

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C. Initial Evaluation

- (1) If the MAT shows ACTIVE with the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Open and close this circuit breaker:

Overhead Circuit Breaker Panel, P11

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
G	20	C23602	OPAS 2

- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
- (3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the Right-A2 Overhead Panel Interface Card, M23217A2.

These are the tasks:

Overhead Panel Interface Card (OPIC) Removal, AMM TASK 23-93-02-000-801

Overhead Panel Interface Card (OPIC) Installation, AMM TASK 23-93-02-400-801

- (5) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the Right Overhead Panel Bus Controller, M23212.

These are the tasks:

Right Overhead Panel Bus Controller (OPBC) Removal, AMM TASK 23-93-01-000-802

Right Overhead Panel Bus Controller (OPBC) Installation, AMM TASK 23-93-01-400-802

- (8) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.
- (9) If the MAT shows ACTIVE for the maintenance message, then continue.
- (10) Replace the Right Overhead Panel Card File, M23217.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802

- (11) If the MAT shows NOT ACTIVE for the maintenance message (or if it does not show), you corrected the fault.

————— END OF TASK —————

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802. Observed Fault with Correlated Maintenance Messages - Fault Isolation

A. Initial Evaluation

- (1) Find the fault code to the right of the fault description in the Observed Faults List (at the front of the FIM).
 - (a) The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.
 - (b) Find the maintenance message to the right of the fault code.
 - (c) Find the task number on the same line as the maintenance message number.
 - (d) Go to the task in the FIM and do the steps in the task.

————— **END OF TASK** —————

803. Standard Airline Method - Fault Isolation

A. Initial Evaluation

NOTE: Use the standard method of your airline to correct this fault.

————— **END OF TASK** —————

804. Passenger Control Unit - Fault Isolation

A. Initial Evaluation

NOTE: Use the standard method of your airline to correct this fault.

————— **END OF TASK** —————

805. Seat Video Display Problems - Fault Isolation

A. Initial Evaluation

NOTE: Use the standard method of your airline to correct this fault.

————— **END OF TASK** —————

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