

CHAPTER

57

Wings

CHAPTER 57
WINGS

Subject/Page	Date	COC	Subject/Page	Date	COC
57-EFFECTIVE PAGES					
1	Sep 15/2023				
2	BLANK				
57-CONTENTS					
1	Sep 15/2021				
2	BLANK				
57-00-00					
1	Sep 15/2021				
2	Sep 15/2021				
3	Sep 15/2021				
4	Sep 15/2021				
5	Sep 15/2021				
6	BLANK				
57-31-00					
1	Sep 15/2021				
2	Sep 15/2021				
3	Sep 15/2021				
4	BLANK				

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

57-EFFECTIVE PAGES



CHAPTER 57
WINGS

<u>CH-SC-SU</u>	<u>SUBJECT</u>	<u>PAGE</u>	<u>EFFECT</u>
57-00-00	WINGS - TOP VIEW - GENERAL DESCRIPTION	2	SIA ALL
57-00-00	WINGS - BOTTOM VIEW - GENERAL DESCRIPTION	4	SIA ALL
57-31-00	WINGLETS - GENERAL DESCRIPTION	2	SIA ALL

57-CONTENTS



THIS PAGE IS INTENTIONALLY LEFT BLANK

57-00-00

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details



WINGS - TOP VIEW - GENERAL DESCRIPTION

General

The left wing is shown. The right wing is almost the same.

Most of material in the wing is aluminum.

These components attach to the wing structure.

- Engine nacelle/pylon
- Flight control surfaces
- Winglets

Wing Reference Dimensions

The wing has two reference dimensions. The reference dimensions give wing locations in inches. Measure each location from buttock line 0. These are the wing reference dimensions:

- Wing station
- Wing buttock line

Measure the wing station perpendicular to the wing leading edge.

Measure the wing buttock line parallel to the buttock line.

Access Panels

Access panels on the top of the wing give access to the main landing gear support structure.

Winglets

The winglets are attached to the outboard end of the wing.

The winglets are made up of an upper and lower blade.

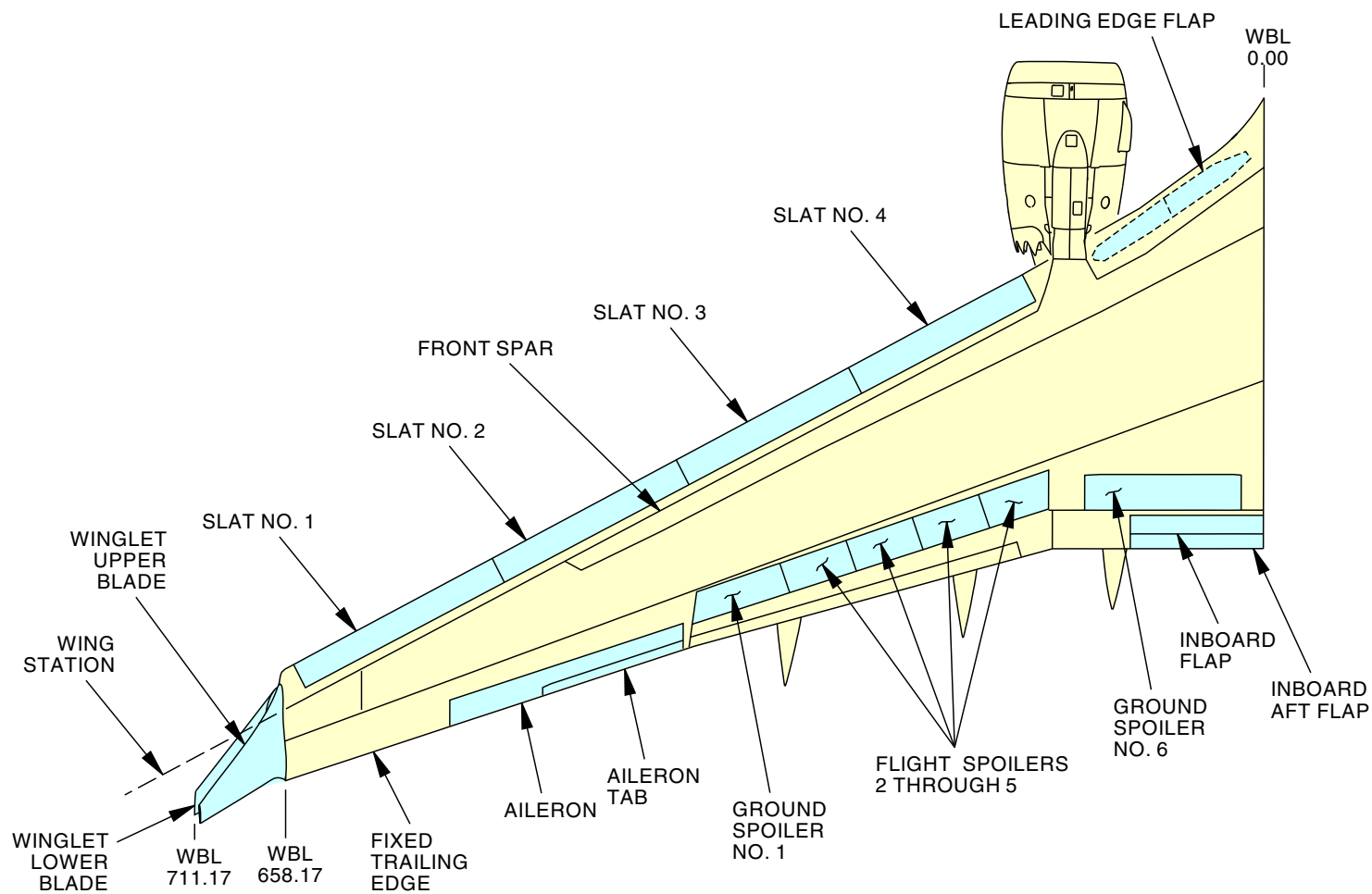
57-00-00

EFFECTIVITY	
SIA ALL	

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINGS - TOP VIEW - GENERAL DESCRIPTION



(LEFT WING IS SHOWN, RIGHT WING IS ALMOST THE SAME)

2370538 S00061521949_V1

WINGS - TOP VIEW - GENERAL DESCRIPTION

57-00-00

57-00-00-001

SIA ALL

EFFECTIVITY

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details

**WINGS - BOTTOM VIEW - GENERAL DESCRIPTION****General**

The bottom of the left wing is shown. The right wing is almost the same.

These components attach to the lower surface of the wing:

- Engine nacelle/pylon
- Trailing edge flap tracks

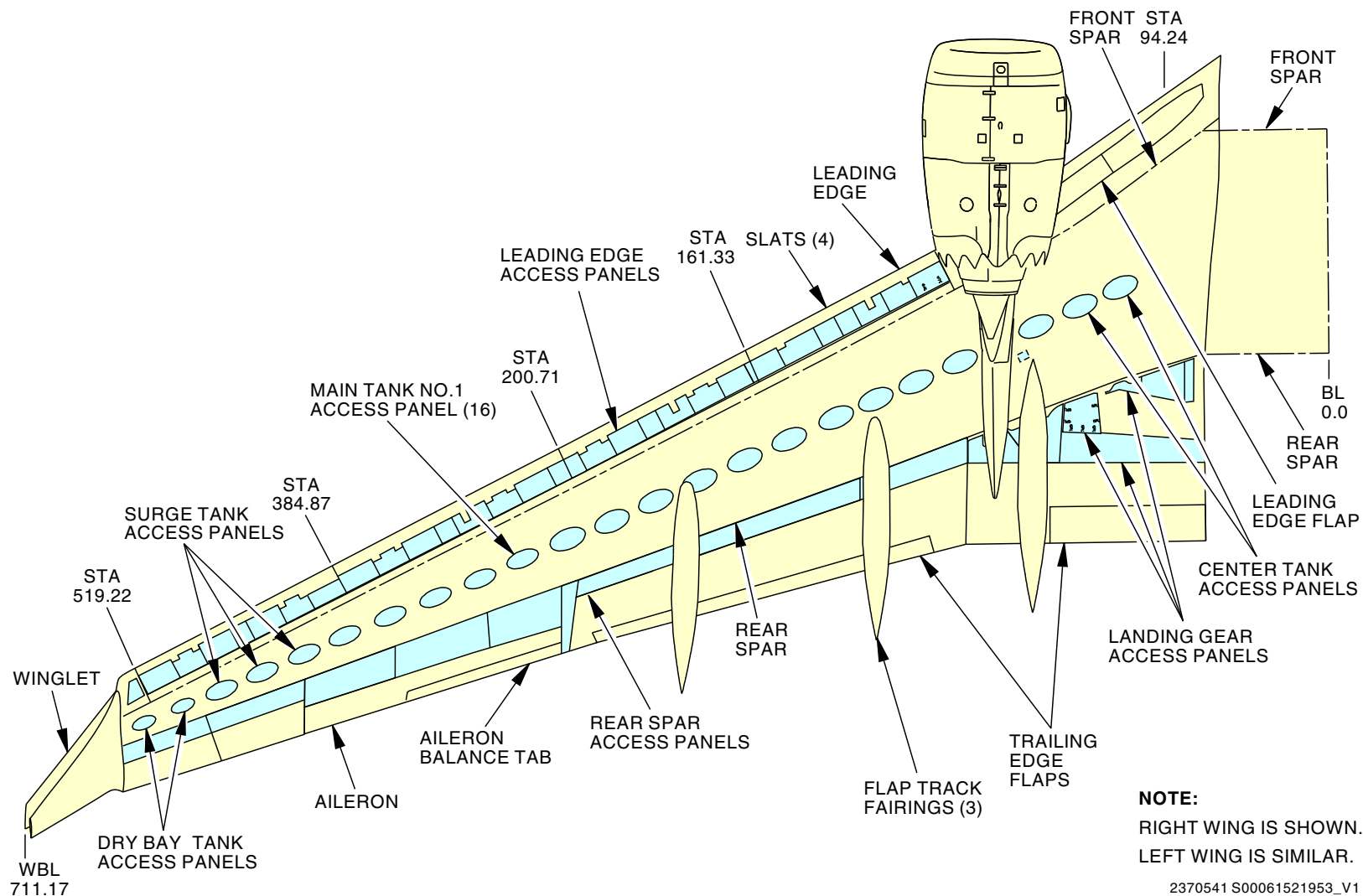
Access Panels

There are access panels on the lower surface of the wing that give access to the fuel tanks and other components.

- Fuel tank (or wet bay) access panels allow access into the center fuel tank, the main fuel tanks and the surge tanks.
- Dry bay access panels allow access into the dry bay areas which are outboard of the surge tanks.
- Access panels behind the wing leading edge give access to the forward spar structure and the leading edge slat actuators and tracks.
- Access panels aft of the rear spar gives access to the rear spar structure, fuel system pumps, aileron and the trailing edge flaps mechanisms.
- The access panels on the flap track fairings give access to the fairing mechanisms and the flap tracks and flap drive mechanisms.

SIA ALL	EFFECTIVITY

WINGS - BOTTOM VIEW - GENERAL DESCRIPTION



WINGS - BOTTOM VIEW - GENERAL DESCRIPTION

57-00-00

57-00-00-002

SIA ALL

EFFECTIVITY

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details



WINGS - BOTTOM VIEW - GENERAL DESCRIPTION

THIS PAGE IS INTENTIONALLY LEFT BLANK

57-31-00

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details



WINGLETS - GENERAL DESCRIPTION

General

The winglets are attached to the outboard end of the wings and consist of a blended upper and lower blade.

The upper blade is approximately 9 feet long and the lower blade is approximately 6 feet long.

There are fairings at the inboard end of the winglet that allow for access to the root fittings, electrical connectors and internal structure.

The lower blade can be removed independently of the upper blade.

Structure

The upper and lower blades of the winglets are made of composite fiberglass/graphite/epoxy honeycomb material with aluminum tip fairings and trailing edge.

The root fitting of the winglet is a machined aluminum and titanium structure.

The fairings on the inboard and outboard end are fiberglass laminate with the forward transition fairing made of super-plastic formed aluminum.

Lighting

There are three lights installed on the winglet, a forward position light, an anti-collision light and an aft marker light.

All three lights are Light Emitting Diode (LED) type and are installed as an assembly.

The forward position light is installed at the outboard leading edge of the wing at the interface between the wing and the winglet.

The anti-collision light is installed in the leading edge at the inboard/upper end of the lower blade of the winglet.

The aft marker light is installed at the outboard/lower end of the lower blade integral with the tip fairing.

Erosion Protection

The upper and lower blades are covered with a polyurethane protective film to stop erosion of the leading edges and skins.

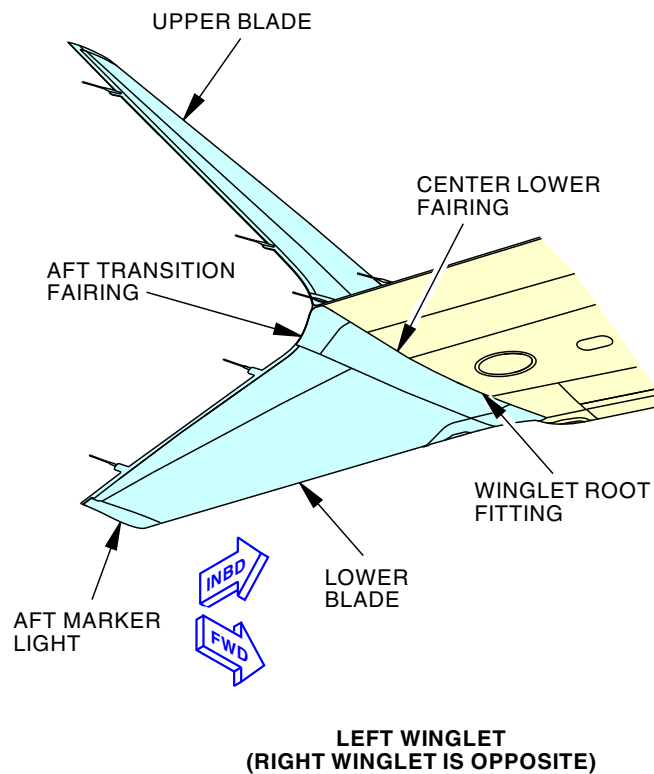
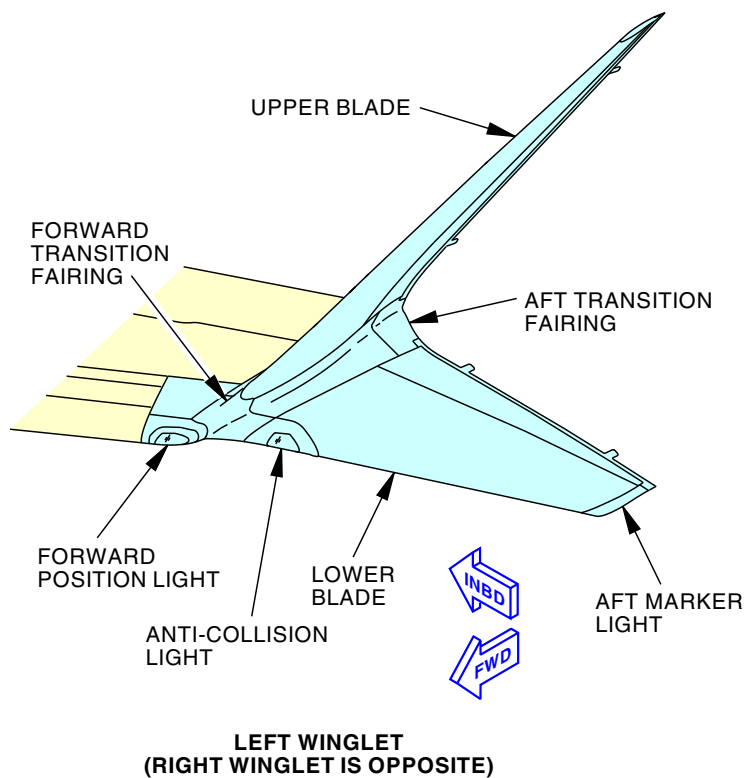
57-31-00

EFFECTIVITY	
SIA ALL	

D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WINGLETS - GENERAL DESCRIPTION



WINGLET - GENERAL DESCRIPTION

2370539 S00061521950_V1

57-31-00

57-31-00-001

SIA ALL	EFFECTIVITY
	D633AM102-SIA

ECCN 9E991 BOEING PROPRIETARY - See title page for details

