Section I

GENERAL

1-1. GENERAL DESCRIPTION.

1-2. The F-106A and F-106B airplanes, manufactured by Convair, a Division of General Dynamics Corporation, are high-performance, land-based, delta-wing, all-weather interceptors. The F-106A is a single-place airplane whose primary mission is interception and destruction of attacking hostile airplanes or airborne missiles that operate within the performance capabilities of the airplane. The F-106B interceptor is a two-place, tandem version of the F-106A with pilot training provisions. Both airplanes are equipped with fully retractable tricycle landing gear and are powered by the Pratt and Whitney J75-P-17 continuous flow gas turbine engine. Externally, the F-106A and F-106B are identical in dimensions except for a slight increase in the cross-sectional area of the F-106B cockpit. Figure 1-1 shows the principal dimensions of the two airplanes. The fuselage fuel tank of the F-106B is located farther aft than the tank in the F-106A to accommodate the lengthened cockpit. In addition, the equipment located in the electronic bay of the F-106A is moved aft to the forward missile bay area on the F-106B. The lower halves of the missile bay doors on the F-106B are shortened to conform to this change in equipment location. The access and inspection provisions are shown on figures 1-2 thru 1-5, refer to paragraph 1-335 for structural breakdown of F-106A and F-106B major airplane components.

1-3. TYPE OF CONSTRUCTION.

1-4. Wing Group.

1-5. The F-106A and F-106B wings are of the full cantilever, stressed skin construction with a delta configuration. This configuration has a 60-degree sweepback of the leading edge and a 5-degree sweep forward of the elevon and wing tip trailing edges. The right and left wing panels are attached to the fuselage with special high-strength bolts through the main spars and fuselage bulkhead fittings, and by drag angles riveted to the inboard edge of the wing and attached to the fuselage structure by means of screws. Each wing panel is equipped with removable cambered leading edge sections, a cambered wing tip, an elevon, a main landing gear and gear wing fairing, and provisions for the external mounting of droppable fuel tanks. Refer to Section II for additional information on the wings and for wing repairs.

1-6. Tail Group.

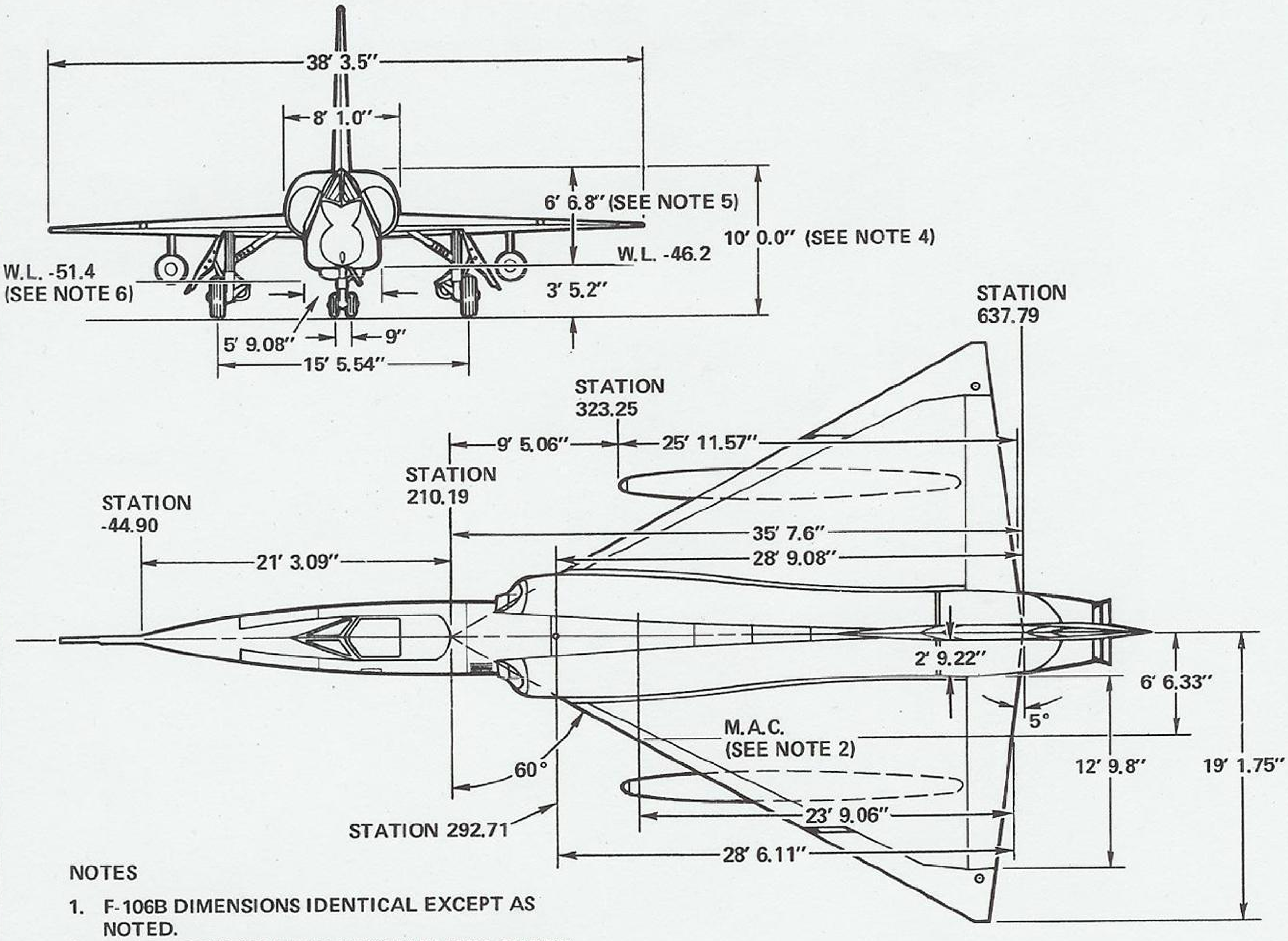
1-7. The tail group consists of a vertical fin and rudder. The fin assembly is an integral part of the fuselage structure and cannot be detached for repair or replacement without extensive separation from the fuselage bulkheads. The fin is equipped with a removable leading edge, a fin tip, and a rudder. The fin loads are carried by four vertical forged spars which are an integral part of the fuselage bulkhead assembly. The rudder is of the aluminum honeycomb core, sandwich-type construction with detachable hinge fittings on the leading edge spar. Refer to Section III for additional tail group information and for repairs to the fin and rudder.

1-8. Body Group.

1-9. The fuselage design is of semi-monocoque construction type with provisions for the radar equipment, the pilot's cockpit, an integral fuel tank, a missile bay, engine air intake ducts, main and nose landing gear wheel wells, electronic and accessory compartments, and the engine compartment. The fuselage structural framework consists basically of a series of semicircular zee and channel spliced beltframes, forged and built-up bulkheads, longerons, gussets, and intercostals. The fuselage framework is enclosed by stressed skins made of aluminum, magnesium, and titanium alloys that are attached with flush-head rivets and other types of fasteners. The fuselage structure depends heavily on the attached wing for longitudinal stiffening; adequate fuselage supports must be provided before a wing may be removed. Refer to Section IV for additional fuselage information and for repairs to the fuselage.

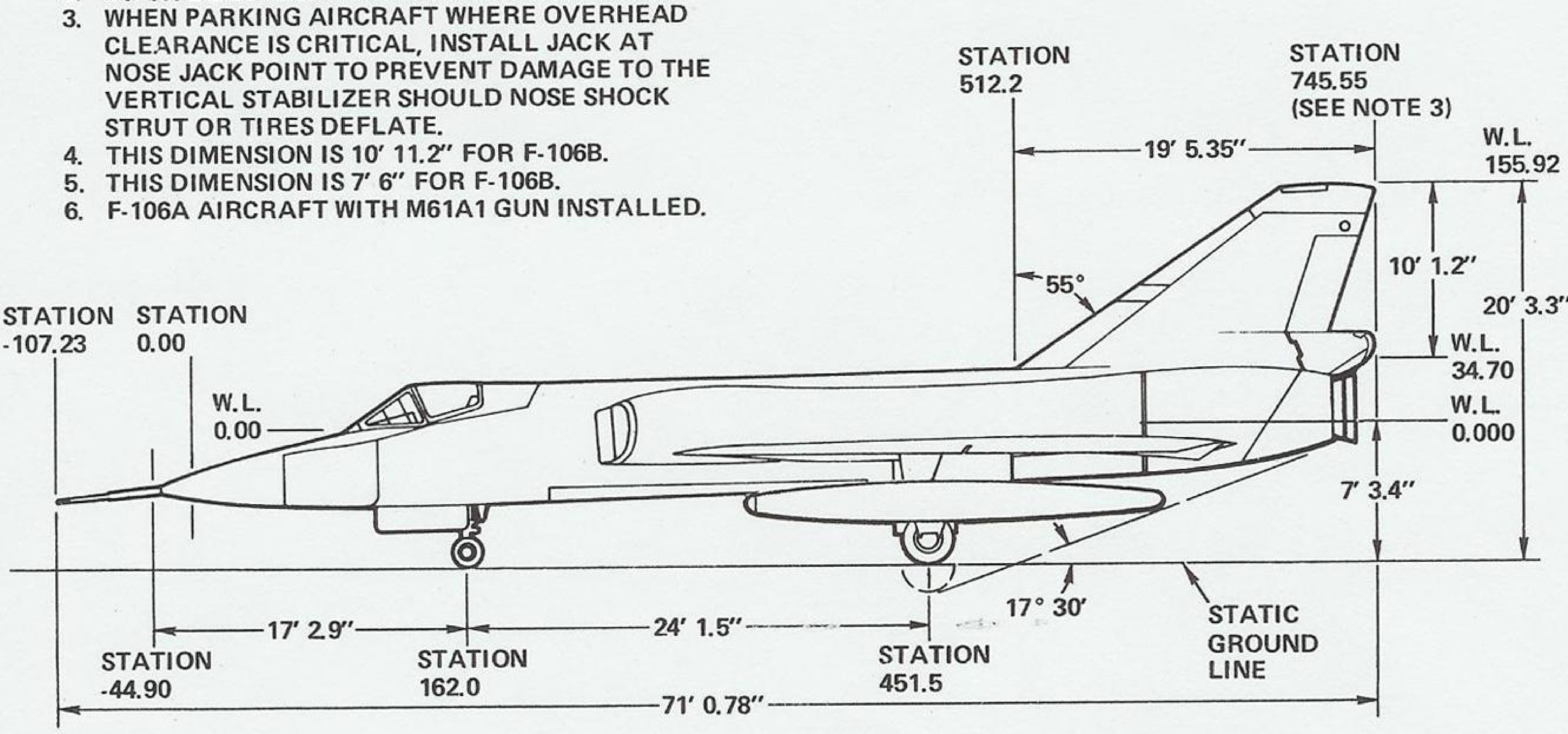
1-10. Landing Gear.

1-11. The F-106A and F-106B airplanes are equipped with electrically controlled, hydraulically operated, fully retractable, tricycle landing gear. The main landing gear retracts inboard and up into the wheel wells in the wing-fuselage area, while the nose landing gear retracts forward and up into the wheel well in the fuselage nose. The dual wheels on the nose gear are steerable during ground operations of the airplane. The nose and main gear assemblies are covered in the retracted position by hydraulically operated doors in the fuselage; wing fairings attached to the main gear struts enclose the main gear wheel well area in the wing



NOTES

1. F-106B DIMENSIONS IDENTICAL EXCEPT AS NOTED.
2. M.A.C. DENOTES MEAN AERODYNAMIC CHORD.
3. WHEN PARKING AIRCRAFT WHERE OVERHEAD CLEARANCE IS CRITICAL, INSTALL JACK AT NOSE JACK POINT TO PREVENT DAMAGE TO THE VERTICAL STABILIZER SHOULD NOSE SHOCK STRUT OR TIRES DEFLATE.
4. THIS DIMENSION IS 10' 11.2" FOR F-106B.
5. THIS DIMENSION IS 7' 6" FOR F-106B.
6. F-106A AIRCRAFT WITH M61A1 GUN INSTALLED.



F-106A(2-1)2A

Figure 1-1. Principal Dimensions

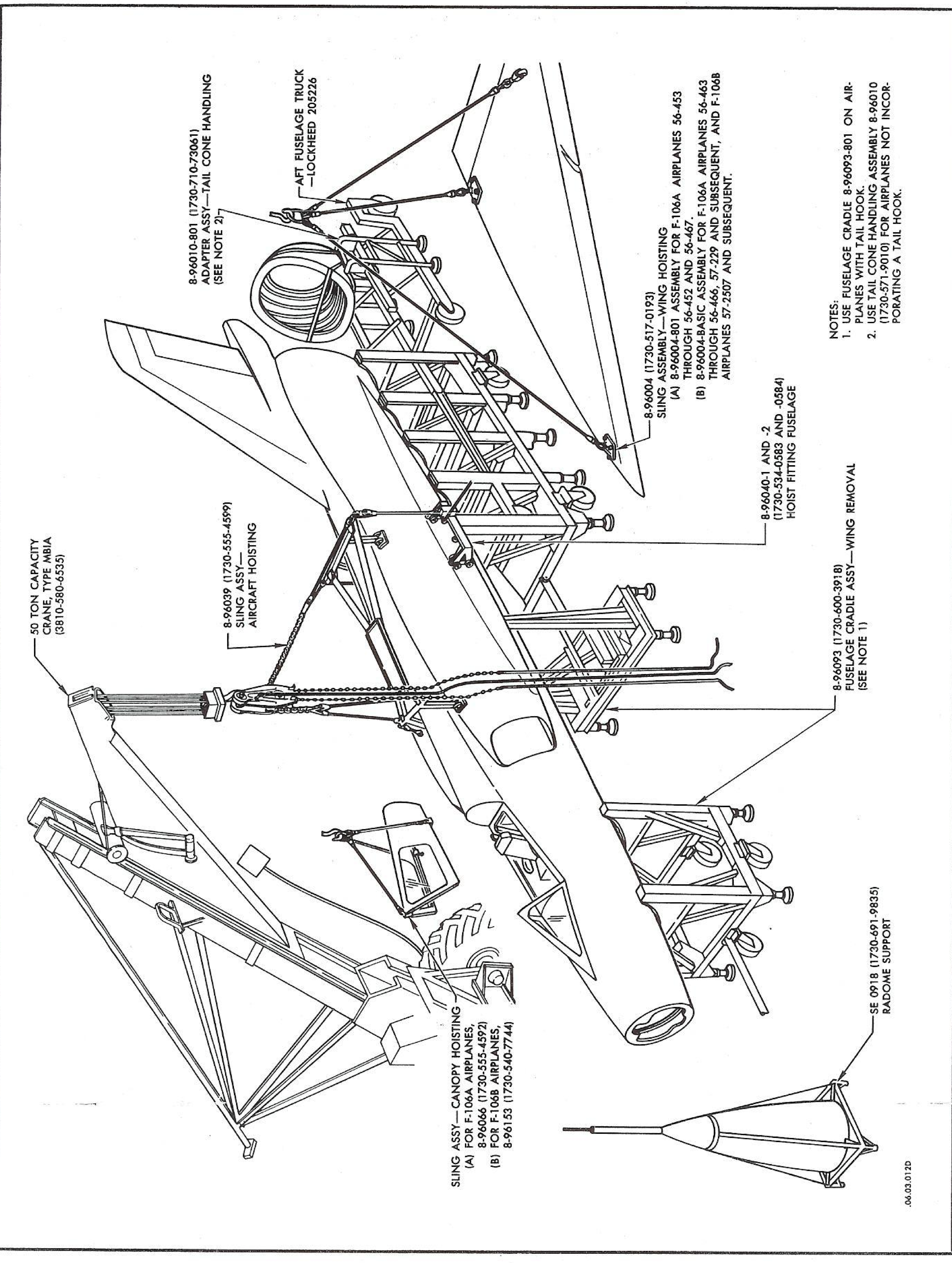
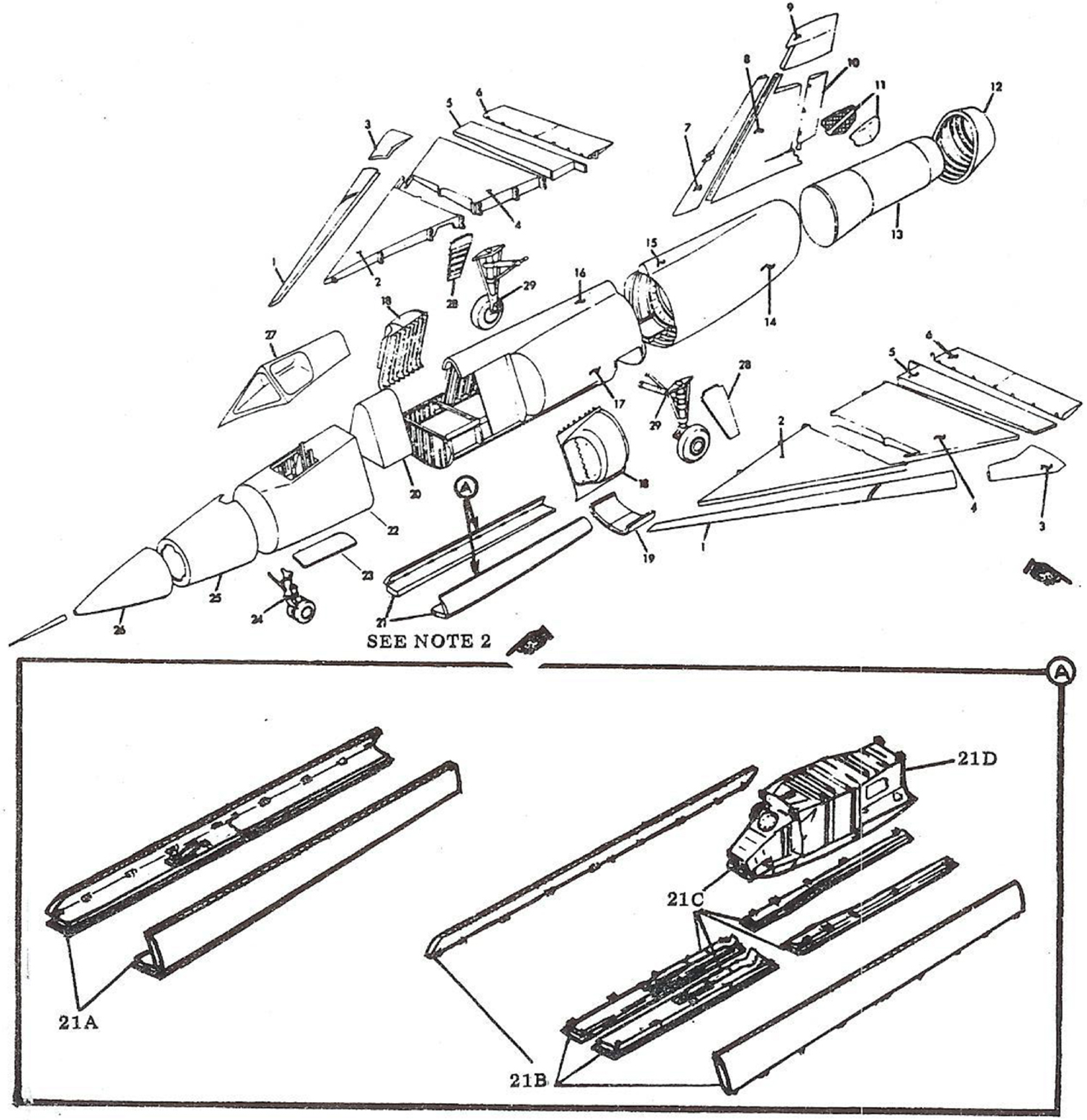


Figure 1-91. Airplane Handling Equipment



KEY	FIGURE NUMBER	NOMENCLATURE	ENGINEERING DRAWING NO.
1.	2-1	WING LEADING EDGE	8-18230
2.	2-1	WING FORWARD TANK	8-18030
3.	2-1	WING TIP	8-18910
4.	2-1	WING AFT TANK	8-18032
5.	2-1	WING TRANSFER TANK	8-18033
6.	2-1	ELEVON	8-13020
7.	3-1	FIN LEADING EDGE	8-14230
8.	3-1	FIN STRUCTURE	8-14035
9.	3-1	FIN TIP	8-14540
10.	3-1	RUDDER	8-15041
11.	4-1	SPEED BRAKE AND DRAG CHUTE HOUSING	8-74870
12.	4-1	TAIL CONE STRUCTURE	8-74490
13.	6-1	ENGINE SHROUD	8-22679
14.	4-1	FUSELAGE INSTALLATION	8-74470
15.	4-1	DORSAL FAIRING	8-74498
16.	4-1	DORSAL FAIRING	8-74497
			66J40244 (SEE NOTE 1)
			66J40245 (SEE NOTE 1)
17.	4-1	FUSELAGE INSTALLATION	8-74477
18.	4-1	VARIABLE RAMP INLET DUCT	8-74566
19.	5-1	MAIN LANDING GEAR FUSELAGE DOOR	8-44545
20.	4-1	FUSELAGE INTEGRAL FUEL TANK	8-74430
21.	4-1	FUSELAGE MISSILE BAY DOORS (SEE NOTE 2)	8-74463
21A.	4-1	FUSELAGE MISSILE BAY DOORS, GUN NOT INSTALLED (SEE NOTE 3)	7144550
21B.	4-1	FUSELAGE MISSILE BAY DOORS, GUN INSTALLED (SEE NOTE 3)	7144550
21C.	4-1	M61A1 GUN ENCLOSURE ASSEMBLY (SEE NOTE 3)	7144521
21D.	4-1	M61A1 GUN FAIRING ASSEMBLY (SEE NOTE 3)	7144522
22.	4-1	FUSELAGE INSTALLATION	8-74405
23.	5-1	NOSE LANDING GEAR DOOR	8-74626
24.	5-1	NOSE LANDING GEAR	8-52003
25.	4-1	FORWARD RADAR ELECTRONICS COMPARTMENT	8-74600
26.	4-1	RADOME	8-70410
27.	4-1	WINDSHIELD AND CANOPY STRUCTURE	8-74800
28.	5-1	MAIN LANDING GEAR WING FAIRING	8-17630
29.	5-1	MAIN LANDING GEAR	8-51013

NOTES:

1. APPLICABLE AFTER INCORPORATION OF TCTO 1F-106-986
2. APPLICABLE PRIOR TO INCORPORATION OF TCTO 1F-106A-558
3. APPLICABLE AFTER INCORPORATION OF TCTO 1F-106A-558
4. TCTO 1F-106A-558 IS APPLICABLE TO F-106A VERTICAL INSTRUMENTED AIRCRAFT

Figure 1-92. Major Components — F-106A

Section II

WING GROUP

2-1. WING GROUP.

2-2. The wing is of full cantilever, stressed skin construction with a delta configuration. This configuration has a 60-degree sweepback of the leading edge and a 5-degree sweep forward of the trailing edge, as shown on figure 2-1. Early F-106 airplanes (F-106A 56-453 thru 56-466 and F-106B 57-2507) have case XIV wings. Later F-106 airplanes have case XXIX wings. The wings are quite similar in construction, the basic difference being that the case XXIX has more camber. The right and left wing panels are attached to the fuselage by means of bolts through the forged fittings on the wing spars and fuselage frames. Drag angles are also used to attach the wing panels to the fuselage. These drag angles are riveted to the inboard edge of the wing and are attached to the outside surface of the fuselage by means of screws. Each wing panel consists of an interspar section with integral fuel tanks, a cambered leading edge, a cambered wing tip, a main landing gear and landing gear fairing, an elevon, outboard elevon actuator fairing, and provisions for the external mounting of droppable fuel tanks. Wing stations are shown on figure 2-2. The F-106A and F-106B airplanes incorporate nine integral fuel tanks. There are four fuel tanks in each wing, identified as No. 1, No. 2, No. 3 and "T" tanks. The F-106A center of gravity control transfer system consists of the "F" tank in the fuselage and the "T" (transfer) tank in the trailing edge structure of each wing. Refer to paragraph 2-4 for the location of the wing fuel tanks Nos. 1, 2 and 3, and the "T" (transfer) tank. See figure 4-1 for the location of the fuselage "F" tank.

2-3. DESCRIPTION OF WING COMPONENTS.

2-4. Interspar Structure.

2-5. The interspar structure is fabricated principally of 7075-T6 aluminum alloy. This structure consists basically of chordwise ribs and spanwise spars to which machined, stressed skin is riveted. The three main integral fuel tanks are contained in this interspar structure between the number 1 and number 6 spars and the wing closing rib; the "T" or transfer tank is located between the number 6 and number 7 spars. All fuel tanks within the interspar structure are designed with machined fuel-tight corner fittings. Small openings in the chordwise ribs permit an even distribution of fuel within each tank. Figure 2-3 illustrates the wing structure and Figure 2-4 shows the location of the fuel tanks.

2-6. Spars and Ribs.

2-7. The wing leading edge spar and the number 7 spar are of built-up construction. Number 2, 3, 4, 5, and 6 spars are constructed of machined forgings. The spanwise spars extend at an angle of 90 degrees from the centerline of the airplane and are interconnected by a series of closely spaced chordwise ribs. The main landing gear attaches to the trunnion mounts on the number 3 and 4 wing spars. See figure 5-4 for the location of the trunnion mounts on the wing spars. The built-up ribs consist of upper and lower extruded rails which are joined together with stiffener reinforced webs. The inboard bulkheads incorporate a series of heavy-gage press-formed brackets and clips to provide attachment for the wing plating and wing to fuselage drag angles.

2-8. Wing Plating.

2-9. The wing plating is made of highly stressed, heavy gage, bare aluminum alloy. Figures 2-5 and 2-6 show the wing plating and the alloy designation for each section of wing plating. Refer to paragraph 2-35 for information concerning repairs to the wing plating. The wing plating is installed with the machined surfaces inside the fuel tank area. Machining provides for the heaviest gages at the points of attachment to the ribs and spars, eliminating doublers and fillers. The requirements for maximum aerodynamic smoothness are partially achieved by machining the large wing skins on the inner surface so that internal ribs, doublers, and fillers are an integral part of the skin. This practice increases rigidity and reduces the tendency of skin buckling, with the attendant effects of disrupted airflow and vibration. The number of outside seams is also reduced, and the existing ones are filled with aerodynamic smoothing compound. Plating above the main landing gear area is of uniform thickness and is attached by means of standard flush-head fasteners. Access doors are located throughout the plating area of the lower wing surface to provide access to all internal areas. The access doors are machined to provide a flush installation and to preserve the aerodynamic characteristics of the wing surfaces.

KEY	STRUCTURAL COMPONENT	FIGURE REFERENCE
1.	Wing	
	Plating	2-5 and 2-6
	Structure	2-3
2.	Elevon plating and structure	
	Inboard	2-13
	Outboard	2-14
3.	Leading edge plating and structure	2-9
		2-10
4.	Wing tip plating and structure	2-11 and 2-12

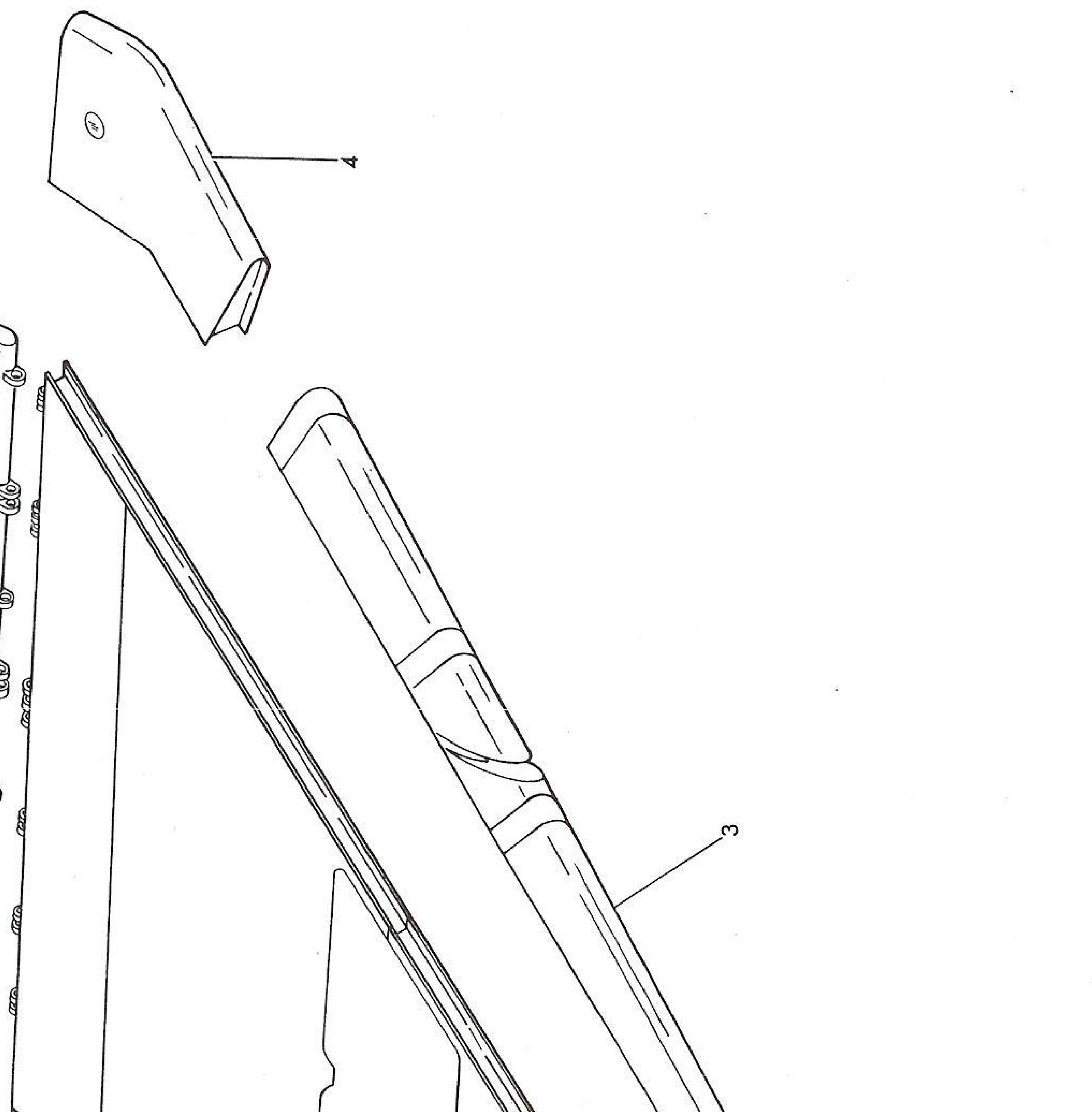


Figure 2-1. Wing Group Components and Index

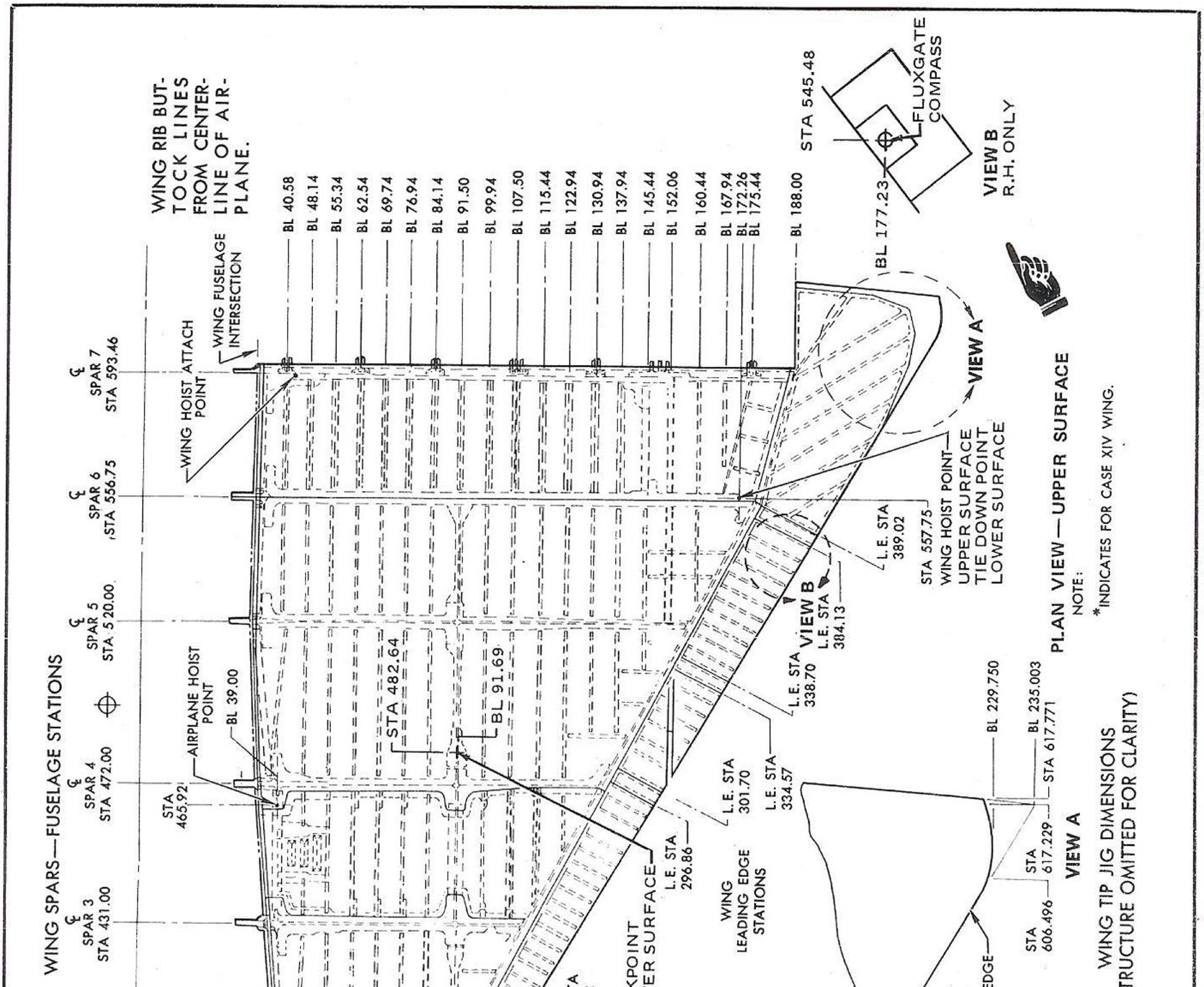


Figure 2-2. Wing Station Diagram

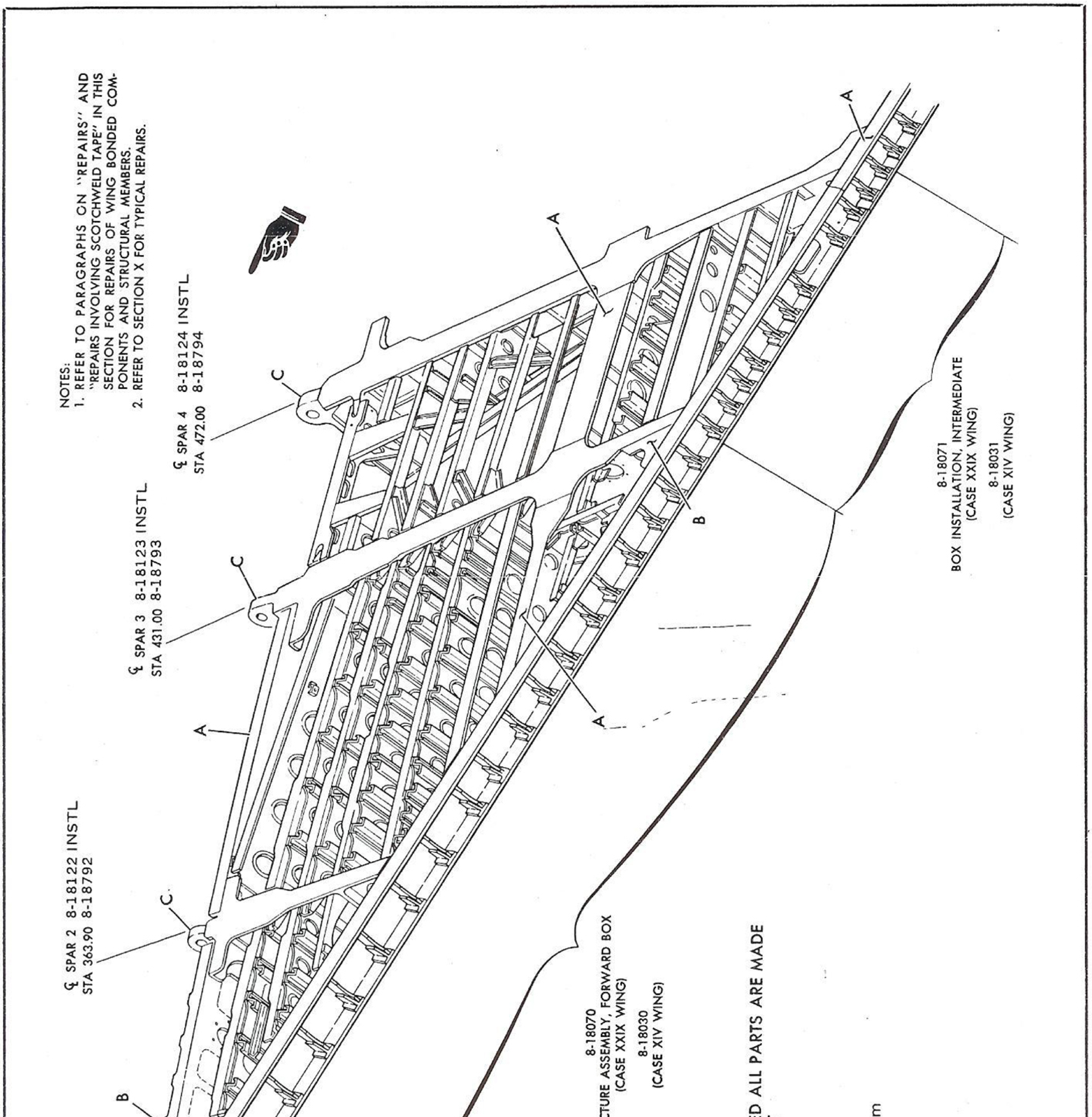


Figure 2-3. Wing Structure (Sheet 1 of 2)

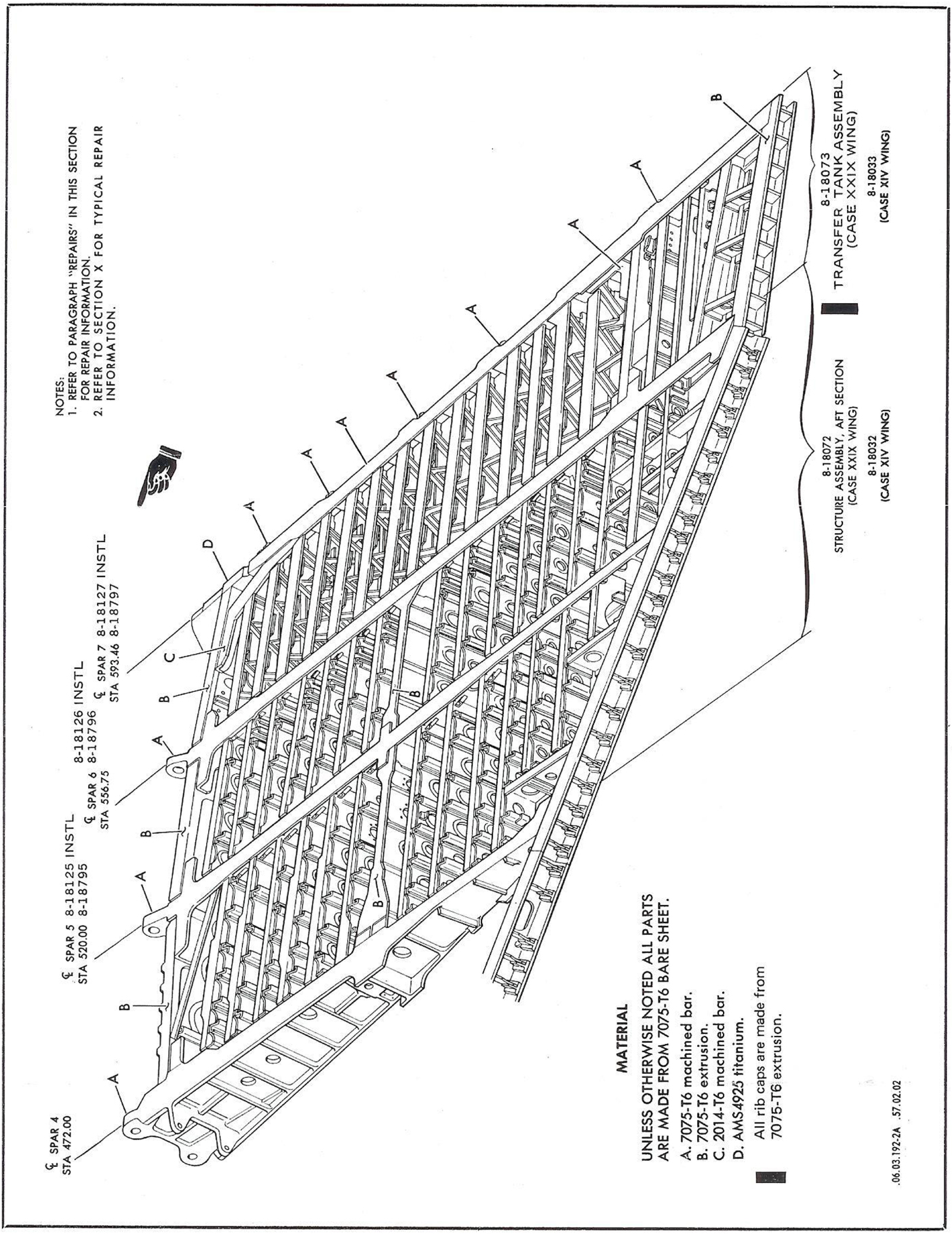


Figure 2-3. Wing Structure (Sheet 2 of 2)

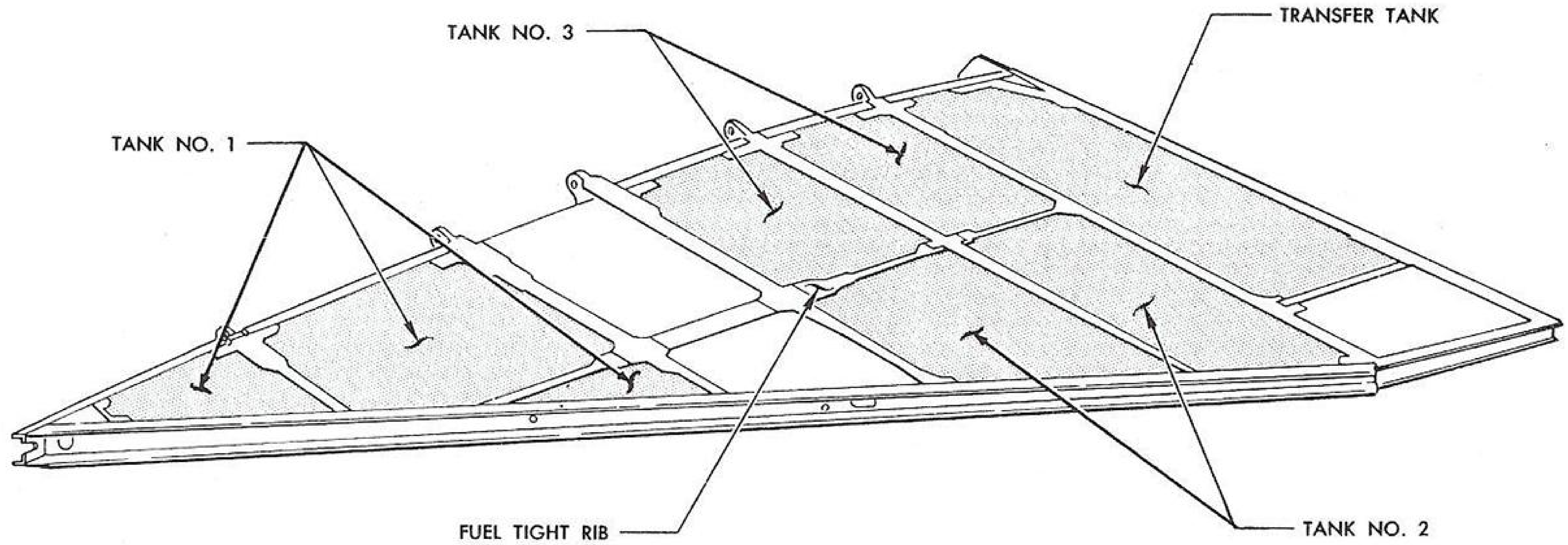


Figure 2-4. Wing Fuel Tank Area

2-10. Wing Attachment.

2-11. The wing is attached to the fuselage with bolts through the wing spars and spar fittings on the fuselage bulkheads, and by drag angles riveted to the inboard edge of the wing and attached to the outside surface of the fuselage with screws. No drilling or reaming is required for the installation of a new wing at the forged fitting attach points. Some match-drilling of screw holes in the drag angles is required. Otherwise the wing is completely interchangeable. Number 1 spar attaches to the fuselage with one bolt; numbers 2, 3, 4, 5, and 6 spars are connected to the fuselage with two bolts, and number 7 spar is attached to the fuselage with a web attachment requiring ten bolts. Detailed instructions giving torque values, type of fittings, special tools, and equipment required for the installation and removal of the wings are given on figure 2-7. Since original installation wing attachment fittings do not require bushings, wing attachment fittings that have become worn or damaged may require bushings to be within tolerances when a new wing is attached. See figure 2-8 for information on bushed fitting repairs.

2-12. Wing Leading Edge.

2-13. The wing leading edge sections are cambered to maintain the airfoil in a given contour specifically for the purpose of improving the aerodynamic characteristics of the wing. See figures 2-9 and 2-10 for details of the wing leading edge construction. The basic construction consists of medium-gage press-formed, aluminum alloy ribs, doublers, and fillers riveted to extruded angles in sections. A short section located between leading edge stations 301.70 and 338.70 provides additional ribs and angles for reinforcement of the leading edge slot. The leading edge slot controls outward air flow over the wing similar to a wing fence but with less drag. Leading edge sections are secured to the wing leading edge spar by means of screws through gang channel nuts. The gang channels are riveted to the inner flange of the wing leading edge spar. The leading edge does not provide for anti-icing.

2-14. Wing Tip.

2-15. The wing tip attached to the Case XIV wing consists basically of spanwise, press-formed channel spars and chordwise ribs as shown on figure 2-11. Two "tee" shaped rails are riveted together to form the main spar at the point of attachment to the wing trailing edge closing rib. Light-weight machined magnesium castings form the leading edge, corner, and trailing edge of the structure. The inner structural parts are riveted together

Section III

TAIL GROUP

3-1. TAIL GROUP.

3-2. The basic tail group structure consists of a full cantilever vertical fin with provisions for the attachment of a fin tip, leading edge, and rudder. The fin assembly is an integral part of the fuselage structure and cannot be detached for repair or replacement without extensive separation of the tail and fuselage structure. Figure 3-1 shows the tail group components and incorporates a reference figure index. Figure 3-2 locates the stations in the fin and rudder structure.

3-3. Fin Interspar Structure.

3-4. The fin assembly consists of riveted high-strength aluminum alloy construction. The structure consists of a built-up leading edge spar and four forged-type spars. Figure 3-3 shows the details of the fin structure. The spars are interconnected by a series of chordwise shear-web ribs and attaching angle clips. The fin inner structure is enveloped by flush riveted aluminum honeycomb core sandwich panels. Additional reinforcement is provided by doublers bounded within the sandwich panel at points of attachment to the spars. Doors are incorporated in the fin plating on the left side to provide access for maintenance and inspection of the bay areas. Figure 3-4 shows the fin and rudder plating.

3-5. Fin Leading Edge.

3-6. The fin leading edge structure consists of a series of press-formed ribs, reinforcing doublers, and angles as shown on figure 3-5. The structure is divided into four sections, including a "Q" intake section, and a stub section which mates with and attaches to the dorsal fairing. The outer plating is flush riveted to the ribs and angles. The leading edge sections are attached to the fin by screws through gang channel nuts which are riveted to the inner flange of the fin leading edge spar. The basic function of the leading edge is to maintain the airfoil in a given contour to meet aerodynamic requirements. The leading edge has no provisions for thermal anti-icing.

3-7. Fin Tip.

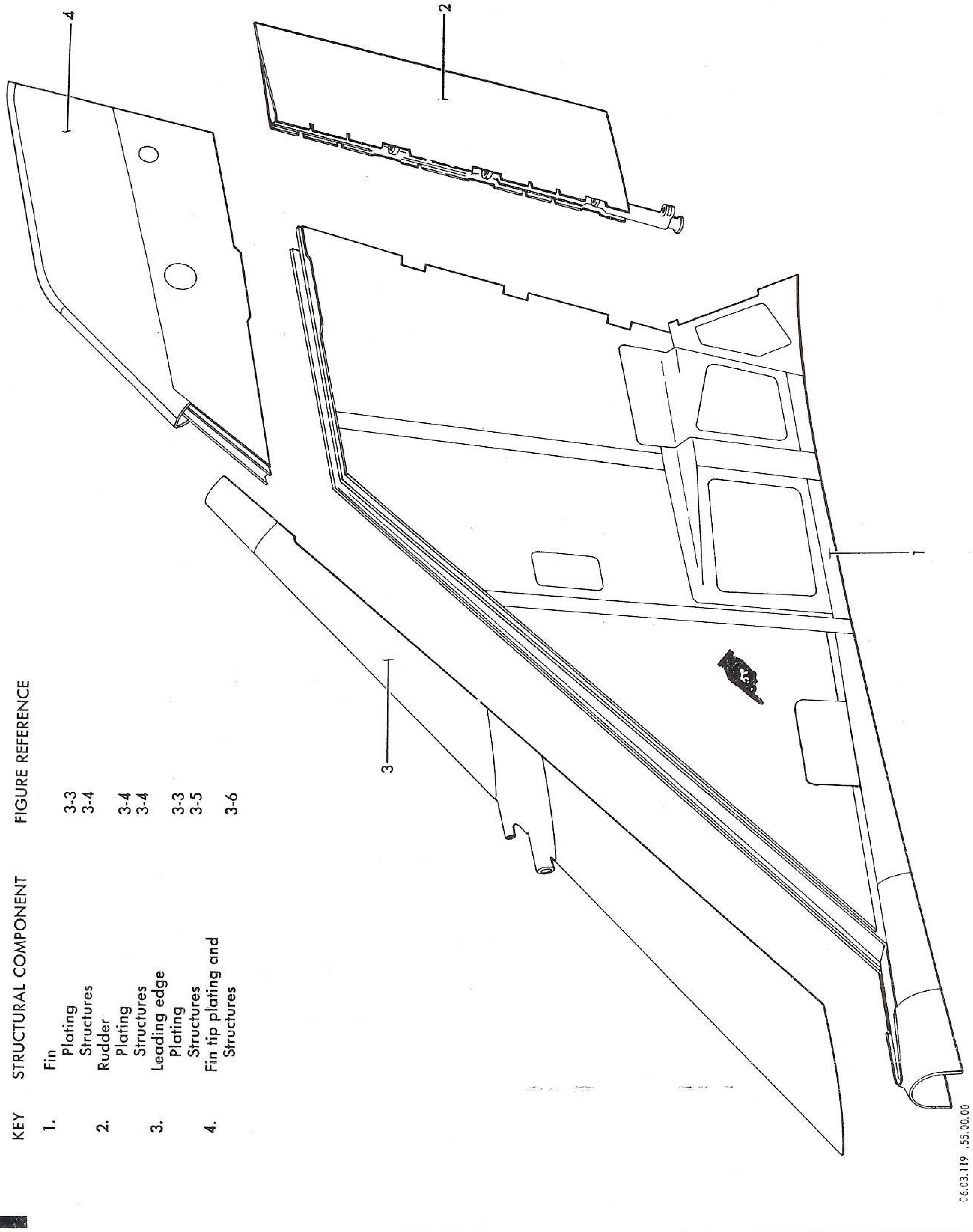
3-8. The fin tip structure is divided into an upper and lower section as shown on figure 3-6. The upper section consists of a fiberglass plastic honeycomb core preformed by routing-out a portion in the center to accommodate the Tacan antenna. This antenna is no longer used. The core is sandwiched between glass cloth laminates and bonded with plastic resins. The lower section is constructed of an aluminum honeycomb core sandwiched between aluminum outer skin panels. The panels are flush riveted to the internal structure of the lower section. The upper and lower sections are joined by screws installed through a plate nut channel attached to the inner flange of the lower section's chordwise, preformed channel. The fin tip leading edge spar, located in the lower section, consists of a built-up type "I" section. Gang channel nuts are riveted to the inside of the spar flanges to provide a means of attachment for the upper end of the vertical fin's leading edge. The fin tip is attached to the vertical fin structure with screws installed through a plate nut channel riveted to the inner flanges of a channel that forms the base of the fin tip's lower section. The lower fin tip section housed the IFF antenna which was removed leaving only the mount and waveguide.

3-9. Rudder.

3-10. The rudder structure consists basically of perforated aluminum honeycomb core sandwich construction. The details of rudder construction are shown on figure 3-3. The rudder leading edge consists of a press-formed channel spar fitted with three detachable forged hinged fittings and a machined actuator arm near the base of the spar. The upper and lower ends are fitted with channel-type ribs reinforced by doublers. The trailing edge consists of an extruded wedge bonded to the rudder plating. The rudder plating is straight-tapered from 0.072-inch gage at the bottom to 0.023-inch gage at the top. The rudder plating is attached with rivets at the perimeter of the structure and metal bonded in the honeycomb core area.

3-11. INDEXING.

3-12. Figure 3-1 is keyed by tail group components to figures in this section which illustrate and describe either structural features or repairs. These components are also located as to area on figure 3-1.



KEY	STRUCTURAL COMPONENT	FIGURE REFERENCE
1.	Fin	
	Plating	3-3
	Structures	3-4
2.	Rudder	
	Plating	3-4
	Structures	3-4
3.	Leading edge	
	Plating	3-3
	Structures	3-5
4.	Fin tip plating and Structures	3-6

Figure 3-1. Tail Group Components and Figure Index

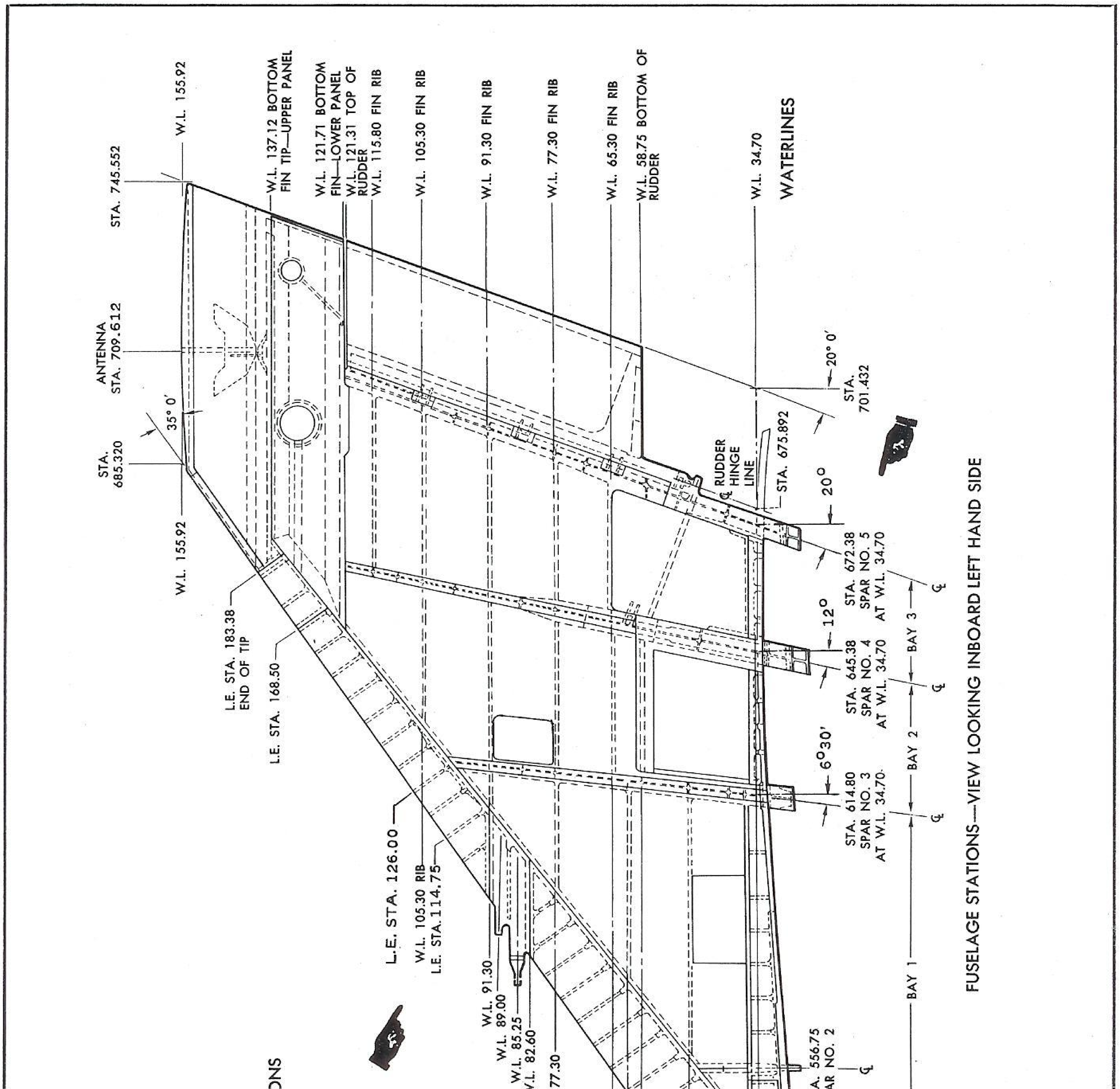


Figure 3-2. Fin and Rudder Station Diagram

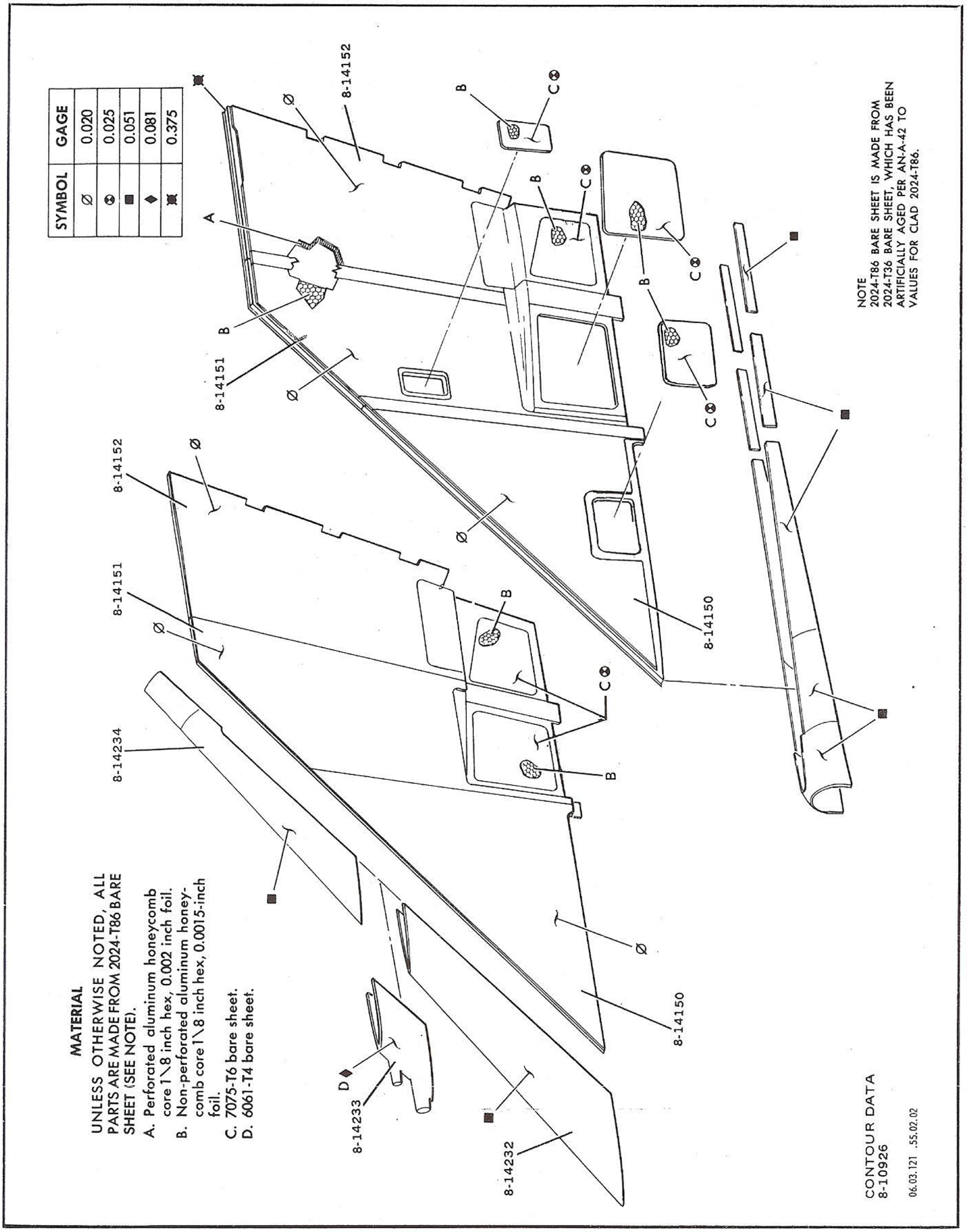


Figure 3-3. Fin Plating Diagram

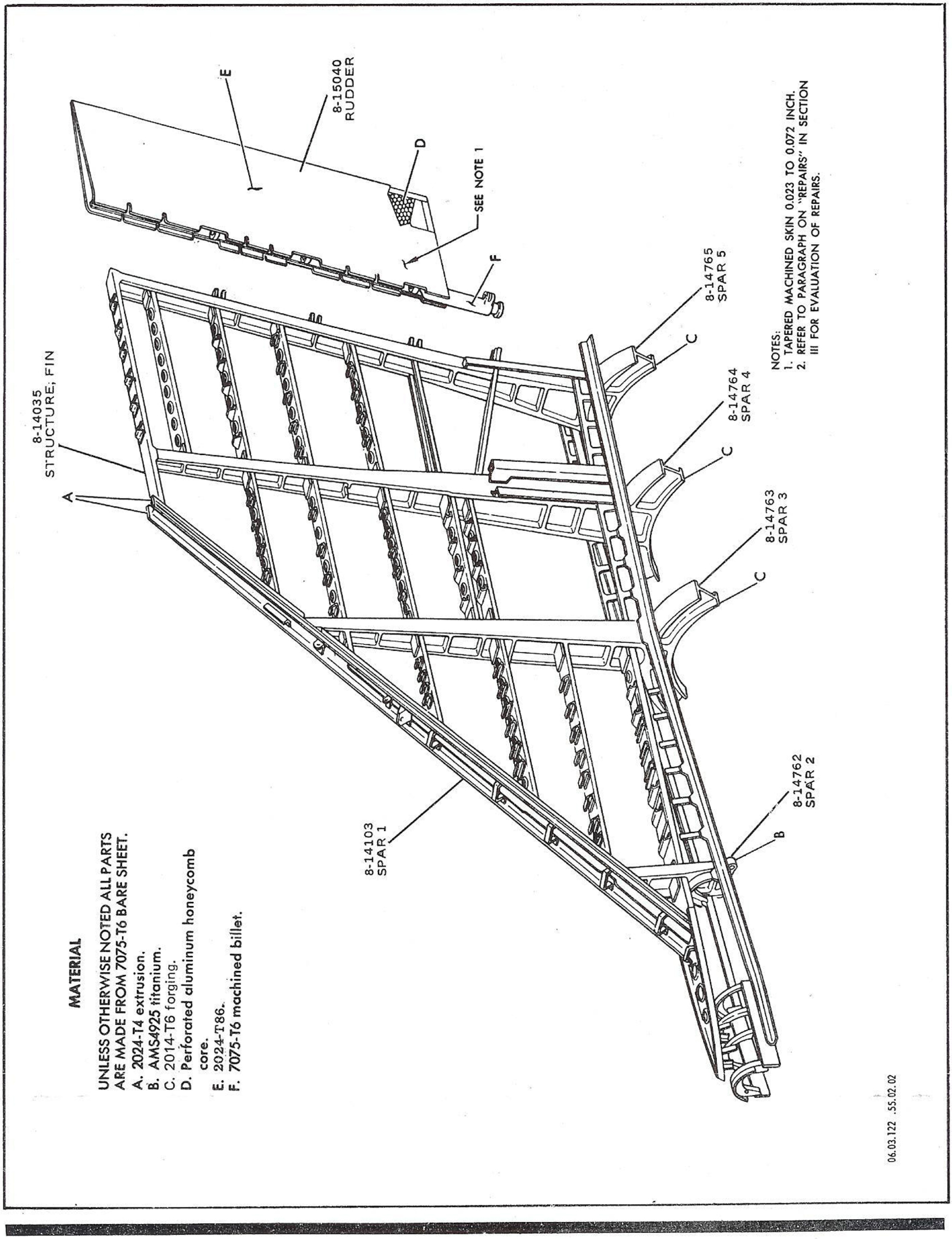
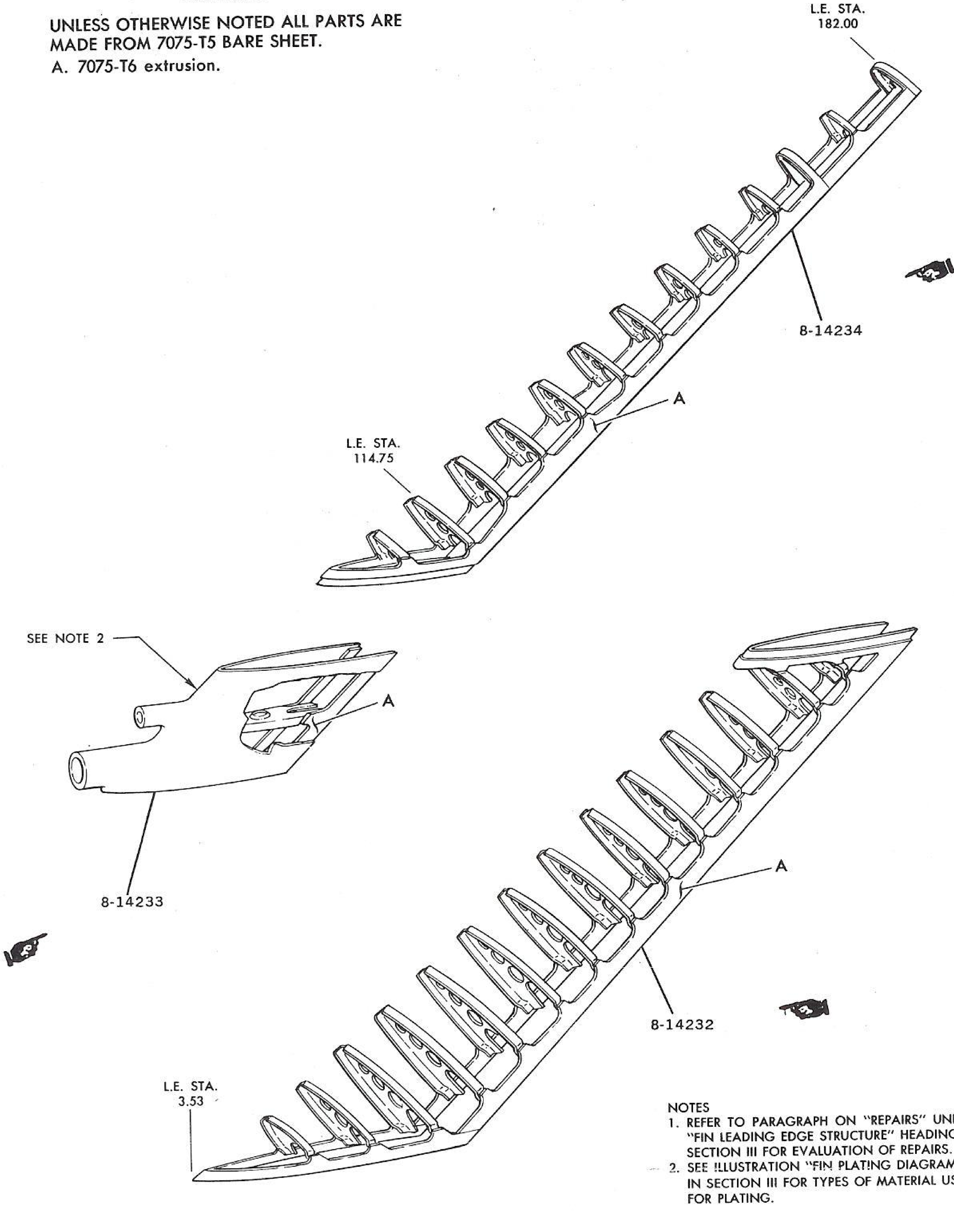


Figure 3-4. Fin and Rudder Structure

MATERIAL

UNLESS OTHERWISE NOTED ALL PARTS ARE MADE FROM 7075-T5 BARE SHEET.

A. 7075-T6 extrusion.



NOTES
1. REFER TO PARAGRAPH ON "REPAIRS" UNDER "FIN LEADING EDGE STRUCTURE" HEADING IN SECTION III FOR EVALUATION OF REPAIRS.
2. SEE ILLUSTRATION "FIN PLATING DIAGRAM" IN SECTION III FOR TYPES OF MATERIAL USED FOR PLATING.

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Figure 3-5. Fin Leading Edge Structure

Section IV

BODY GROUP

4-1. BODY GROUP.

4-2. The main fuselage sections of the F-106A and F-106B airplanes are semi-monocoque in design and of riveted, high-strength, all-metal construction. The fuselage structures differ only in that portion of the structure from station 102.00 to station 472.00. The difference is basically due to the single-place cockpit in the F-106A and the two-place, tandem cockpit in the F-106B, with their attendant differences in fuselage fuel tank and electronic bay locations.

4-3. DESCRIPTION OF FUSELAGE SECTIONS.

4-4. The fuselages of the F-106A and F-106B airplanes are divided into four main sections. These sections are the fuselage nose section, the forward and aft intermediate sections, and the fuselage aft section or tail cone. All sections except the aft or tail cone sections are joined by manufactured splices; the tail cone is pinned to the aft intermediate section and is readily removable. Figure 4-1 shows the fuselage components and gives a figure index for individual component illustrations. Fuselage stations for the F-106A and F-106B are shown on figures 4-2 and 4-3.

4-5. Fuselage Nose Section—F-106A.

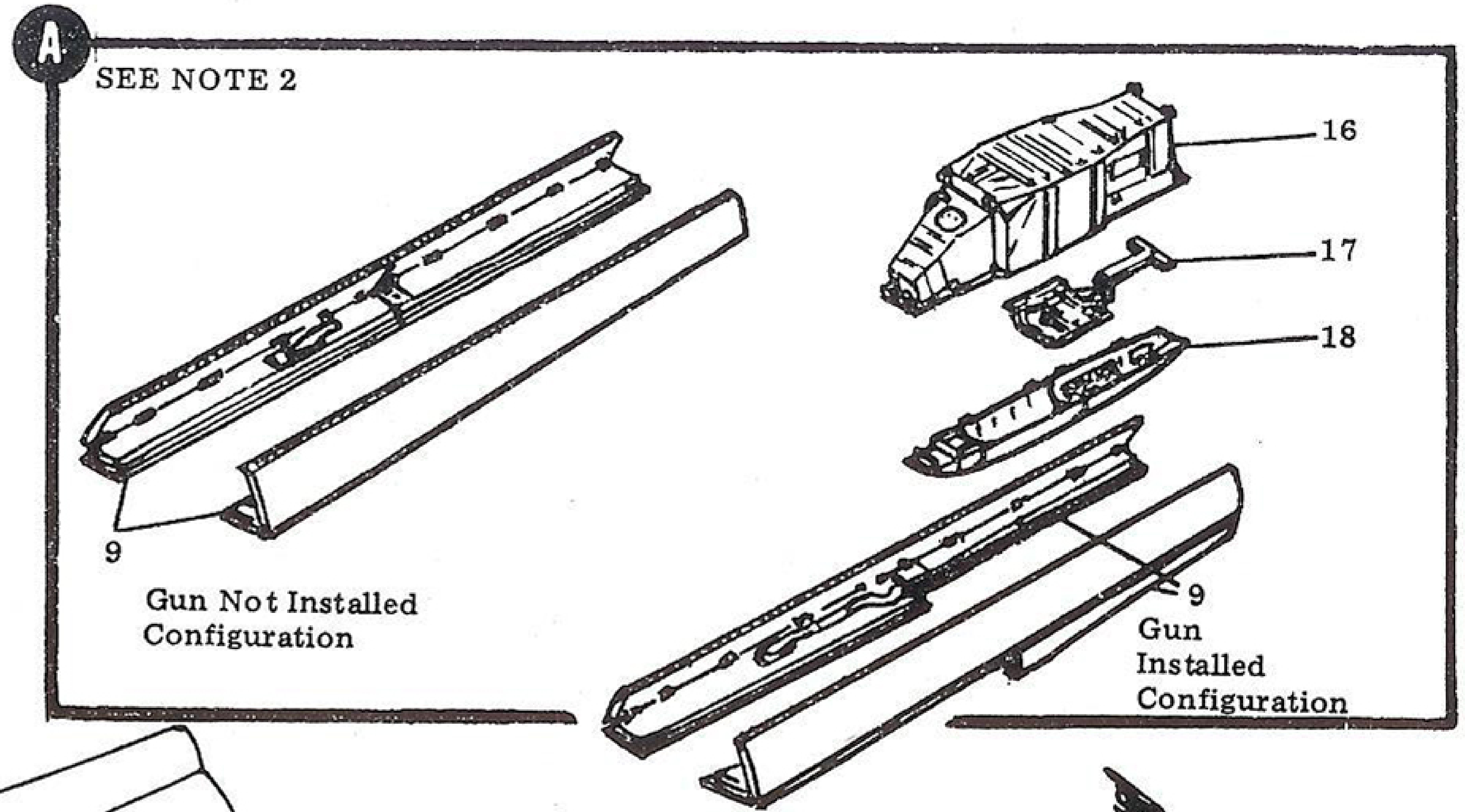
4-6. The fuselage nose section extends from the airspeed boom aft to station 253. Located in this nose section is the removable fiberglass radome, the forward electronics compartment, cockpit, nose wheel well, fuselage fuel tank, and the upper and lower aft electronic compartments. The cone-shaped radome is of the continuous fiberglass, filament wound type. The fiberglass is reinforced with low-pressure laminating resin, Specification MIL-R-7575, or equivalent, used as a bonding agent. See figure 4-6 for repair limitations and refer to paragraph 4-33 for repair information. The radome is equipped with an aluminum mounting ring at the large end. Four bolts connect the radome to the fuselage bulkhead at station 40.89. A neoprene seal, extruded inserts, and retainers fitted to the radome ring assembly provide the required sealing at the joint between the radome and the fuselage structure. The forward tip of the radome is fitted with an adapter for the attachment of the boom and the pitot tube. The forward radar electronics compartment is constructed basically of stressed aluminum alloy.

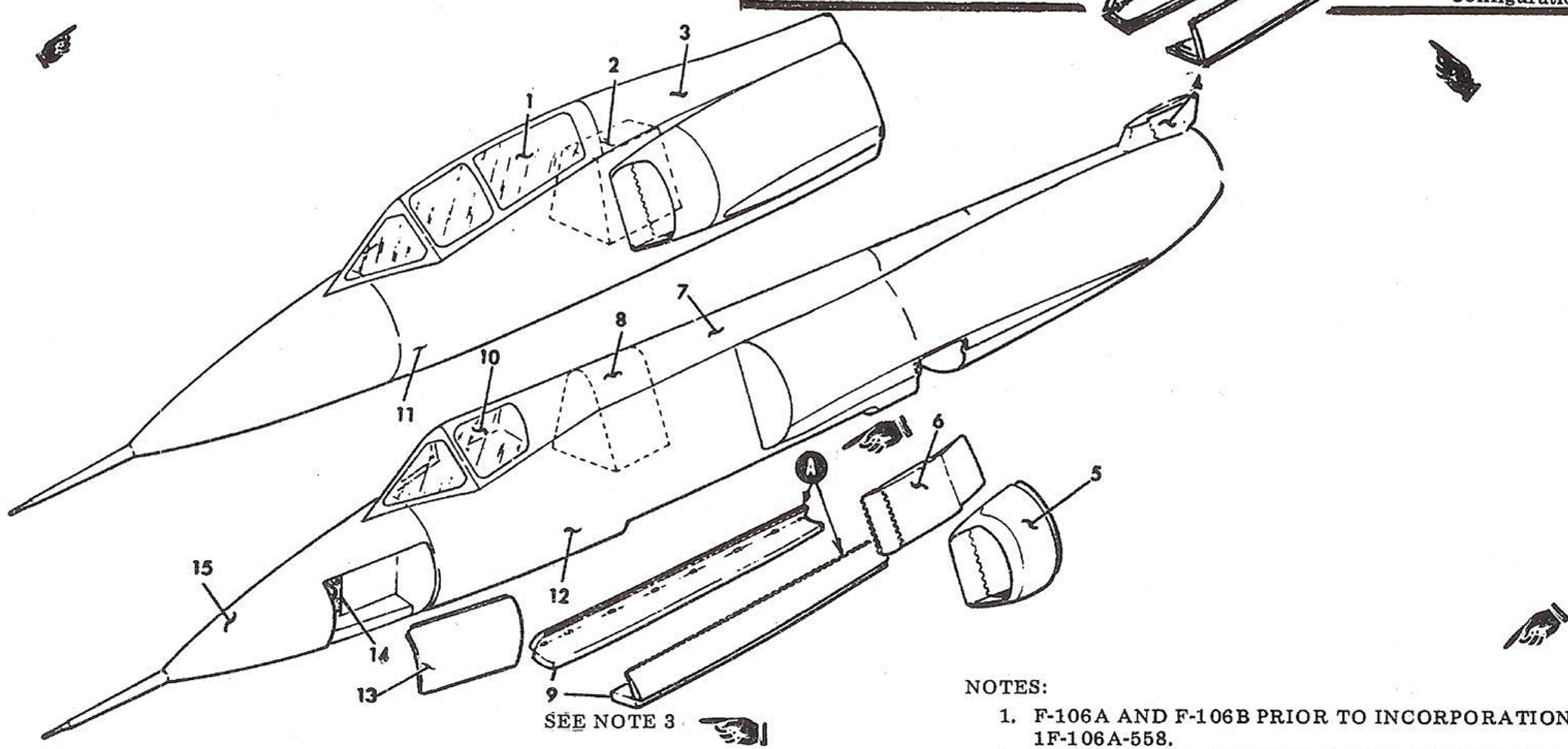
4-7. The forward bulkhead at station 40.89 is of the built-up type construction and provides the framework for attachment of the radome. Four longerons, two upper and two lower, extend aft from this bulkhead at station 40.89 to the bulkhead at station 102.00. A shear web, made of stressed aluminum alloy and reinforced with extruded aluminum angles, extends from the fuselage bulkhead at station 40.89 to the fuselage bulkhead at station 102.00. This shear web is considered a structural member and should be treated as such when designing any repair for it. The forward radar electronics compartment is enveloped by stressed aluminum alloy plating on the upper and lower surfaces; this plating is attached to the fuselage structure with flush-head rivets. Access doors, on the left and right sides of the forward radar electronics compartment, complete the envelopment of the fuselage structure in this area. These doors are of the panel type and consist of a stressed aluminum alloy outer skin attached to the door ribs and angles with flush-head rivets. The doors are hinged to the upper portion of the fuselage structure and are held in the closed position by stressed panel Camloc fasteners. See figures 4-4, 4-5, 4-7 and 4-8 for illustrations showing fuselage structure, plating and door structure in this area. Refer to Section I for information pertaining to stressed panel Camloc fasteners.

4-8. The lower section of the fuselage structure from station 102.00 to station 253.00 (shown on figure 4-9) consists principally of a series of semicircular zee and channel spliced beltframes with forged and built-up bulkheads connected by longerons, gussets and intercostals. The fuselage framework is enveloped by stressed aluminum alloy skins attached with flush-head rivets and other fasteners. This portion of the fuselage provides the space for the nose landing gear wheel well and attachment framework for the nose landing gear and gear door.

4-9. The pilot's compartment for the F-106A is pressurized and its structural framing consists of a series of closely spaced vertical frame assemblies reinforced by longitudinal stiffeners. The web flooring is supported by channels and zee stiffeners riveted to the built-up type bulkheads at stations 102.00 and 171.50. The two upper,

KEY	STRUCTURAL COMPONENT	FIGURE REFERENCE
1.	Windshield and Canopy F-106B.	4-12
2.	Fuselage Integral Fuel Tank F-106B.	4-14
3.	Fuselage Plating—F-106B.	4-5
4.	Speed Brake Structure and Drag Chute Housing.	4-23
5.	Engine Air Duct—Forward Inlet To Station 316.00.	4-17
6.	Variable Ramp—Inlet Duct.	4-18
7.	Fuselage Plating—F-106A.	4-4
8.	Fuselage Integral Fuel Tank—F-106A.	4-13
9.	Missile Bay Door Structure and Plating.	4-21
10.	Windshield and Canopy—F-106A.	4-11
11.	Fuselage Structure—F-106B—Station 102.00 To 273.00.	4-10
12.	Fuselage Structure—F-106A—Station 102.00 To 253.00.	4-9
13.	Forward Electronics Compartment Door.	4-8
14.	Fuselage Structure—Station 40.89 To 102.00.	4-7
15.	Radome Structure.	4-6
16.	M61A1 Gun Housing Structure (See Note 2)	4-21A
17.	M61A1 Gun Pallet Structure (See Note 2)	4-21A
18.	M61A1 Gun Fairing Structure (See Note 2)	4-21B





NOTES:

1. F-106A AND F-106B PRIOR TO INCORPORATION OF TCTO 1F-106A-558.
2. F-106A AFTER INCORPORATION OF TCTO 1F-106A-558.
3. TCTO 1F-106A-558 IS APPLICABLE TO F-106A VERTICAL INSTRUMENTED AIRCRAFT.

Figure 4-1. Fuselage Components and Figure Index

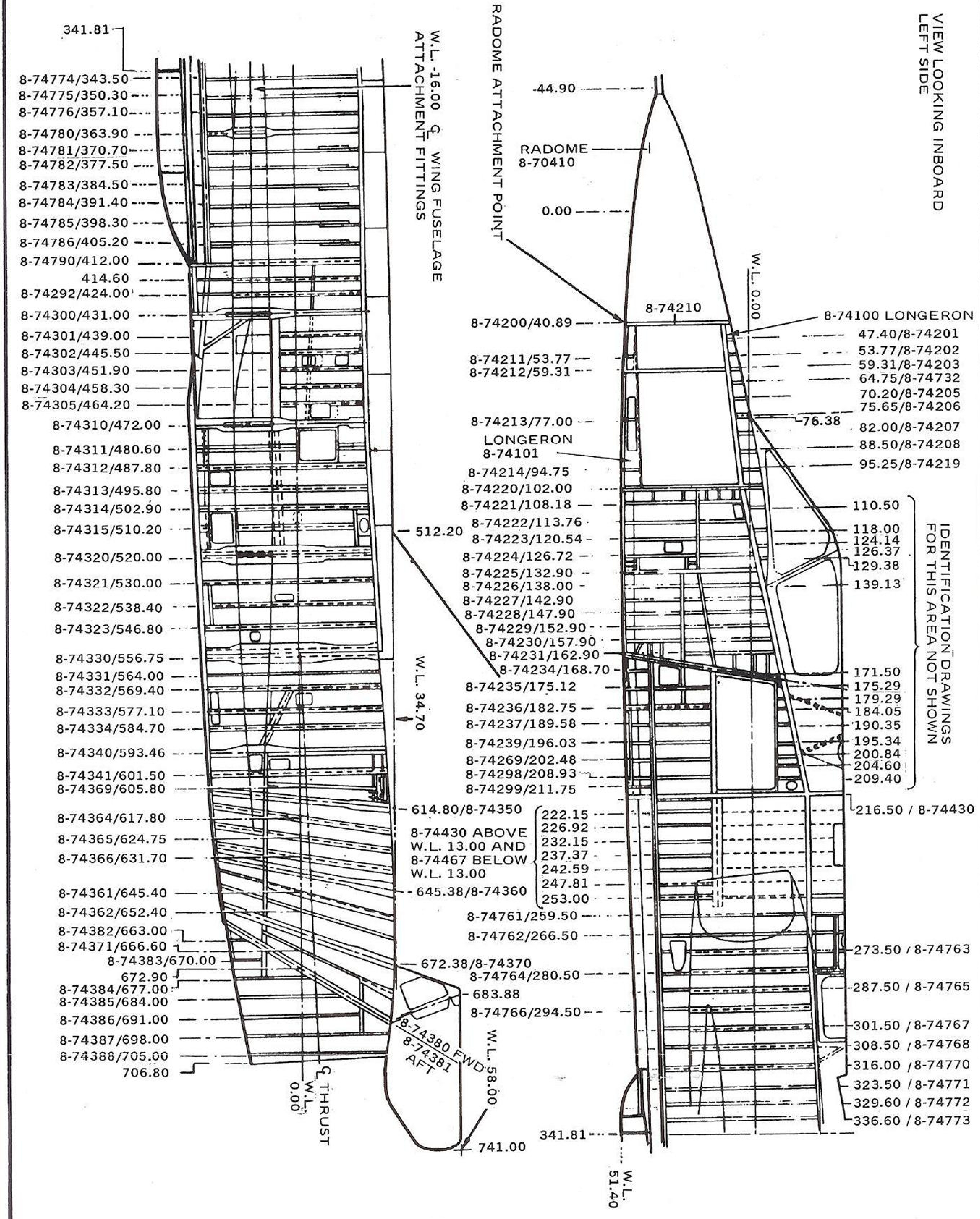


Figure 4-2. Fuselage Station Diagram — F-106A

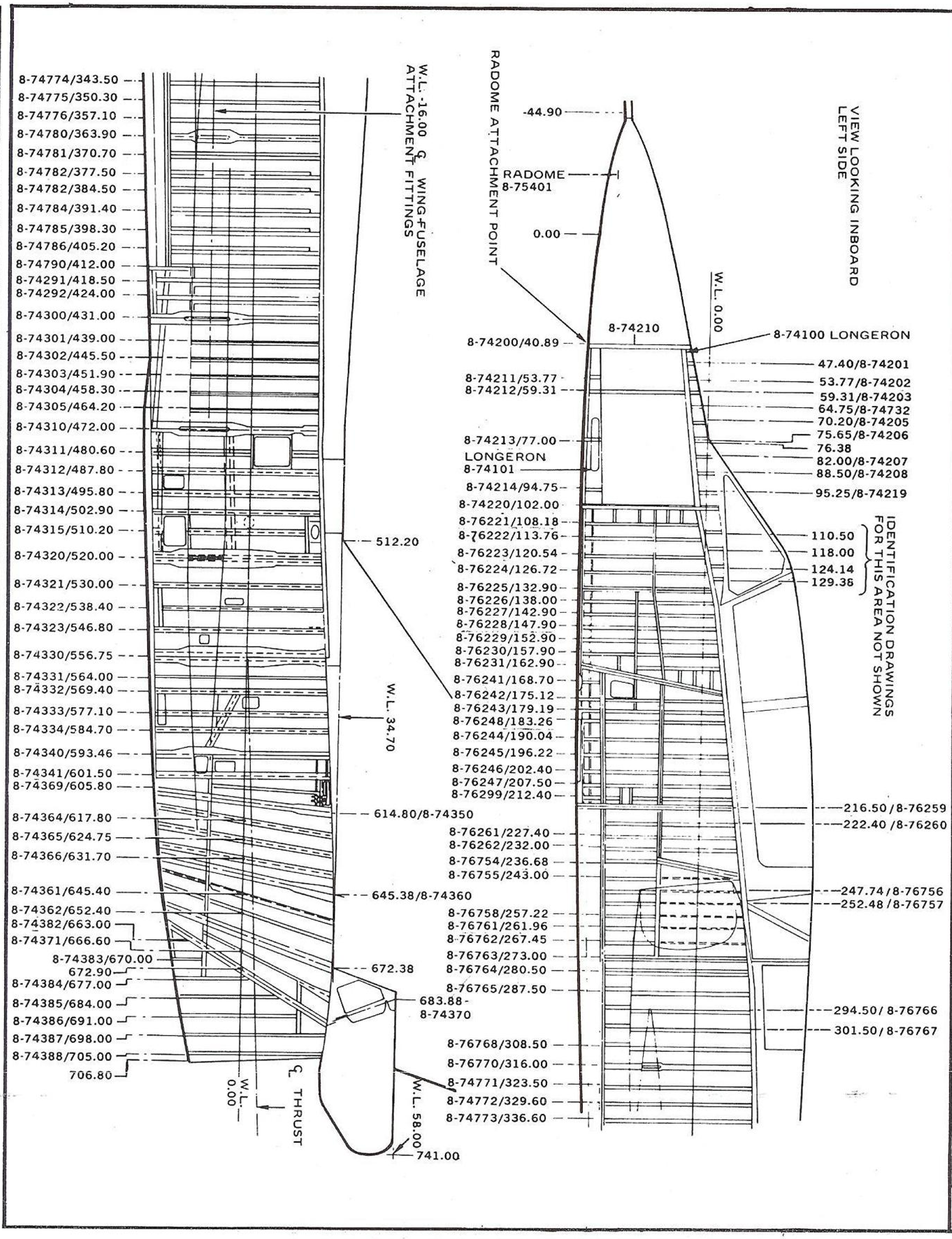


Figure 4-3. Fuselage Station Diagram — F-106B

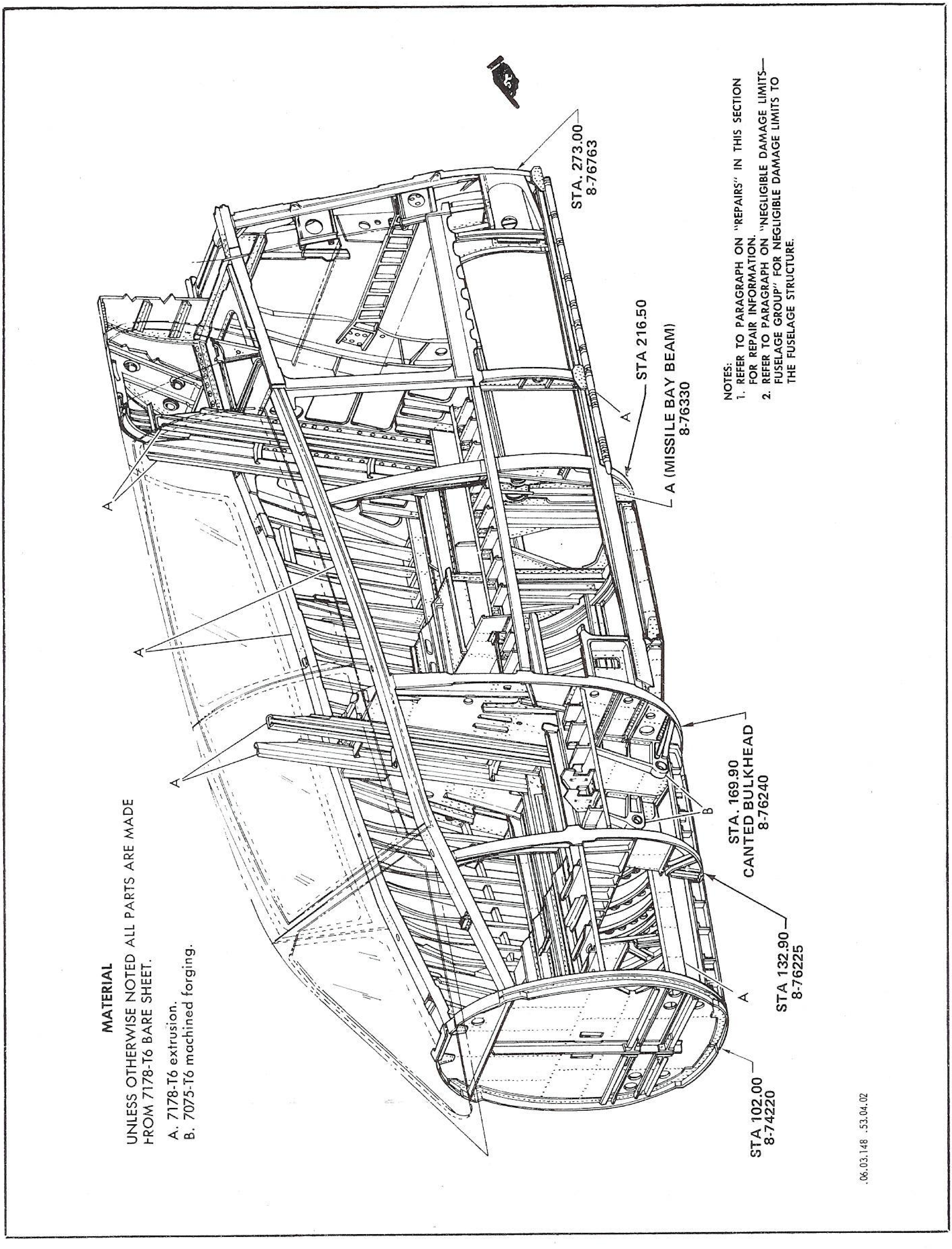
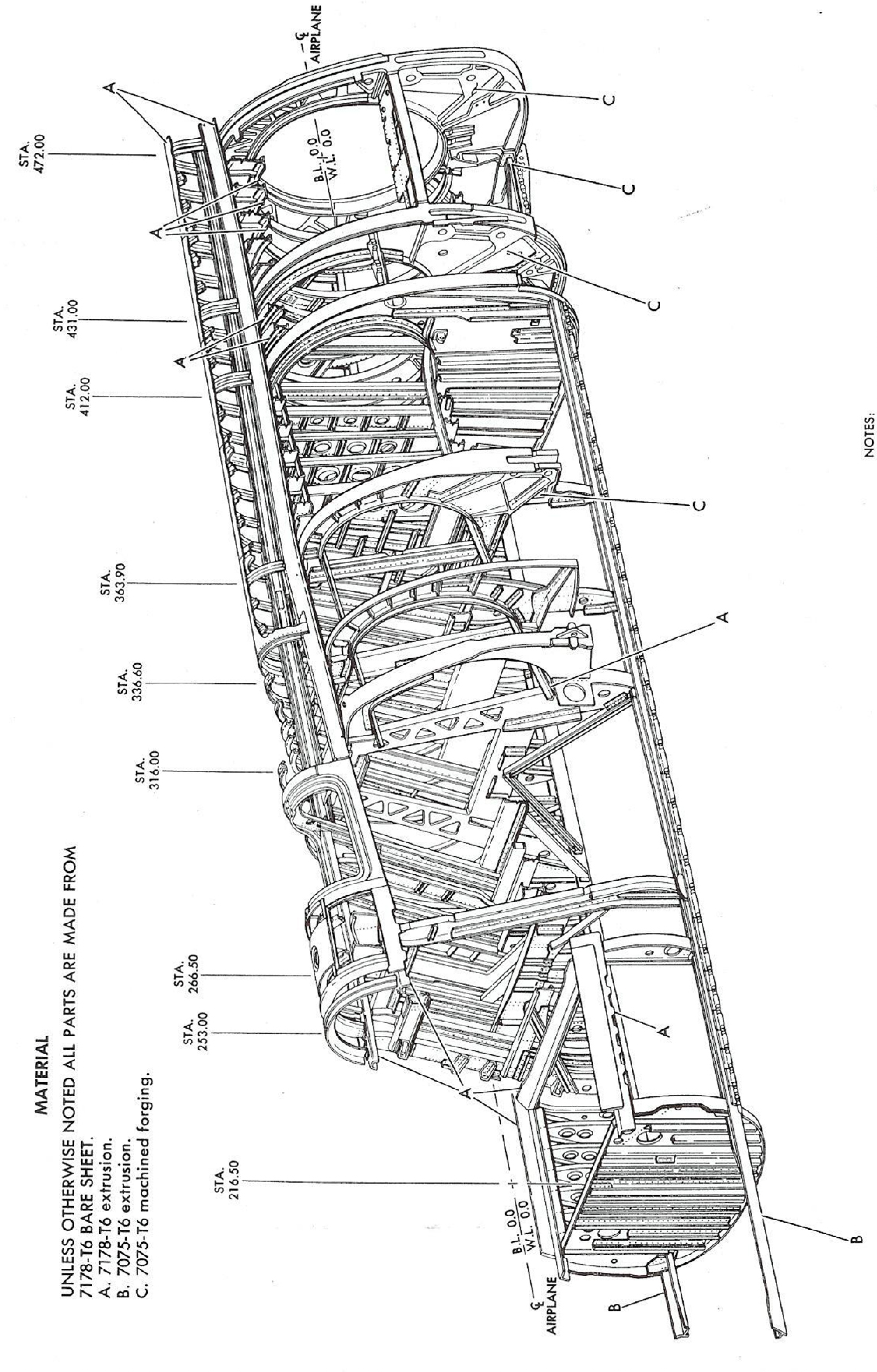


Figure 4-10. Fuselage Structure — Station 102.00 to 273.00 — F-106B



MATERIAL

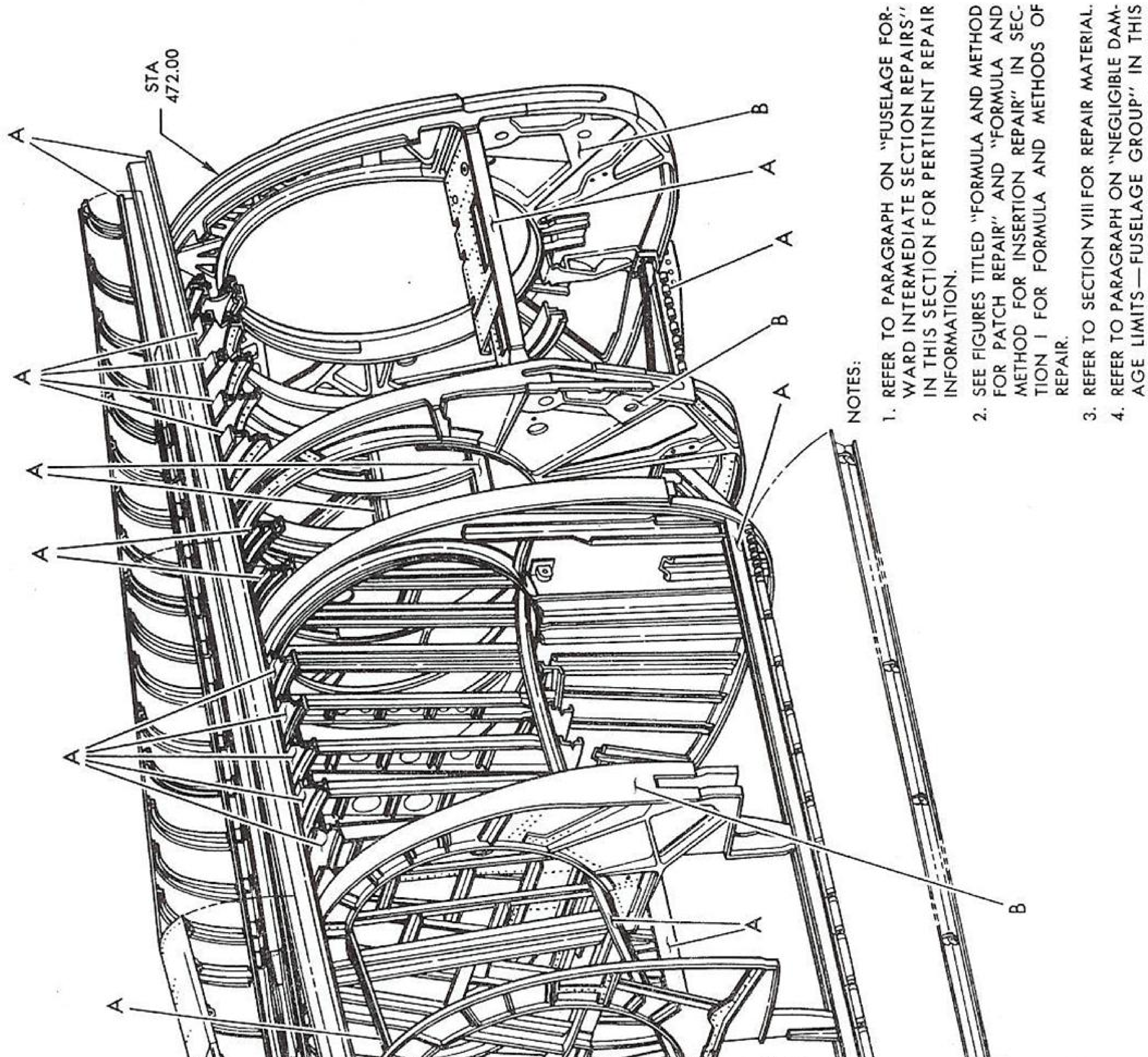
UNLESS OTHERWISE NOTED ALL PARTS ARE MADE FROM 7178-T6 BARE SHEET.

A. 7178-T6 extrusion.
B. 7075-T6 extrusion.
C. 7075-T6 machined forging.

NOTES:

1. SEE FIGURE "FORMULA AND METHOD FOR PATCH REPAIR" AND "FORMULA AND METHOD FOR INSERTION REPAIR" IN SECTION I FOR FORMULA AND METHOD OF REPAIR. REFER TO PARAGRAPH "TYPICAL RIB AND SPLICE REPAIR" IN SECTION X FOR TYPICAL REPAIRS.
2. REFER TO SECTION I FOR ASSEMBLY BREAKDOWN DRAWING NUMBERS.

Figure 4-16. Fuselage Structure — Station 216.00 to 472.00 — F-106A



MATERIAL

UNLESS OTHERWISE NOTED ALL PARTS ARE MADE FROM 7178-T6 BARE SHEET.

A. 7178-T6 extrusion.

B. 7075-T6 machined forging.

NOTES:

1. REFER TO PARAGRAPH ON "FUSELAGE FORWARD INTERMEDIATE SECTION REPAIRS" IN THIS SECTION FOR PERTINENT REPAIR INFORMATION.
2. SEE FIGURES TITLED "FORMULA AND METHOD FOR PATCH REPAIR" AND "FORMULA AND METHOD FOR INSERTION REPAIR" IN SECTION I FOR FORMULA AND METHODS OF REPAIR.
3. REFER TO SECTION VIII FOR REPAIR MATERIAL.
4. REFER TO PARAGRAPH ON "NEGLIGIBLE DAMAGE LIMITS—FUSELAGE GROUP" IN THIS SECTION FOR DISPOSITION OF NEGLIGIBLE DAMAGE.

Figure 4-22. Fuselage Structure — Stations 273.00 to 472.00 — F-106B

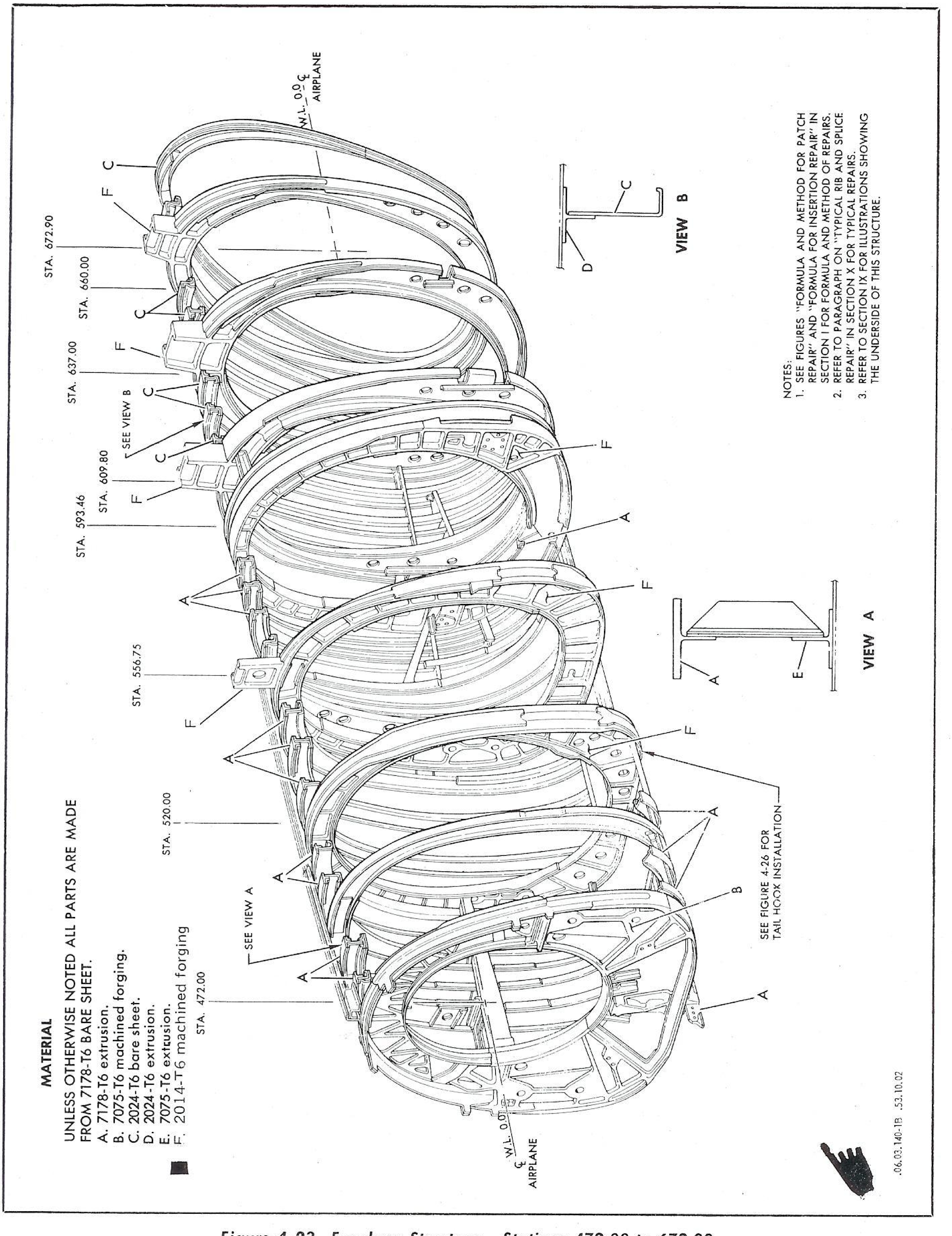


Figure 4-23. Fuselage Structure — Stations 472.00 to 672.00