

SEQUENTIAL COPY

NO.

050

XB-70-2-1

DEVELOPMENT PROGRAM MANUAL  
(GENERAL AIRPLANE)

USAF SERIES  
**XB-70A**  
AIRCRAFT

CONTRACT AF33(657)-12395  
CONTRACT AF33(657)-15871

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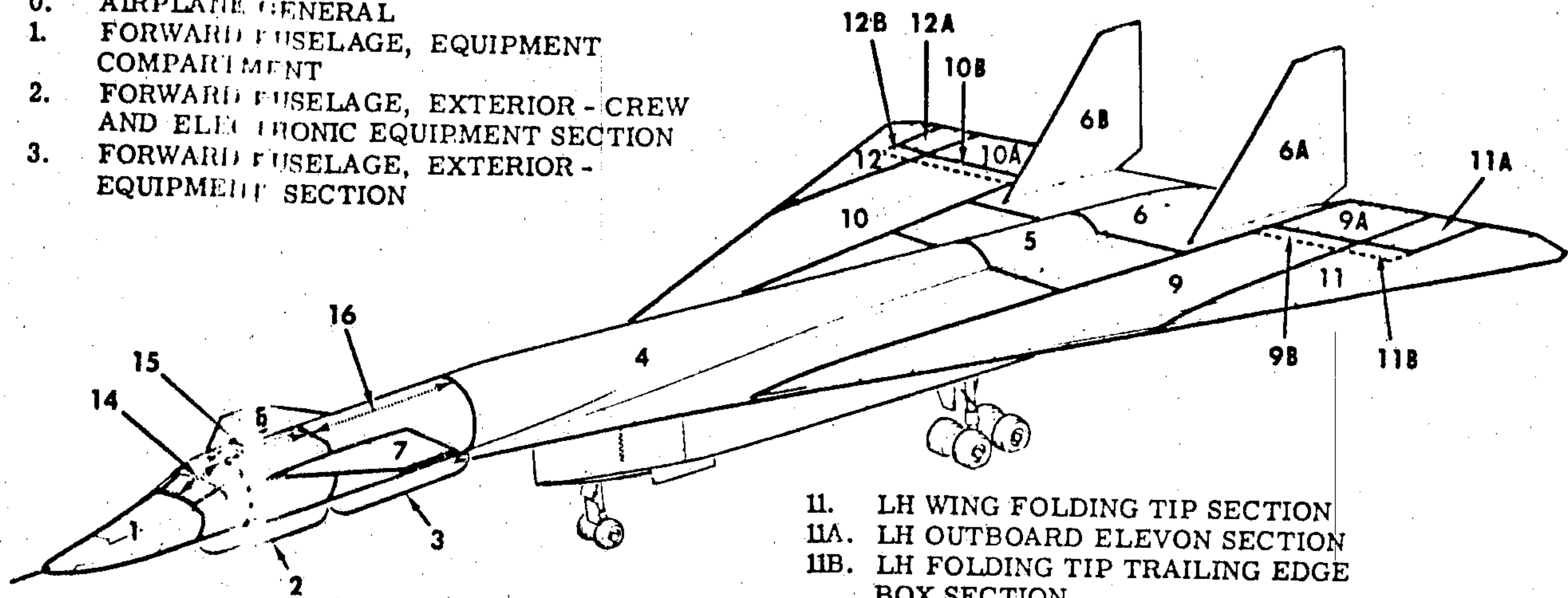
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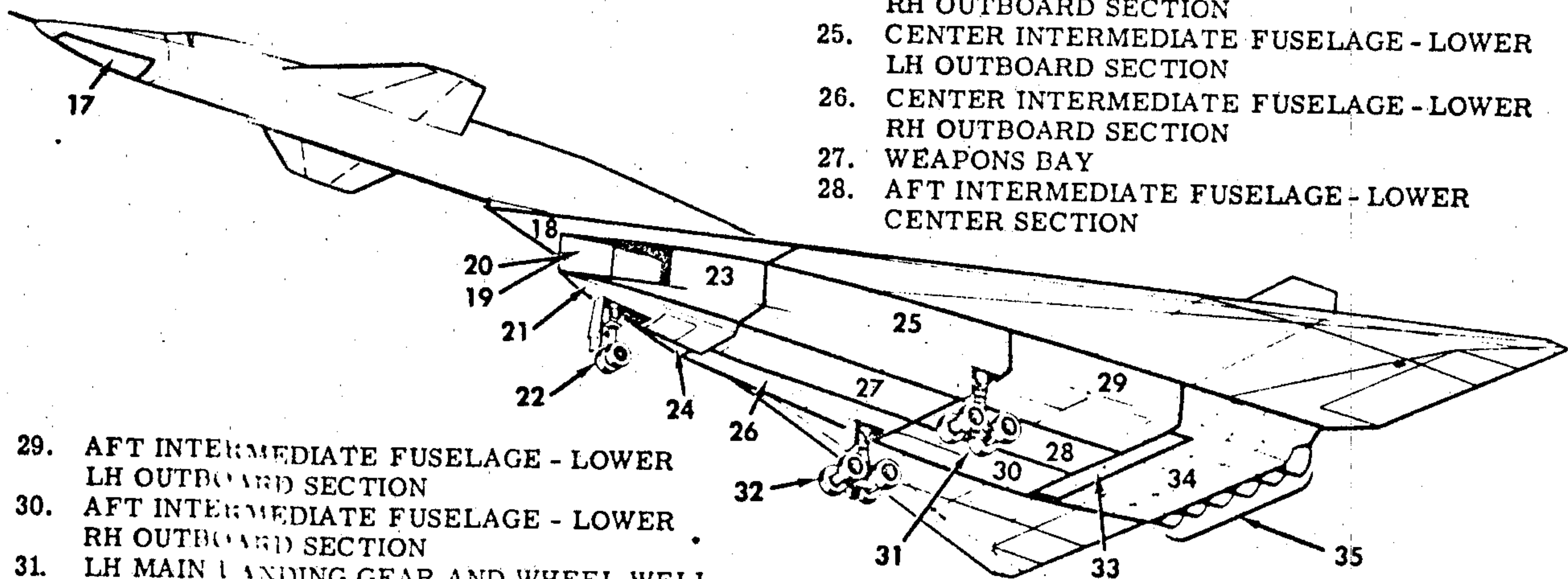
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- 0. AIRPLANE GENERAL
- 1. FORWARD FUSELAGE, EQUIPMENT COMPARTMENT
- 2. FORWARD FUSELAGE, EXTERIOR - CREW AND ELECTRONIC EQUIPMENT SECTION
- 3. FORWARD FUSELAGE, EXTERIOR - EQUIPMENT SECTION



- 4. FORWARD INTERMEDIATE FUSELAGE - UPPER CENTER SECTION
- 5. AFT INTERMEDIATE FUSELAGE - UPPER CENTER SECTION
- 6. AFT FUSELAGE - UPPER SECTION
- 6A. LH VERTICAL STABILIZER
- 6B. RH VERTICAL STABILIZER
- 7. LH HORIZONTAL STABILIZER
- 8. RH HORIZONTAL STABILIZER
- 9. LH WING - INBOARD BOX SECTION
- 9A. LH INBOARD ELEVON SECTION
- 9B. LH INBOARD TRAILING EDGE BOX SECTION
- 10. RH WING - INBOARD BOX SECTION
- 10A. RH INBOARD ELEVON SECTION
- 10B. RH INBOARD PANEL TRAILING EDGE BOX SECTION

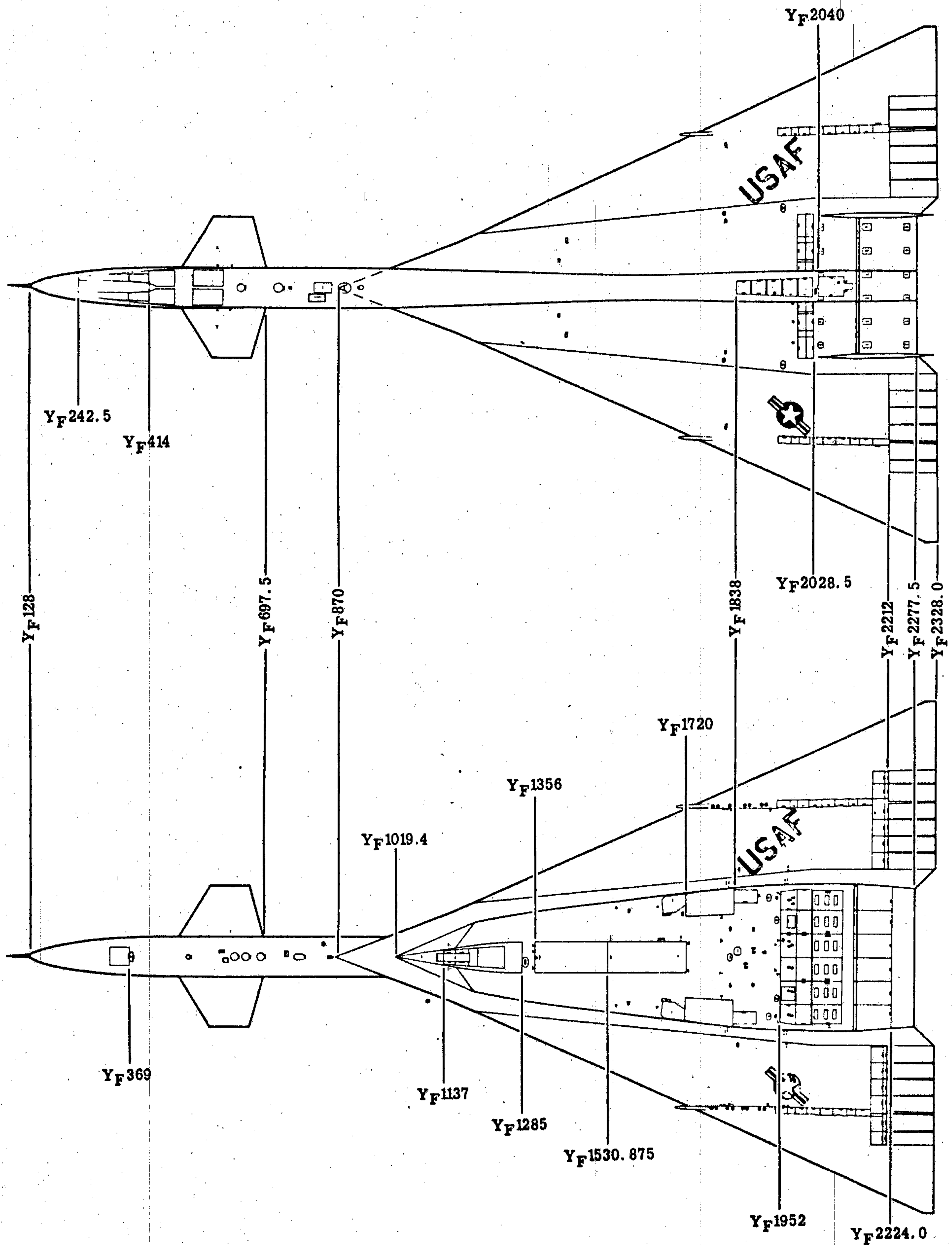
- 11. LH WING FOLDING TIP SECTION
- 11A. LH OUTBOARD ELEVON SECTION
- 11B. LH FOLDING TIP TRAILING EDGE BOX SECTION
- 12. RH WING FOLDING TIP SECTION
- 12A. RH OUTBOARD ELEVON SECTION
- 12B. RH FOLDING TIP TRAILING EDGE BOX SECTION
- 14. CREW COMPARTMENT
- 15. ELECTRONIC EQUIPMENT COMPARTMENT
- 16. ENVIRONMENTAL CONTROL EQUIPMENT COMPARTMENT
- 17. NOSE RADOME
- 18. WING LEADING EDGE - LOWER CENTER SECTION
- 19. LH AIR INTAKE DUCT
- 20. RH AIR INTAKE DUCT
- 21. FORWARD INTERMEDIATE FUSELAGE - LOWER CENTER SECTION
- 22. NOSE GEAR AND WHEEL WELL
- 23. FORWARD INTERMEDIATE FUSELAGE - LOWER LH OUTBOARD SECTION
- 24. FORWARD INTERMEDIATE FUSELAGE - LOWER RH OUTBOARD SECTION
- 25. CENTER INTERMEDIATE FUSELAGE - LOWER LH OUTBOARD SECTION
- 26. CENTER INTERMEDIATE FUSELAGE - LOWER RH OUTBOARD SECTION
- 27. WEAPONS BAY
- 28. AFT INTERMEDIATE FUSELAGE - LOWER CENTER SECTION



- 29. AFT INTERMEDIATE FUSELAGE - LOWER LH OUTBOARD SECTION
- 30. AFT INTERMEDIATE FUSELAGE - LOWER RH OUTBOARD SECTION
- 31. LH MAIN LANDING GEAR AND WHEEL WELL
- 32. RH MAIN LANDING GEAR AND WHEEL WELL
- 33. ENGINE ACCESSORY BAY
- 33A. ENGINE ACCESSORY BAY NO. 1
- 33A. ENGINE ACCESSORY BAY NO. 2
- 33A. ENGINE ACCESSORY BAY NO. 3
- 33A. ENGINE ACCESSORY BAY NO. 4
- 33A. ENGINE ACCESSORY BAY NO. 5
- 33A. ENGINE ACCESSORY BAY NO. 6

- 34. ENGINE BAY
- 34A. ENGINE BAY NO. 1
- 34A. ENGINE BAY NO. 2
- 34A. ENGINE BAY NO. 3
- 34A. ENGINE BAY NO. 4
- 34A. ENGINE BAY NO. 5
- 34A. ENGINE BAY NO. 6
- 35. ENGINE
- 35A. ENGINE NO. 1
- 35A. ENGINE NO. 2
- 35A. ENGINE NO. 3
- 35A. ENGINE NO. 4
- 35A. ENGINE NO. 5
- 35A. ENGINE NO. 6

Figure 1-4. Maintenance Work Areas



70-2-00-93A

Figure 1-8. Fuselage Station Reference Points



- |   |   |
|---|---|
| 1. PITOT BOOM   | 24. ENGINE ACCESSORY DRIVE SYSTEM COMPARTMENT (TYPICAL)           |
| 2. MOVABLE WINDSHIELD RAMP                                  | 25. INTAKE DUCT BYPASS DOORS (TYPICAL)                            |
| 3. PILOT'S ESCAPE CAPSULE                                   | 26. VARIABLE INTAKE DUCT  |
| 4. COPILOT'S ESCAPE CAPSULE                                 | 27. NOSE GEAR (RETRACTED)   |
| 5. ENTRANCE DOOR  | 28. ENVIRONMENTAL CONTROL EQUIPMENT COMPARTMENT                   |
| 6. OXYGEN CONVERTERS (2)                                    | 29. ELECTRONIC EQUIPMENT COMPARTMENT                              |
| 7. HORIZONTAL STABILIZER                                    | 30. CREW COMPARTMENT  |
| 8. GROUND ESCAPE HATCH                                      | 31. FORWARD EQUIPMENT COMPARTMENT                                 |
| 9. IFF AND TACAN ANTENNA                                    | 32. LOCALIZER ANTENNA   |
| 10. FLAPS   | 33. LANDING LIGHT   |
| 11. UHF ANTENNA   | 34. AUXILIARY LANDING LIGHT                                       |
| 12. RETRACTABLE ANTICOLLISION LIGHT                         | 35. TACAN ANTENNA   |
| 13. TACAN ANTENNA   | 36. IFF AND TACAN ANTENNA   |
| 14. FUSELAGE FUEL TANK (TYPICAL)                            | 37. UHF ANTENNA   |
| 15. WING FUEL TANK (TYPICAL)                                | 38. MARKER BEACON ANTENNA   |
| 16. MAIN LANDING GEAR BOGIE (RETRACTED)                     | 39. GROUND COOLING  |
| 17. DRAG CHUTE COMPARTMENT                                  | 40. ANTICOLLISION LIGHTS (RETRACTABLE)                            |
| 18. MOVABLE VERTICAL STABILIZER (TYPICAL BOTH SIDES)        | 41. SINGLE POINT REFUELING RECEPTACLE (RIGHT SIDE ONLY)           |
| 19. YJ93 ENGINES WITH AFTERBURNER                           | 42. EXTERNAL ELECTRICAL POWER RECEPTACLE                          |
| 20. SEGMENTED ELEVONS (TYPICAL BOTH SIDES)                  | 43. HYDRAULIC AND GASEOUS NITROGEN GROUND-TEST-FILLER CONNECTIONS |
| 21. COMBINATION WING TIP AND TAIL LIGHT (TYPICAL BOTH TIPS) |   |
| 22. FOLDING WING TIP (TYPICAL BOTH SIDES)                   |   |
| 23. WING FOLD POWER HINGE (TYPICAL BOTH SIDES)              |   |

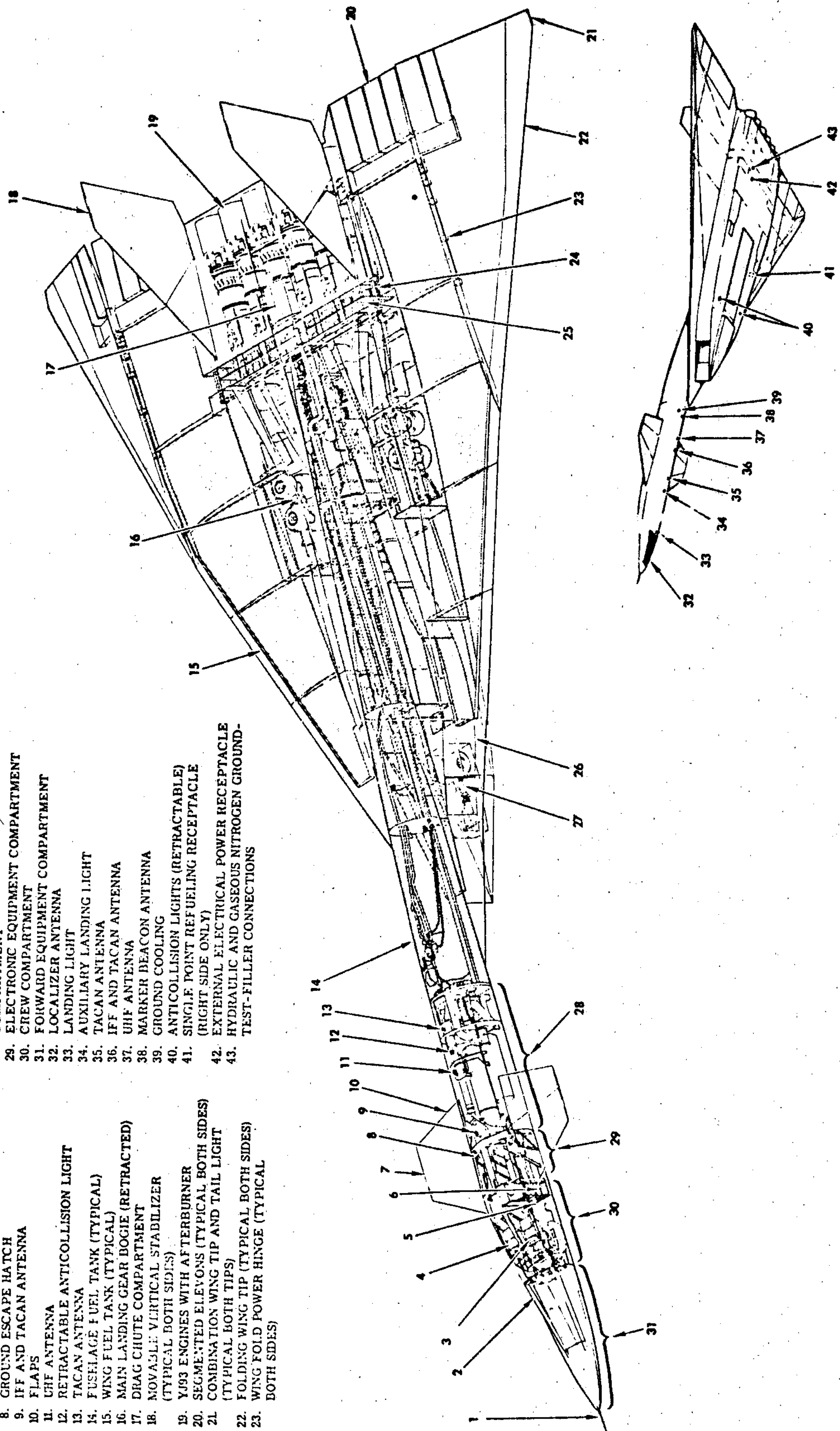


Figure 1-1. General Arrangement

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**NOTE** Airplane dimensions are taken with landing gear struts and tires inflated to correct pressure.

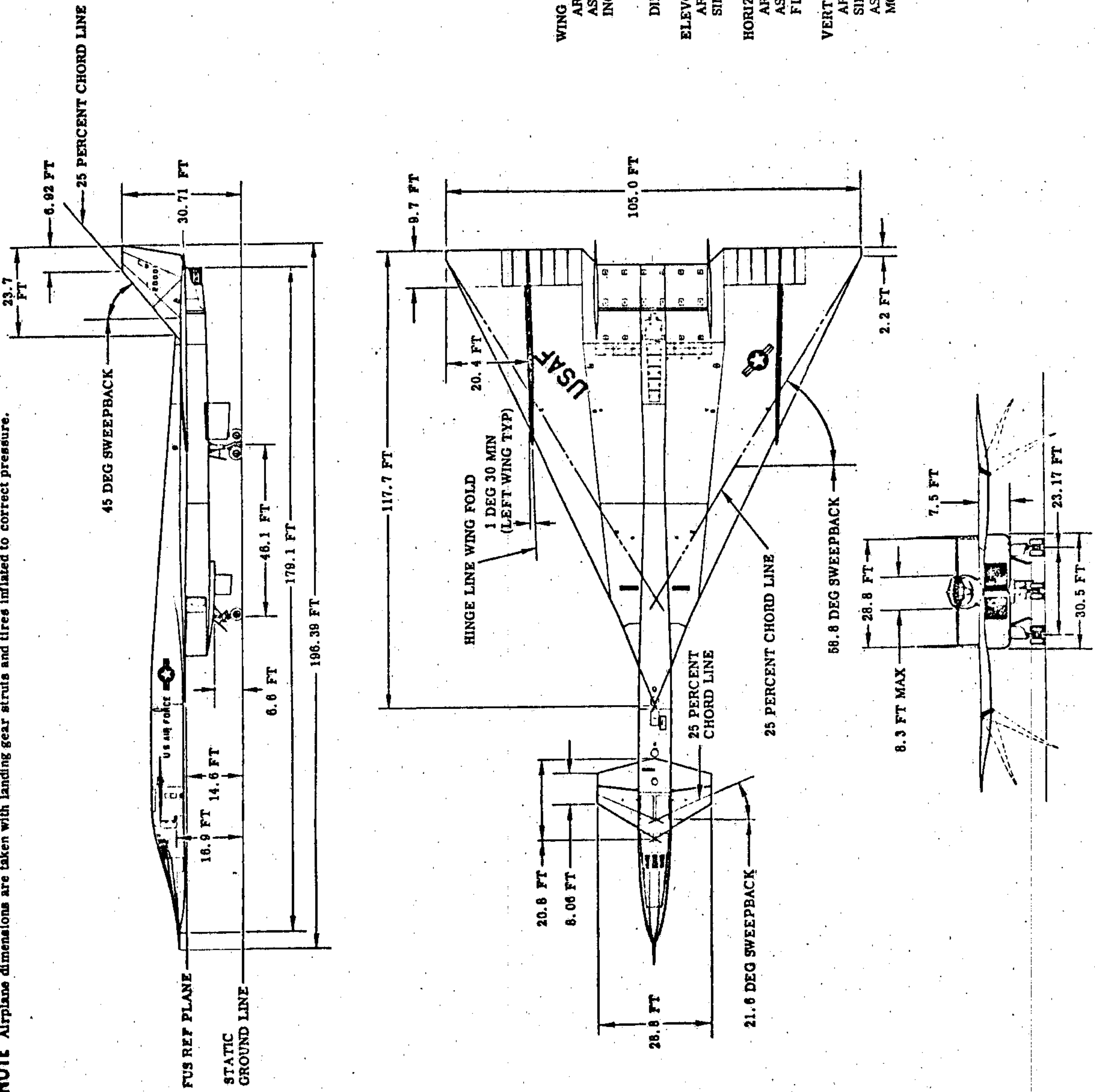
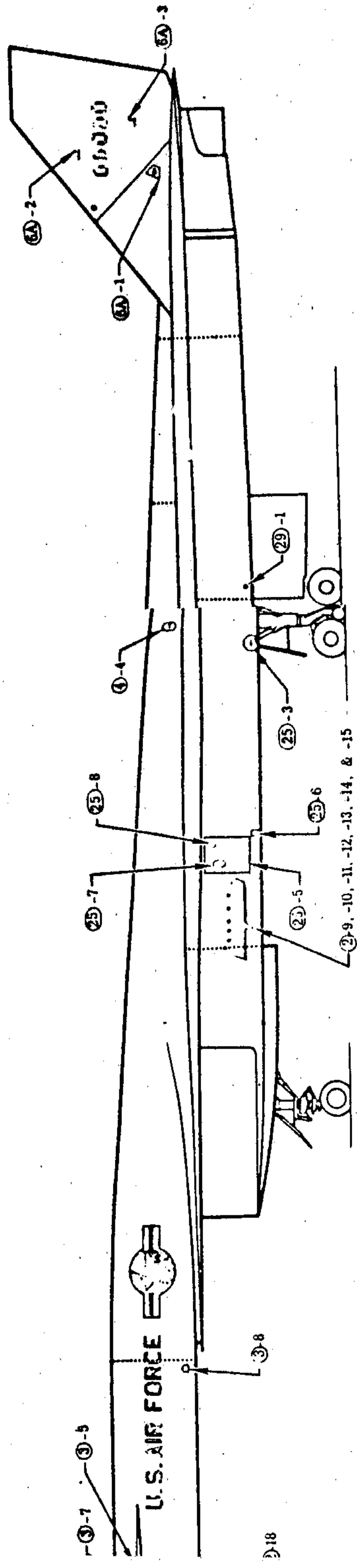
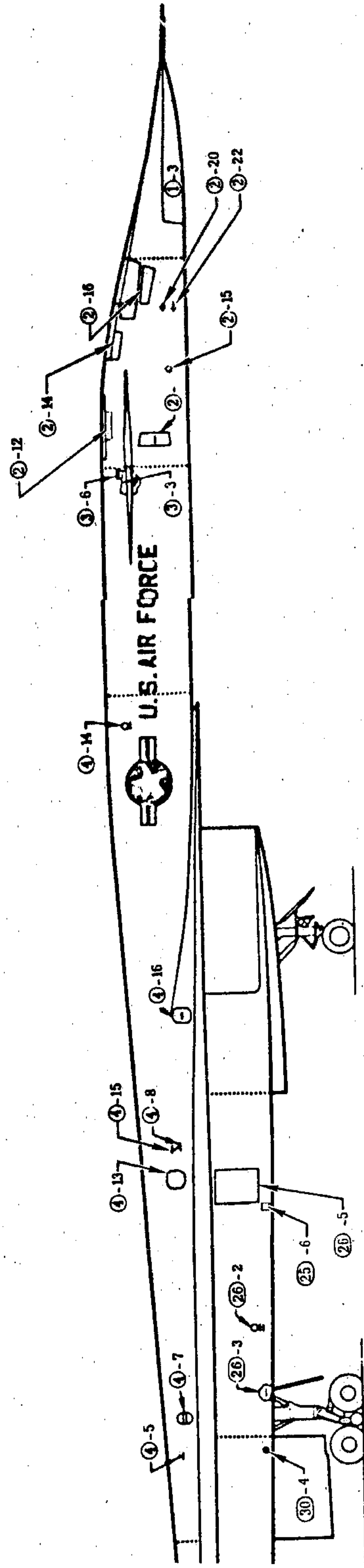


Figure 1-3 Airplane Dimensions

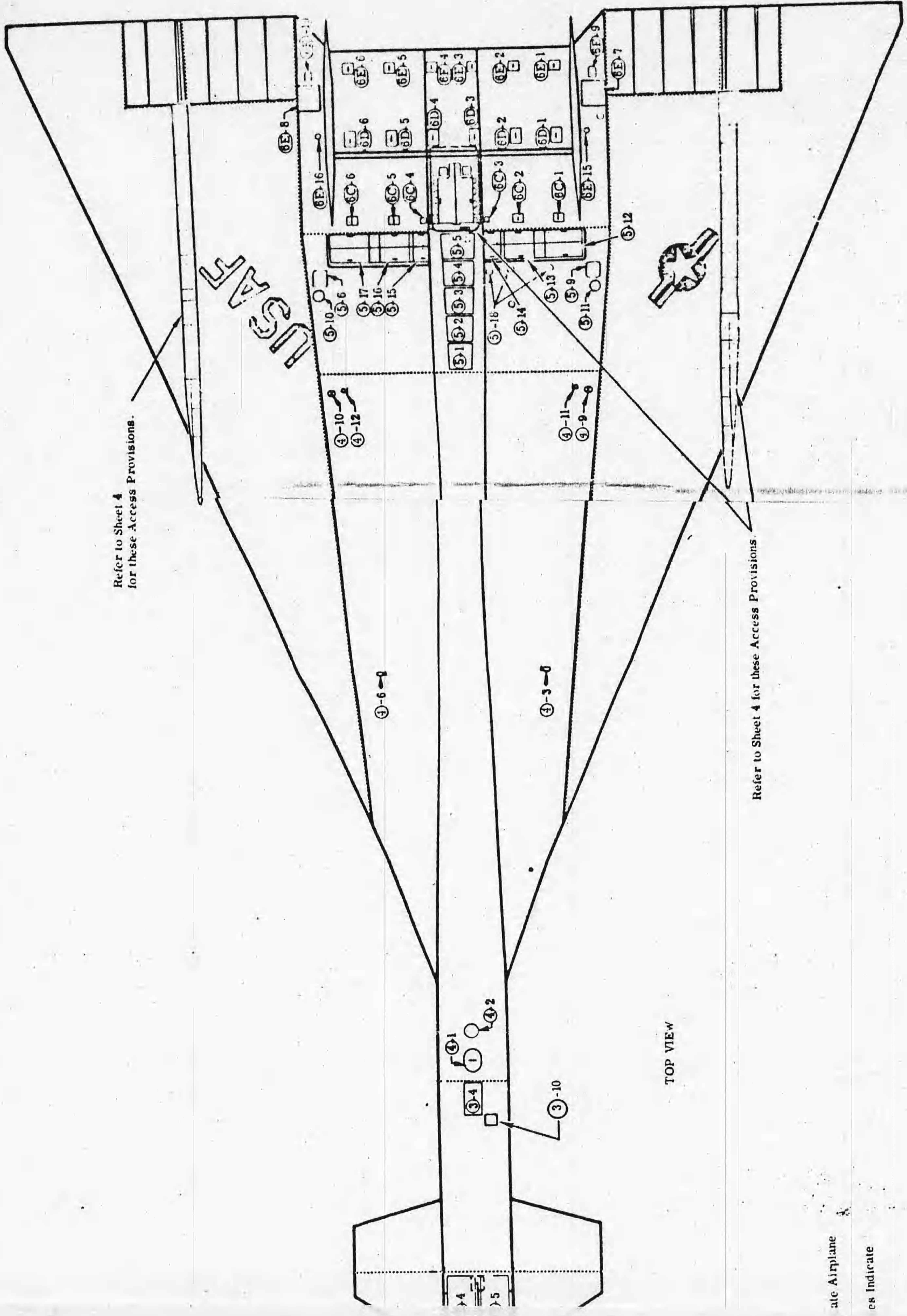


LEFT SIDE VIEW



RIGHT SIDE VIEW





Refer to Sheet 4 for these Access Provisions.

Refer to Sheet 4 for these Access Provisions.

TOP VIEW

ate Airplane  
es Indicate

B-70-2-00-2E



FLIGHT TEST INSTRUMENTATION (F502)  
FUEL PROBE ACCESS (F504)  
WEAPONS BAY AFT DOOR  
PUMP, FUEL TANK NO. 2 (F432)  
WEAPONS BAY FWD DOOR LOCK  
WEAPONS BAY AFT DOOR LOCK  
FUEL TANK NO. 4\*  
WEAPONS BAY ACTUATOR  
JUNCTION BOX, ELECTRICAL  
FUEL BOOSTER PUMP, LOWER - TANK NO. 3\*  
FUEL BOOSTER PUMP, UPPER - TANK NO. 3\*  
MASS FUEL FILTER (F542)  
HYD PRIMARY AND UTILITY NO. 1 FILTER (F543)  
HYD PRIMARY AND UTILITY NO. 2 FILTER (F544)  
FUEL TANK NO. 4 (F538)  
FUEL TANK NO. 5 LEVEL CONTROL PILOT VALVE  
AND FUEL GAGE CONNECTION (F547)  
PUMP, FUEL TANK NO. 5 (F550 LH)  
FIRE EXTINGUISHER (F541 LH)  
FUEL PROBE ACCESS (F547 LH)  
FUEL TANK NO. 5 - LEVEL CONTROL PILOT VALVE  
AND FUEL GAGE CONNECTION (F547 RH)  
PUMP, FUEL TANK NO. 5 (F552 RH)\*  
FIRE EXTINGUISHER (F541 RH)  
FUEL PROBE ACCESS (F568)

30-6 FLIGHT TEST INSTRUMENTATION (F502)  
30-7 FUEL PROBE ACCESS (F504)  
30-8 WEAPONS BAY AFT DOOR  
30-9 PUMP, FUEL TANK NO. 2 (F432)  
30-10 WEAPONS BAY FWD DOOR LOCK  
30-11 WEAPONS BAY AFT DOOR LOCK  
30-12 FUEL TANK NO. 4\*  
30-13 WEAPONS BAY ACTUATOR  
30-14 JUNCTION BOX, ELECTRICAL  
30-15 FUEL BOOSTER PUMP, LOWER - TANK NO. 3\*  
30-16 FUEL BOOSTER PUMP, UPPER - TANK NO. 3\*  
30-17 MASS FUEL FILTER (F542)  
30-18 HYD PRIMARY AND UTILITY NO. 1 FILTER (F543)  
30-19 HYD PRIMARY AND UTILITY NO. 2 FILTER (F544)  
30-20 FUEL TANK NO. 4 (F538)  
30-21 FUEL TANK NO. 5 LEVEL CONTROL PILOT VALVE  
AND FUEL GAGE CONNECTION (F547)  
30-22 PUMP, FUEL TANK NO. 5 (F550 LH)  
30-23 FIRE EXTINGUISHER (F541 LH)  
30-24 FUEL PROBE ACCESS (F547 LH)  
30-25 FUEL TANK NO. 5 - LEVEL CONTROL PILOT VALVE  
AND FUEL GAGE CONNECTION (F547 RH)  
30-26 PUMP, FUEL TANK NO. 5 (F552 RH)\*  
30-27 FIRE EXTINGUISHER (F541 RH)  
30-28 FUEL PROBE ACCESS (F568)

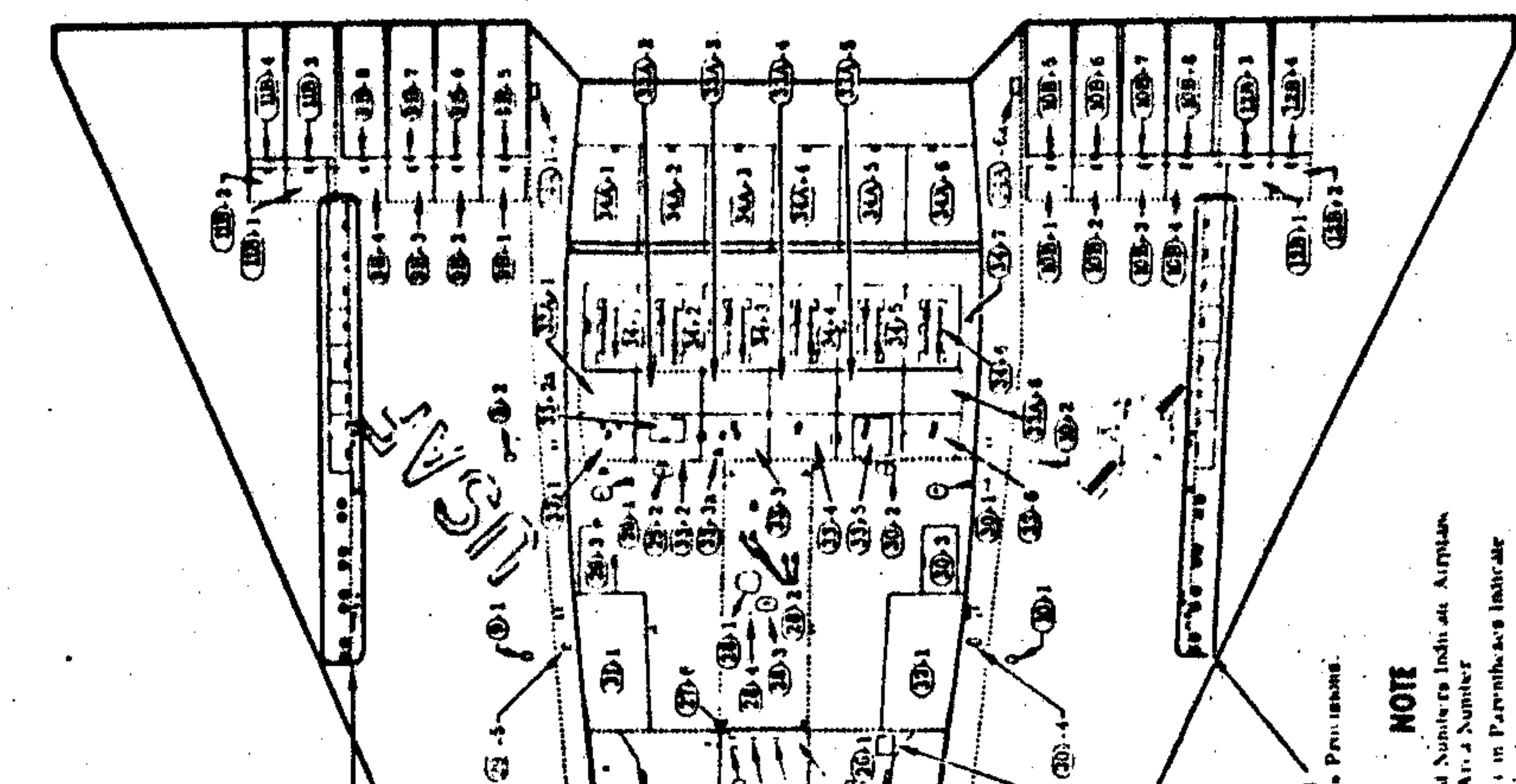
ILOT VALVE (W116 RH)  
ILOT VALVE (W139 LH)

ILOT VALVE (W116 RH)  
ILOT VALVE (W140 RH)

30-1 MAIN LANDING GEAR, LH  
30-2 MAIN LANDING GEAR, RH  
30-3 ENGINE NO. 1 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F554)  
30-4 ENGINE NO. 2 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F555)  
30-5 NITROGEN AND HYDRAULIC GROUND CONNECTIONS  
ENGINE NO. 3 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F556)  
30-6 EXTERNAL POWER RECEPTACLE  
STATIC GROUND, INTERPHONE CONNECTION  
ENGINE NO. 4 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F557)  
ENGINE NO. 5 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F558)  
ENGINE NO. 6 FUEL SHUTOFF VALVE  
ELECTRICAL AND HYDRAULIC (F559)  
30-7 ACCESSORY GEAR BOX NO. 1 ENGINE (F560)  
30-8 ACCESSORY GEAR BOX NO. 2 ENGINE (F548)  
30-9 ACCESSORY GEAR BOX NO. 3 ENGINE (F542)  
30-10 ACCESSORY GEAR BOX NO. 4 ENGINE (F563)  
30-11 ACCESSORY GEAR BOX NO. 5 ENGINE (F544)  
30-12 ACCESSORY GEAR BOX NO. 6 ENGINE (F565)  
30-13 ACCESSORY COMPARTMENT ENGINE NO. 1  
OIL TANK SERVICING (F604)  
30-14 ACCESSORY COMPARTMENT ENGINE NO. 2  
OIL TANK SERVICING (F602)

31-3 ACCESSORY COMPARTMENT ENGINE NO. 3  
OIL TANK SERVICING (F603)  
31-4 ACCESSORY COMPARTMENT ENGINE NO. 4  
OIL TANK SERVICING (F604)  
31-5 ACCESSORY COMPARTMENT ENGINE NO. 5  
OIL TANK SERVICING (F605)  
31-6 ACCESSORY COMPARTMENT ENGINE NO. 6  
HYD TANK SERVICING (F606)  
31-7 OIL TANK SERVICING - ENGINE NO. 6 (F615)  
31-8 ENGINE NO. 1 REMOVAL  
31-9 HINGE PIN ACTUATOR FITTING  
31-10 ENGINE NO. 2 REMOVAL  
31-11 ENGINE NO. 3 REMOVAL  
31-12 ENGINE NO. 4 REMOVAL  
31-13 ENGINE NO. 5 REMOVAL  
31-14 ENGINE NO. 6 REMOVAL  
31-15 VERTICAL STABILIZER ACCESS (F616)  
31-16 HINGE PIN ACTUATOR FITTING

32-3 ACCESSORY COMPARTMENT ENGINE NO. 3  
OIL TANK SERVICING (F603)  
32-4 ACCESSORY COMPARTMENT ENGINE NO. 4  
OIL TANK SERVICING (F604)  
32-5 ACCESSORY COMPARTMENT ENGINE NO. 5  
OIL TANK SERVICING (F605)  
32-6 ACCESSORY COMPARTMENT ENGINE NO. 6  
HYD TANK SERVICING (F606)  
32-7 OIL TANK SERVICING - ENGINE NO. 6 (F615)  
32-8 ENGINE NO. 1 REMOVAL  
32-9 HINGE PIN ACTUATOR FITTING  
32-10 ENGINE NO. 2 REMOVAL  
32-11 ENGINE NO. 3 REMOVAL  
32-12 ENGINE NO. 4 REMOVAL  
32-13 ENGINE NO. 5 REMOVAL  
32-14 ENGINE NO. 6 REMOVAL  
32-15 VERTICAL STABILIZER ACCESS (F616)  
32-16 HINGE PIN ACTUATOR FITTING



Refer to Sheet 4 for these Access Provisions.

**NOTE**

- Access From Weapons Bay
- Access From Main Wheel Well
- Circled Numbers Indicate Airplane Work Area Number
- Symbols in Parentheses Indicate Door Numbers

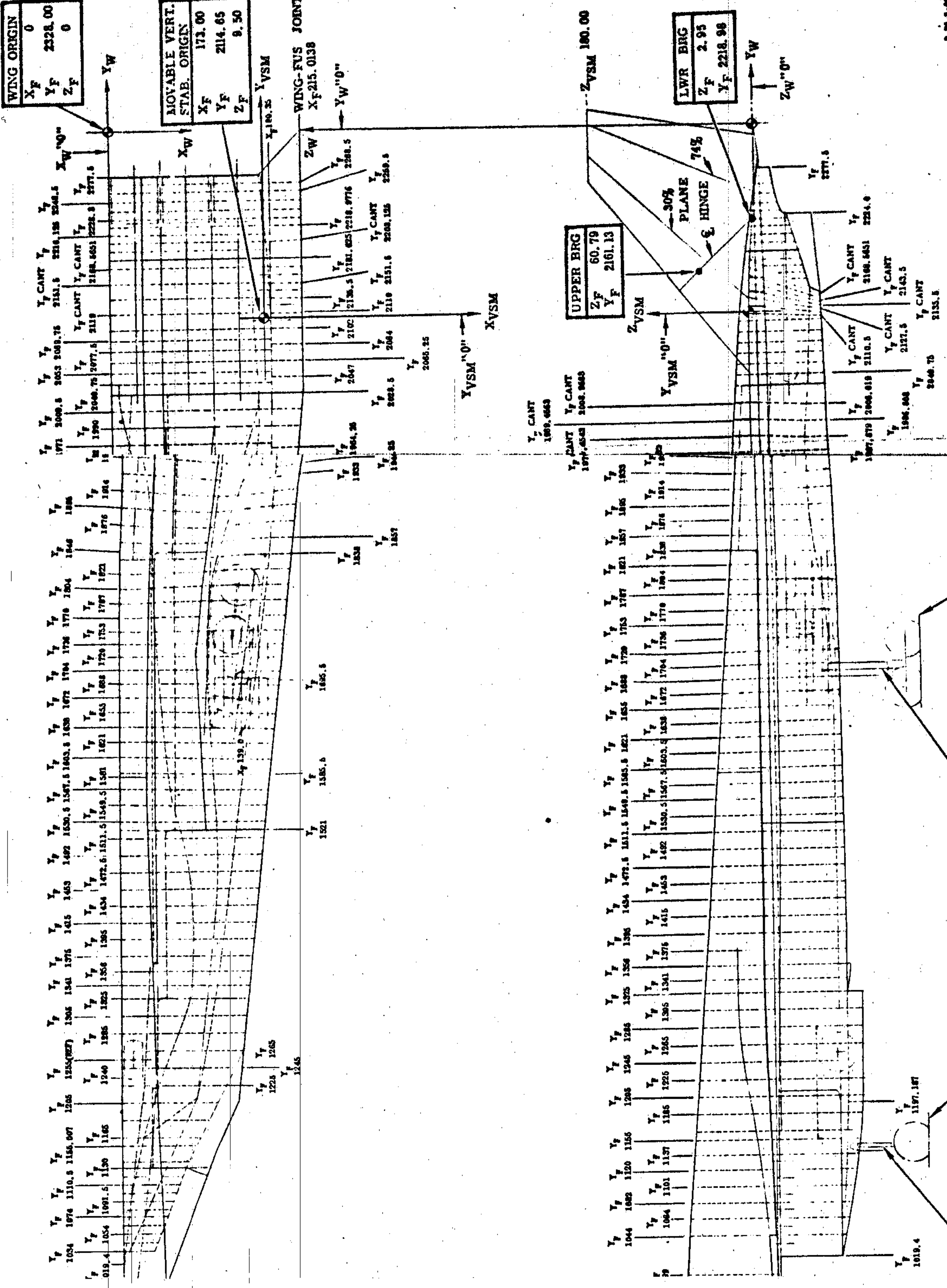


WING ORIGIN		
X <sub>F</sub>	Y <sub>F</sub>	Z <sub>F</sub>
0	2328.00	0

MOVABLE VERT. STAB. ORIGIN		
X <sub>F</sub>	Y <sub>F</sub>	Z <sub>F</sub>
173.00	2114.65	9.50

LWR BRG		
Z <sub>F</sub>	Y <sub>F</sub>	X <sub>F</sub>
2.95	2218.98	

UPPER BRG		
Z <sub>F</sub>	Y <sub>F</sub>	X <sub>F</sub>
60.79	2161.13	



TRUT (Y<sub>F</sub> 144.5) (REF) STATIC GROUND LINE (Z<sub>F</sub>-179.0)      STRUT (Y<sub>F</sub> 1695.5) (REF) STATIC GROUND LINE (Z<sub>F</sub>-179.0)