

FLIGHT MANUAL

USAF SERIES

F-100D (I) F-100F (I)

(HIGH WIRE)

-2, -6, -11, -16, -20

(HIGH WIRE)

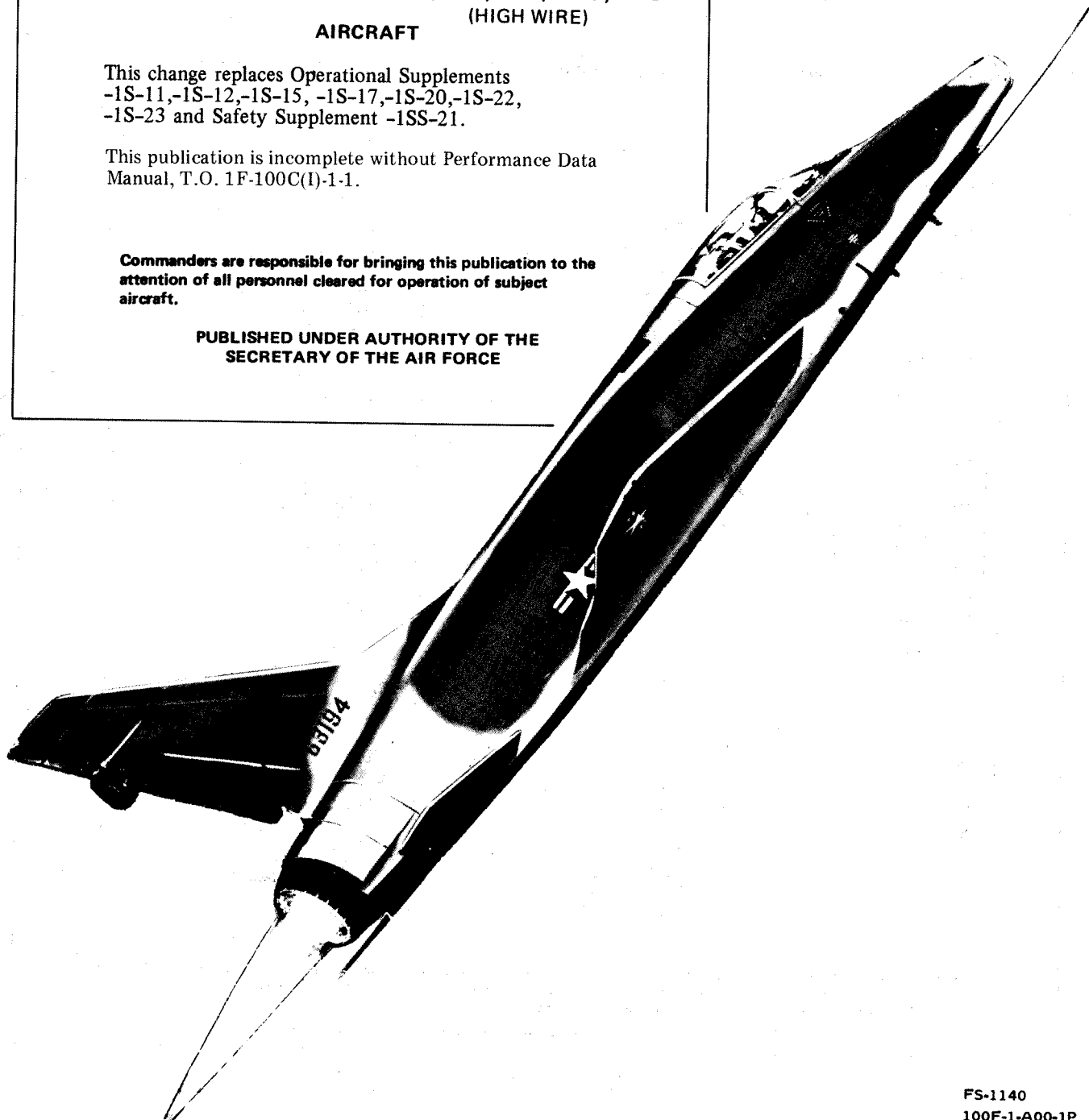
AIRCRAFT

This change replaces Operational Supplements
-1S-11, -1S-12, -1S-15, -1S-17, -1S-20, -1S-22,
-1S-23 and Safety Supplement -1SS-21.

This publication is incomplete without Performance Data
Manual, T.O. 1F-100C(I)-1-1.

Commanders are responsible for bringing this publication to the
attention of all personnel cleared for operation of subject
aircraft.

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SECRETARY OF THE AIR FORCE

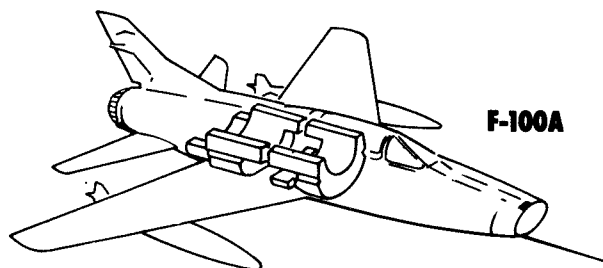


FS-1140
100F-1-A00-1P

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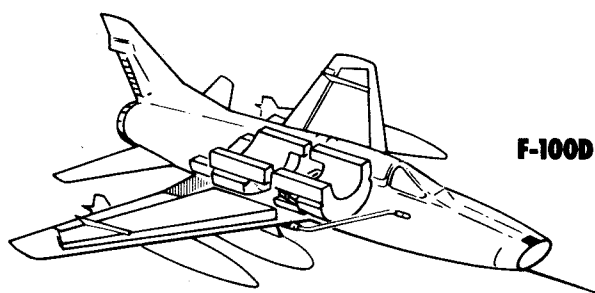
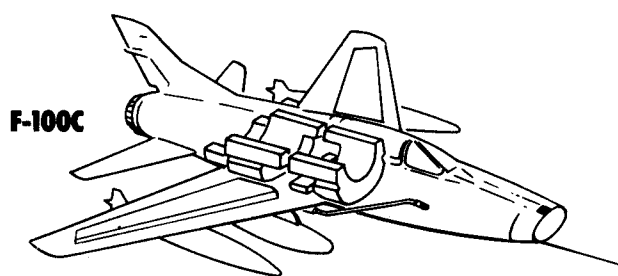
MAIN DIFFERENCES TABLE

F-100 SERIES



ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	THREE INVERTERS
ARMAMENT	FOUR GUNS AND MISSILES
STARTER	PNEUMATIC
DROP TANKS	TWO 275-GALLON
INTERNAL FUEL	FUSELAGE
REFUELING PROVISIONS	GRAVITY TANK FILLING
FLAPS	NO
OXYGEN SYSTEM	GASEOUS, WITH D-2 REGULATOR

ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	THREE INVERTERS
ARMAMENT	FOUR GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS AND MISSILES MOUNTED ON REMOVABLE PYLONS.
STARTER	PNEUMATIC
DROP TANKS	TWO 275-GALLON AND/OR COMBINATION OF 200-GALLON (TWO 335-GALLON ON SOME AIRPLANES)
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	NO
OXYGEN SYSTEM	LIQUID, WITH D-2A REGULATOR



ENGINE	J57-21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	ONE ENGINE-DRIVEN AC GENERATOR WITH ONE STAND-BY INVERTER
ARMAMENT	FOUR GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS, AND MISSILES MOUNTED ON FORCE EJECTION PYLONS.
STARTER	CARTRIDGE - PNEUMATIC
DROP TANKS	TWO 275-GALLON, TWO 450-GALLON OR TWO 335-GALLON AND/OR COMBINATION OF 200-GALLON.
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE-TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	YES
OXYGEN SYSTEM	LIQUID WITH MD-1 REGULATOR

ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	ONE ENGINE-DRIVEN AC GENERATOR WITH ONE STAND-BY INVERTER
ARMAMENT	TWO GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS, AND MISSILES MOUNTED ON FORCE EJECTION PYLONS
STARTER	CARTRIDGE - PNEUMATIC
DROP TANKS	TWO 275-GALLON TWO 450-GALLON OR TWO 335-GALLON AND/OR COMBINATION OF 200-GALLON.
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE-TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	YES
OXYGEN SYSTEM	LIQUID WITH MD-1 REGULATOR

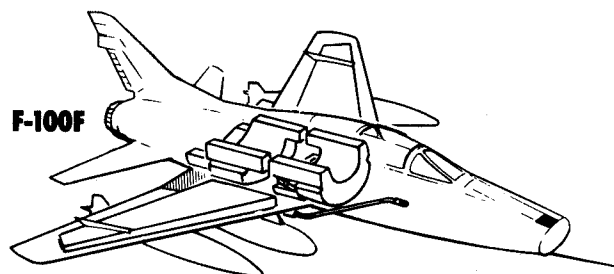
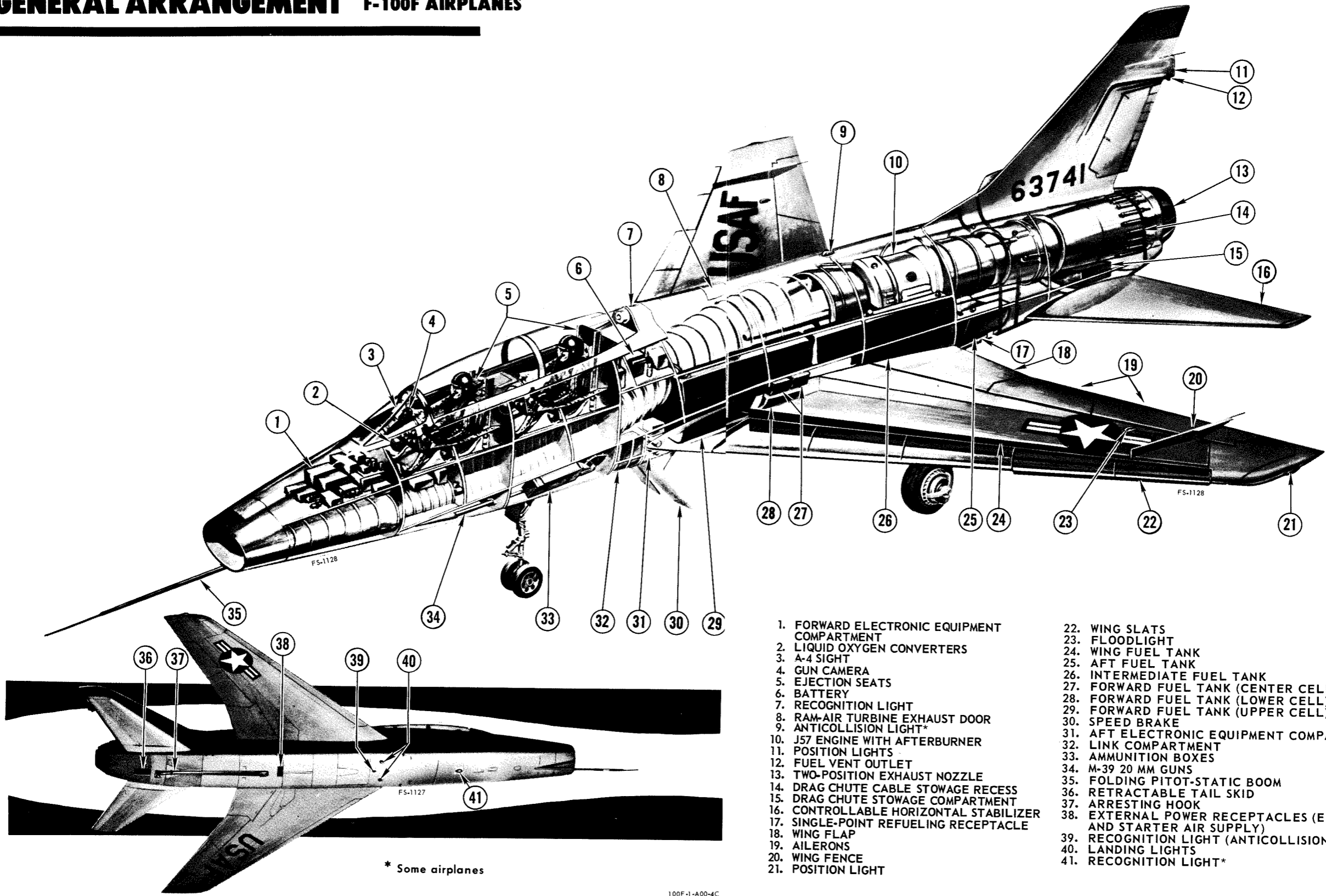


Figure 1-4

GENERAL ARRANGEMENT F-100F AIRPLANES



- | | |
|---|--|
| <ol style="list-style-type: none"> 1. FORWARD ELECTRONIC EQUIPMENT COMPARTMENT 2. LIQUID OXYGEN CONVERTERS 3. A-4 SIGHT 4. GUN CAMERA 5. EJECTION SEATS 6. BATTERY 7. RECOGNITION LIGHT 8. RAM-AIR TURBINE EXHAUST DOOR 9. ANTICOLLISION LIGHT* 10. J57 ENGINE WITH AFTERBURNER 11. POSITION LIGHTS 12. FUEL VENT OUTLET 13. TWO-POSITION EXHAUST NOZZLE 14. DRAG CHUTE CABLE STOWAGE RECESS 15. DRAG CHUTE STOWAGE COMPARTMENT 16. CONTROLLABLE HORIZONTAL STABILIZER 17. SINGLE-POINT REFUELING RECEPTACLE 18. WING FLAP 19.AILERONS 20. WING FENCE 21. POSITION LIGHT | <ol style="list-style-type: none"> 22. WING SLATS 23. FLOODLIGHT 24. WING FUEL TANK 25. AFT FUEL TANK 26. INTERMEDIATE FUEL TANK 27. FORWARD FUEL TANK (CENTER CELL) 28. FORWARD FUEL TANK (LOWER CELL) 29. FORWARD FUEL TANK (UPPER CELL) 30. SPEED BRAKE 31. AFT ELECTRONIC EQUIPMENT COMPARTMENT 32. LINK COMPARTMENT 33. AMMUNITION BOXES 34. M-39 20 MM GUNS 35. FOLDING PITOT-STATIC BOOM 36. RETRACTABLE TAIL SKID 37. ARRESTING HOOK 38. EXTERNAL POWER RECEPTACLES (ELECTRICAL AND STARTER AIR SUPPLY) 39. RECOGNITION LIGHT (ANTICOLLISION LIGHT*) 40. LANDING LIGHTS 41. RECOGNITION LIGHT* |
|---|--|

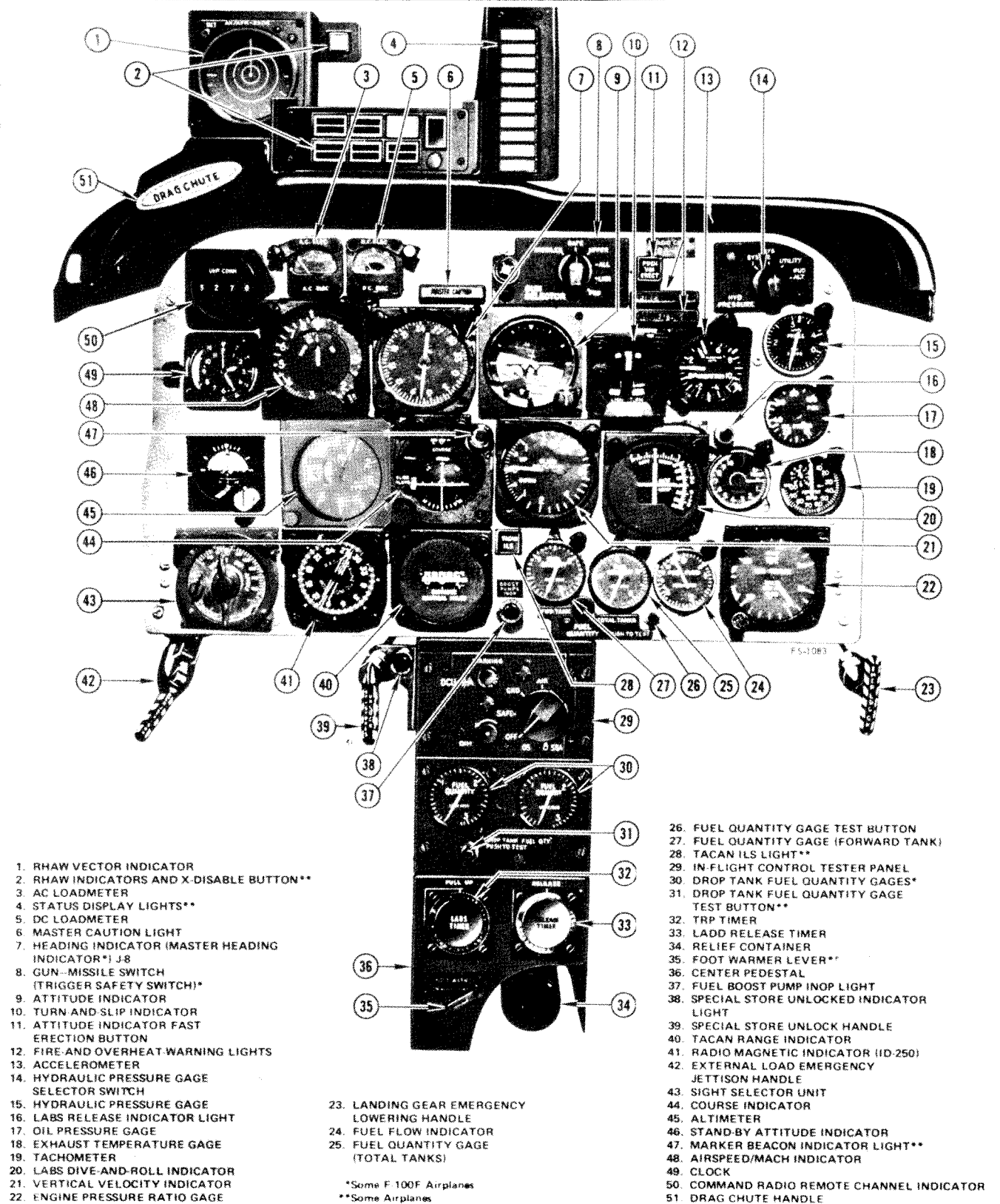
* Some airplanes

100F-1-A00-4C

Figure 1-2 (Sheet 1 of 2)

Figure 1-2 (Sheet 2 of 2)

INSTRUMENT PANEL F-100D AND FRONT COCKPIT F-100F



- 1. RHAW VECTOR INDICATOR
- 2. RHAW INDICATORS AND X-DISABLE BUTTON**
- 3. AC LOADMETER
- 4. STATUS DISPLAY LIGHTS**
- 5. DC LOADMETER
- 6. MASTER CAUTION LIGHT
- 7. HEADING INDICATOR (MASTER HEADING INDICATOR*) J-8
- 8. GUN-MISSILE SWITCH (TRIGGER SAFETY SWITCH)*
- 9. ATTITUDE INDICATOR
- 10. TURN AND SLIP INDICATOR
- 11. ATTITUDE INDICATOR FAST ERECTION BUTTON
- 12. FIRE AND OVERHEAT WARNING LIGHTS
- 13. ACCELEROMETER
- 14. HYDRAULIC PRESSURE GAGE SELECTOR SWITCH
- 15. HYDRAULIC PRESSURE GAGE
- 16. LABS RELEASE INDICATOR LIGHT
- 17. OIL PRESSURE GAGE
- 18. EXHAUST TEMPERATURE GAGE
- 19. TACHOMETER
- 20. LABS DIVE AND ROLL INDICATOR
- 21. VERTICAL VELOCITY INDICATOR
- 22. ENGINE PRESSURE RATIO GAGE

- 23. LANDING GEAR EMERGENCY LOWERING HANDLE
- 24. FUEL FLOW INDICATOR
- 25. FUEL QUANTITY GAGE (TOTAL TANKS)

*Some F-100F Airplanes
 **Some Airplanes

- 26. FUEL QUANTITY GAGE TEST BUTTON
- 27. FUEL QUANTITY GAGE (FORWARD TANK)
- 28. TACAN ILS LIGHT**
- 29. IN-FLIGHT CONTROL TESTER PANEL
- 30. DROP TANK FUEL QUANTITY GAGES*
- 31. DROP TANK FUEL QUANTITY GAGE TEST BUTTON**
- 32. TRP TIMER
- 33. LADD RELEASE TIMER
- 34. RELIEF CONTAINER
- 35. FOOT WARMER LEVER**
- 36. CENTER PEDESTAL
- 37. FUEL BOOST PUMP INOP LIGHT
- 38. SPECIAL STORE UNLOCKED INDICATOR LIGHT
- 39. SPECIAL STORE UNLOCK HANDLE
- 40. TACAN RANGE INDICATOR
- 41. RADIO MAGNETIC INDICATOR (ID-250)
- 42. EXTERNAL LOAD EMERGENCY JETTISON HANDLE
- 43. SIGHT SELECTOR UNIT
- 44. COURSE INDICATOR
- 45. ALTIMETER
- 46. STAND-BY ATTITUDE INDICATOR
- 47. MARKER BEACON INDICATOR LIGHT**
- 48. AIRSPEED/MACH INDICATOR
- 49. CLOCK
- 50. COMMAND RADIO REMOTE CHANNEL INDICATOR
- 51. DRAG CHUTE HANDLE

Figure 1-6

J57 ENGINE

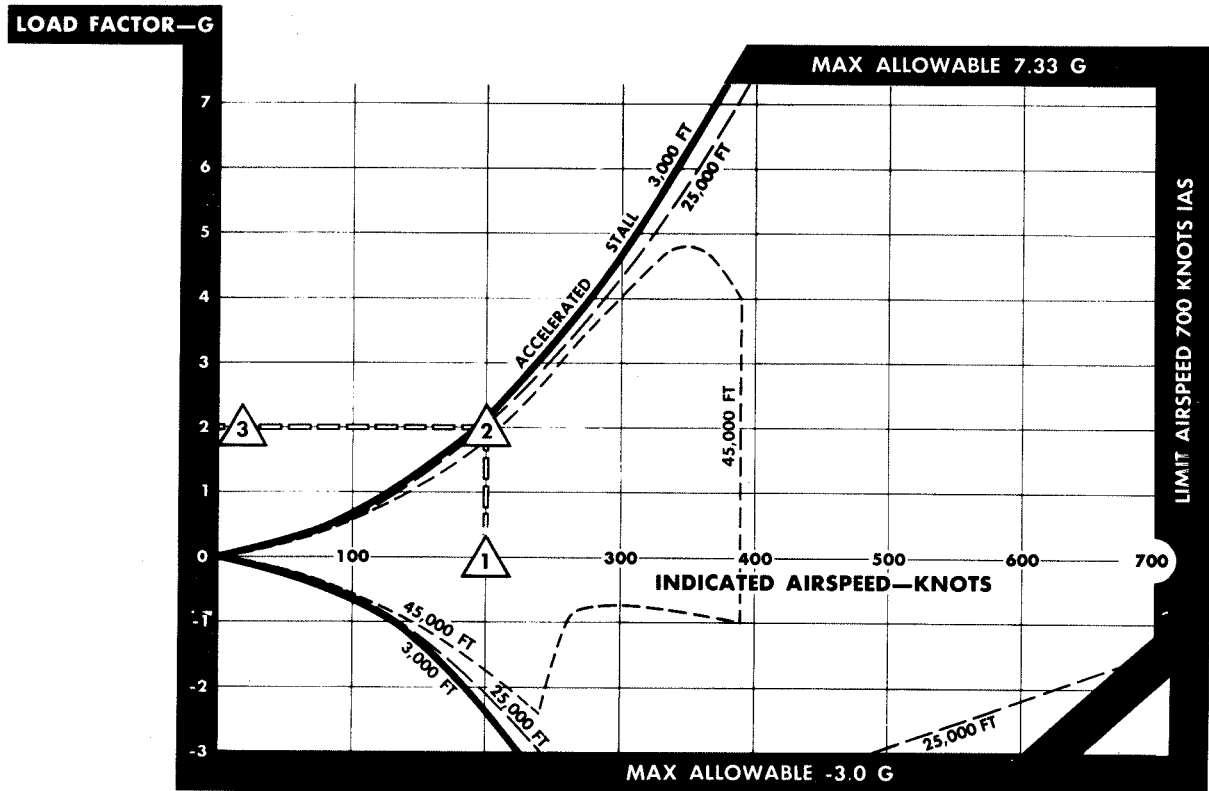


Figure 1-5

OPERATING FLIGHT

NO EXTERNAL LOAD
GROSS WEIGHT 28,100 LB
(COMBAT CONDITION)

F-100D AIRPLANES



HOW TO USE CHART:

- 1 Select your indicated airspeed: 200 knots IAS.
- 2 Trace vertically to your flight altitude: 25,000 feet.
- 3 Move horizontally to the left and find the maximum G you can pull before stalling: 2.0 G.

NOTE
Accelerated stall speeds increase with an increase in gross weight.

F-100D-1-A93-17

Figure 5-7 (Sheet 1 of 2)

IN-FLIGHT EMERGENCIES (Cont)
SEAT EJECTION WITH DART/SNUBBING SYSTEM

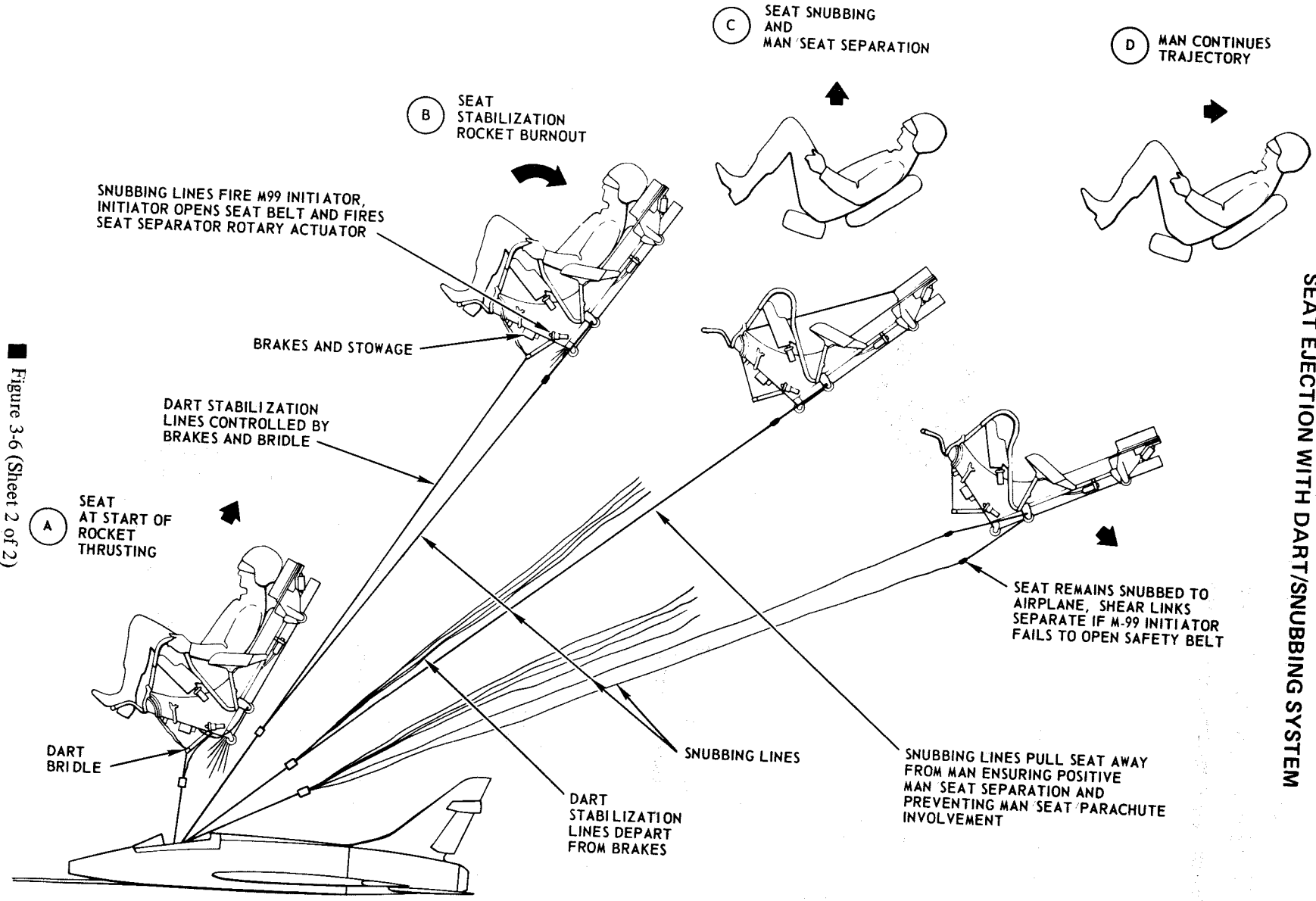


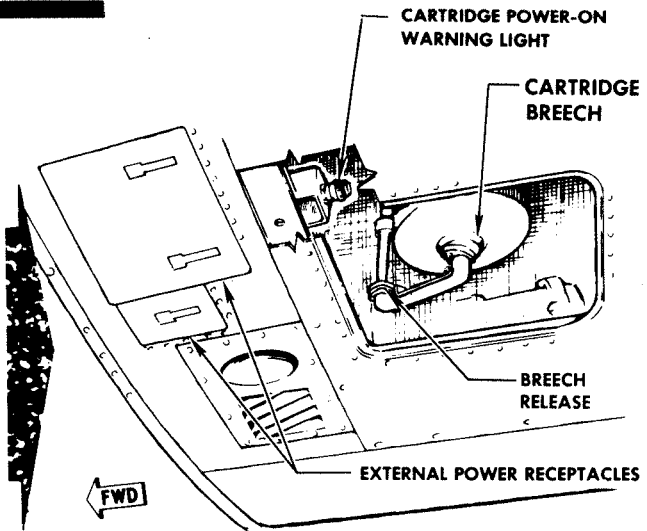
Figure 3-6 (Sheet 2 of 2)

LOADING CARTRIDGE STARTER

1. Remove access door and check cartridge power-on warning light out.
2. Remove cartridge breech from starter by squeezing breech release and rotating breech clockwise.

WARNING

- Do not remove cartridge breech from starter if a start has been made within 5 minutes, as injury could occur.
- Asbestos gloves and a plastic face shield should be worn when a cartridge that has been recently fired is being removed.

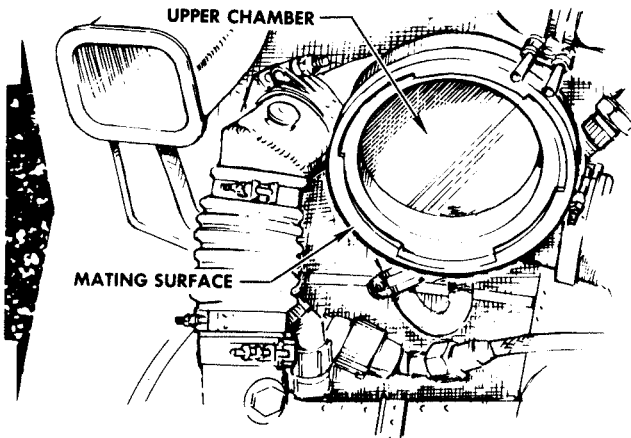


3. Clean deposits from upper cartridge chamber and around mating surface of chamber.
4. Remove cartridge from breech and clean inside of breech.

NOTE

Clean and inspect the dome of breech cap to ensure good electrical contact with grounding clip of cartridge.

5. Remove cartridge from can.



6. Remove safety clip from grounding clip. Bend grounding clip up about 30 degrees and insert into breech. Force cartridge against surface of breech cap dome and rotate about 90 degrees.
7. Test cartridge power-on warning light; then check OUT.

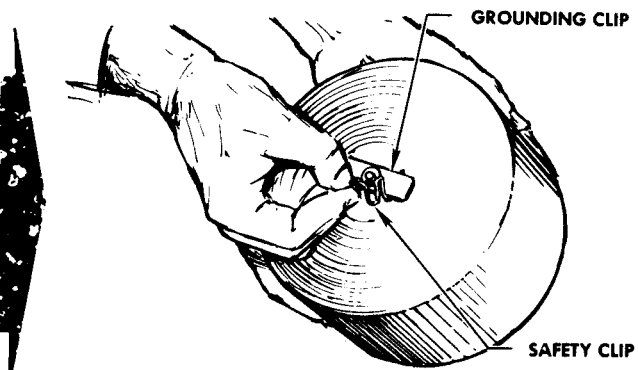
WARNING

During loading of the starter, the engine master and battery switches must be off and external electrical power disconnected.

NOTE

The starter exhaust port area must be clear of fuel, oil, and foreign objects.

8. Install breech into breech cap, engage locking threads, squeeze breech release, rotate breech counterclockwise until seated, and allow breech to seat.



9. During start, have fire guard stand by just forward of the horizontal stabilizer, about 6 feet out from the left side.

F-100D-1-A40-2A

Figure 2-8

F-100D STORE INDEX NUMBERS AIRSPEED LIMITS AND RELEASE LIMITS

NOTE

- Item 171
- Unless stated otherwise, each index number at the wing stations is for a symmetrically mounted pair of stores.
- Index number for a store at one wing station only is one-half that given for the symmetrically mounted pair of stores.
- When pylons only or pylons and TERS are carried, the index number for each pylon or pylon and TER may be considered to be zero.
- Numbers in parenthesis in the "INDEX NUMBERS", "AIRSPEED LIMITS" and "RELEASE LIMITS" columns refer to the NOTES on (Sheet 15 of 15) of this illustration.

STORE	INDEX NUMBER					AIRSPEED LIMITS NOTE	RELEASE LIMITS NOTE
	OUTBOARD STATIONS	INTERMEDIATE STATIONS	INBOARD STATIONS		CENTERLINE STATION		
			STORE ON PYLON	STORE ON TER			
A/A37U-15 Tow Target System (LH OUTBD STA)	33 23 (14)					Target stowed: 350 KIAS. Target launched or released: 475 KIAS. (1)	Pad and Launcher not recommended for release.
AIM-9B/E/J Missile (4 Missiles or 2 Missiles and 2 TDU-11/B Target Rockets)			-18			600 KIAS (2)	Any airspeed and between 0 G and 4.0 G. (11)
B37K-1 Practice Bomb Rack	4 BDU-33/() or 4 MK-106	20				600 KIAS (3)	Any airspeed and between 1.0 G and 5.0 G.
	Empty	16					
BLU-1/B Fire Bomb (Unfinned) BLU-1A/B and BLU-1B/B	34	25	-11	1 = -14 2 = -25		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12) (15)
BLU-1/B Fire Bomb (Finned) BLU-1A/B and BLU-1B/B	34	26	-11			500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-1C/B Fire Bomb (Unfinned)	34	26	-11	1 = -15 2 = -25		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12) (15)
BLU-1C/B Fire Bomb (Finned)	34	26	-11			500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-27/B, B/B, C/B Fire Bomb (Unfinned)	38	26	-16	1 = -18 2 = -34		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-27/B, B/B, C/B Fire Bomb (Finned)	39	27	-16			500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)

Figure 5-5 (Sheet 1 of 15)

F-100D STORE INDEX NUMBERS, AIRSPEED LIMITS, AND RELEASE LIMITS

STORE	INDEX NUMBER					AIRSPEED LIMITS NOTE	RELEASE LIMITS NOTE
	OUTBOARD STATIONS	INTERMEDIATE STATIONS	INBOARD STATIONS		CENTERLINE STATION		
			STORE ON PYLON	STORE ON TER			
CBU-12A/A Dispenser (SUU-7C/A Empty)	Full	32				500 KIAS (3)	Full: Any airspeed and between 0 G and 4.0 G (13)
	Empty	19					
CBU-24/B or CBU-24A/B Cluster Dispenser		36	16	-10	1 = -11 2 = -34	600 KIAS (5)	Any airspeed and between 0 G and 4.0 G.
CBU-24B/B Cluster Dispenser		37	16	-11	1 = -11 2 = -34	600 KIAS (5)	Any airspeed and between 0 G and 4.0 G (15)
CBU-28/A Bomblet Dispenser	Full	27	24	-3		500 KIAS (3)	Dispensing: 500 KIAS to .95 Mach in 1.0 G flight. Jettisoning: 500 KIAS to .85 Mach in 1.0 G flight.
	Empty	20	23	7			
CBU-29/B or CBU-29A/B Cluster Dispenser		36	16	-10	1 = -11 2 = -34	600 KIAS (5)	Any airspeed and between 0 G and 4.0 G.
CBU-29B/B Cluster Dispenser		37	16	-11	1 = -11 2 = -34	600 KIAS (5)	Any airspeed and between 0 G and 4.0 G (15)
CBU-30/A Dispenser	Full	25	24	0		500 KIAS (3)	Dispensing: 500 KIAS to .95 Mach in 1.0 G flight. Jettisoning: 500 KIAS to .85 Mach in 1.0 G flight.
	Empty	20	23	7			
CBU-34/A CBU-34A/A Mine Dispenser	Full	39	27	-15		500 KIAS (3)	Dispensing: Any airspeed and 0° to 45° dive. Jettisoning: Any airspeed level 1.0 G flight.
	Empty	21	23	4			
CBU-37/A Mine Dispenser	Full	27	24	-3		500 KIAS (3)	Dispensing: 500 KIAS to .95 Mach in 1.0 G flight. Jettisoning: 500 KIAS to .85 Mach in 1.0 G flight.
	Empty	20	23	7			
CBU-42/A Mine Dispenser	Full	39	27	-15		500 KIAS (3)	Dispensing: Any airspeed and 0° to 45° dive. Jettisoning: Any airspeed level 1.0 G flight.
	Empty	21	23	4			
CBU-46/A Bomb Dispenser	Full	39				500 KIAS (3)	Dispensing: 500 KIAS and 1.0 G in 0° to 45° dive.
	Empty	19					
CBU-49/B and CBU-49A/B Cluster Dispenser		36	16	-10	1 = -12 2 = -34	600 KIAS (5)	Dispensing: Any airspeed and between 0 G and 4.0 G. (15)
CBU-49B/B Cluster Dispenser		37	16	-10	1 = -12 2 = -34	600 KIAS (5)	Dispensing: Any airspeed and between 0 G and 4.0 G.

Figure 5-5 (Sheet 3 of 15)

F-100D STORE INDEX NUMBERS, AIRSPEED LIMITS, AND RELEASE LIMITS

STORE	INDEX NUMBER					AIRSPEED LIMITS NOTE	RELEASE LIMITS NOTE
	OUTBOARD STATIONS	INTERMEDIATE STATIONS	INBOARD STATIONS		CENTERLINE STATION		
			STORE ON PYLON	STORE ON TER			
M117(R) Bomb	39	17	-10	1 = -12 2 = -33		600 KIAS (5)	Any airspeed and between 0 G and 4.0 G (12) (15)
M117(D) Bomb	39	17	-10	1 = -12 2 = -33		500 KIAS (5)	Any airspeed and between 0 G and 4.0 G (12) (15)
M117GP Bomb with 36 inch M1A1 Fuse Extender	38	17	-10			600 KIAS (5)	Any airspeed and between 0 G and 4.0 G (12)
M129E1 Leaflet Bomb	20	22	6			600 KIAS (5)	Any airspeed and between 0 G and 4.0 G (12)
MC-1 Chemical Bomb	32	25	-5	1 = -8 2 = -23		600 KIAS (5)	Any airspeed and between 0 G and 4.0 G. (12) (15)
MK-12 Mod O Leaflet Tank	Full	30	20	-6		500 KIAS	Any airspeed and between 1.0 G and 4.0 G.
	Empty	24	18	1			
MK-36 Mod O Destructor	29	14	-12	1 = -15 2 = -27 3 = -35		600 KIAS (5)	500 KIAS and between 0 G and 4.0 G (12) (15) (16)
MK-81 GP Bomb	21	13	-1	1 = -5 2 = -9 3 = -8		600 KIAS (5)	500 KIAS and between 0 G and 4.0 G (12) (15)
MK-82 GP Bomb	30	14	-10	1 = -14 2 = -25 3 = -31		600 KIAS (5)	500 KIAS and between 0 G and 4.0 G (12) (15)

Figure 5-5 (Sheet 5 of 15)

F-100D STORE INDEX NUMBERS, AIRSPEED LIMITS, AND RELEASE LIMITS

STORE	INDEX NUMBER					AIRSPEED LIMITS NOTE Airspeed limits given in this column are for stores carried directly on pylons. For stores carried on TER's, the airspeed limit, unless those stated below are more restrictive, is 500 KIAS or Mach .90, whichever is less.	RELEASE LIMITS NOTE Any airspeed limit which is more restrictive than those shown below shall prevail for normal store release. • Release limits given in this column are for stores carried directly on pylons. For stores carried on TER's the release limits, unless those stated below are more restrictive, are as follows: Finned Stores: Any airspeed to 500 KIAS or Mach .90, whichever is less and between .5 G and 4.0 G. Unfinned Stores: Any airspeed to 450 KIAS or Mach .90, whichever is less and between .5 G and 4.0 G. • There are no restrictions for releasing empty pylons with empty TER's installed.
	OUTBOARD STATIONS	INTERMEDIATE STATIONS	INBOARD STATIONS		CENTERLINE STATION		
			STORE ON PYLON	STORE ON TER			
SUU-25A/A Flare Dispenser	Full	25				450 KIAS or Mach .90	Any airspeed between 200 KIAS and Mach .85 in 1.0 G flight.
	Empty	18					
SUU-25B/A Flare Dispenser	Full	28				500 KIAS or Mach .95	Any airspeed between 200 KIAS and Mach .85 in 1.0 G flight.
	Empty	19					
SUU-25C/A, E/A Flare Dispenser	Full	28				500 KIAS or Mach .95	Any airspeed and between 250 KIAS and 375 KIAS in 1.0 G flight.
	Empty	19					

*(5) Do not exceed Mach .90 below 10,000 feet, Mach .95 between 10,000 and 25,000 feet, or Mach 1.0 above 25,000 feet.

** (15) Minimum ripple release rate is 0.060 seconds, for munitions carried on TER's.

Figure 5-5 (Sheet 7 of 15)

F-100F STORE INDEX NUMBERS, AIRSPEED LIMITS, AND RELEASE LIMITS

NOTE

- Unless stated otherwise, each index number at the wing stations is for a symmetrically mounted pair of stores.
- Index number for a store at one wing station only is one-half that given for the symmetrically mounted pair of stores.
 - When pylons only are carried, the index number for each pylon may be considered to be zero.
 - Numbers in parenthesis in the "AIRSPEED LIMITS" and "RELEASE LIMITS" columns refer to the NOTES on Sheet 14 of this illustration.
 - Stores followed by - Item 174.

STORE	INDEX NUMBER				AIRSPEED LIMITS	RELEASE LIMITS NOTE Any airspeed limit which is more restrictive than those shown below shall prevail for normal store release.
	OUTBOARD STATIONS	INTERMEDIATE STATIONS	INBOARD STATIONS	CENTERLINE STATION		
A/A37U-15 Tow Target System (LH OUTBD STA)	30				Target stowed: 350 KIAS. Target launched or released: 475 KIAS. (1)	Pod and Launcher not recommended for release.
AIM-9B/E/J Missile (4 Missiles or 2 Missiles and 2 TDU-11/B Target Rockets)			-17		600 KIAS (2)	Any airspeed and between 0 G and 4.0 G. (11)
B37K-1 Practice Bomb Rack	4 BDU-33/() or 4 MK-106	19			600 KIAS (3)	Any airspeed and between 1.0 G and 5.0 G.
	Empty	16				
BLU-1/B Fire Bomb (Unfinned) BLU-1A/B and BLU-1 B/B	33	27	-9		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-1/B Fire Bomb (Finned) BLU-1A/B and BLU-1 B/B	34	28	-9		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-1C/B Fire Bomb (Unfinned)	33	27	-7		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-1 C/B Fire Bomb (Finned)	34	28	-9		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-27/B, B/B, C/B Fire Bomb (Unfinned)	37	28	-14		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-27/B, B/B, C/B Fire Bomb (Finned)	38	29	-14		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-32A/B, B/B, C/B Fire Bomb (Unfinned)	31	16	-9		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)
BLU-32A/B, B/B, C/B Fire Bomb (Finned)	31	17	-9		500 KIAS (3)	Any airspeed and between 0 G and 4.0 G. (12)

Figure 5-5 (Sheet 9 of 15)

GENERAL ARRANGEMENT

1. AMMUNITION DRUM
2. AIR REFUELING RECEPTACLE & PROBE
3. ATM (AIR TURBINE MOTOR)
4. OPTICAL SIGHT
5. EJECTION SEAT
6. **F** ONLY REAR EJECTION SEAT
7. FORWARD FUEL TANK
8. MAIN FUEL TANK
9. LE FLAP
10. TE FLAP
11. AFT FUEL TANK
12. ENGINE

13. WATER TANK
14. POSITION LIGHTS (3)
15. RUDDER
16. DRAG CHUTE COMPT
17. SPEED BRAKES
18. STABILIZER
19. ARRESTING HOOK
20. AILERON
21. WING PYLON TANK
22. SPOILERS
23. TAXI LIGHT
24. CENTERLINE PYLON TANK

GROUND SERVICE UNITS — SEE FIGURE 1-78
ANTENNA LOCATIONS — SEE FIGURE 1-40

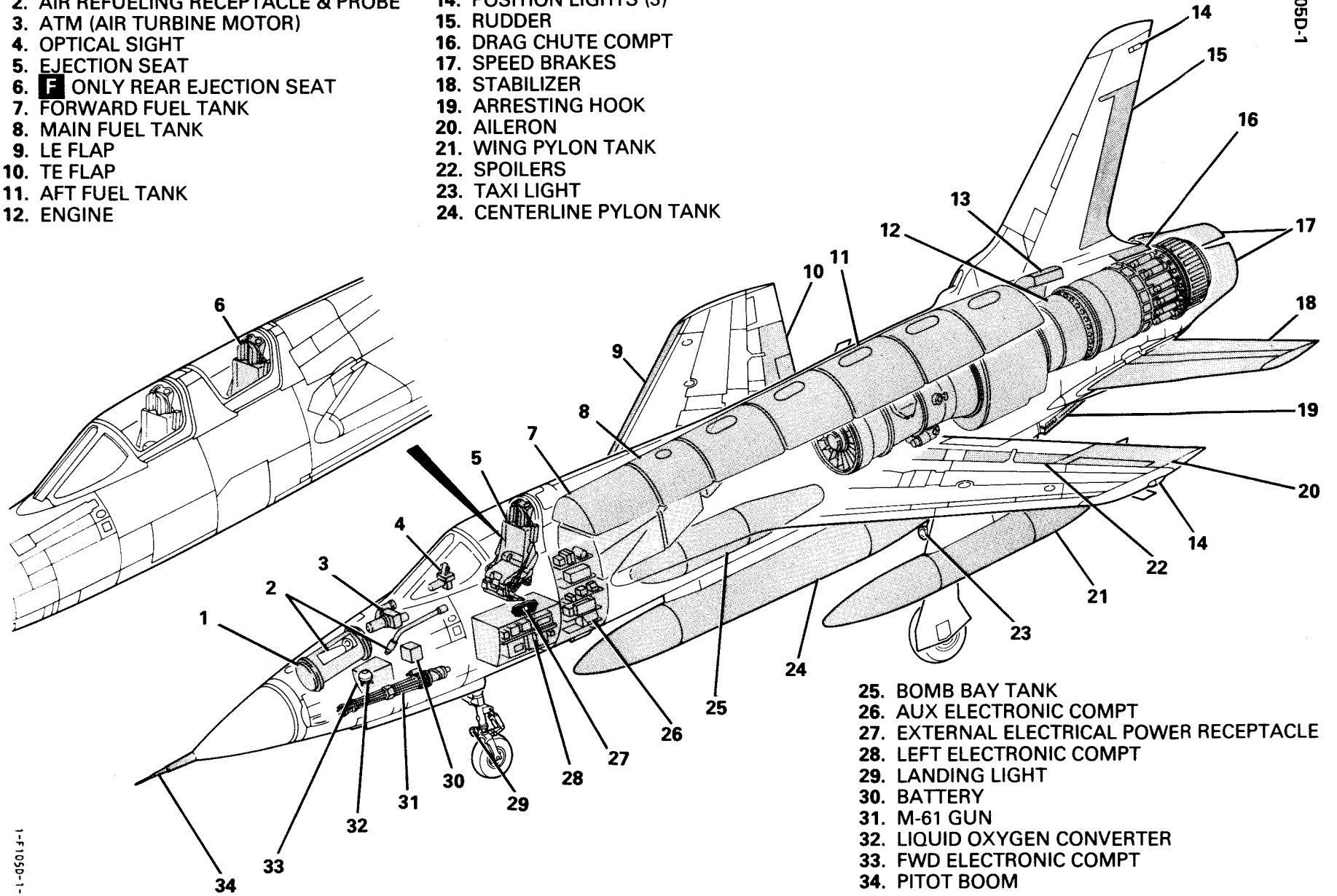


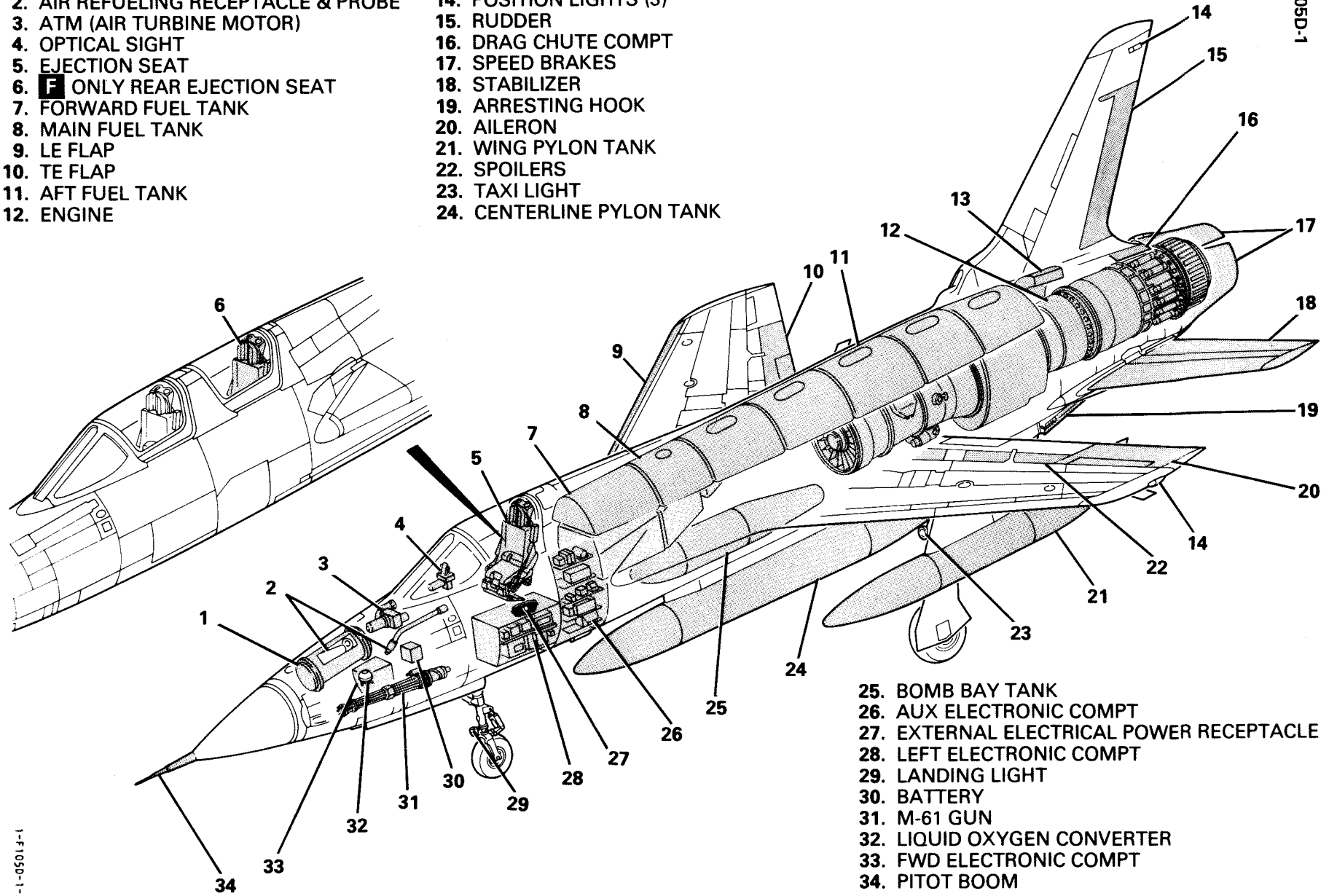
Figure 1-1

25. BOMB BAY TANK
26. AUX ELECTRONIC COMPT
27. EXTERNAL ELECTRICAL POWER RECEPTACLE
28. LEFT ELECTRONIC COMPT
29. LANDING LIGHT
30. BATTERY
31. M-61 GUN
32. LIQUID OXYGEN CONVERTER
33. FWD ELECTRONIC COMPT
34. PITOT BOOM

GENERAL ARRANGEMENT

1. AMMUNITION DRUM
2. AIR REFUELING RECEPTACLE & PROBE
3. ATM (AIR TURBINE MOTOR)
4. OPTICAL SIGHT
5. EJECTION SEAT
6. **F** ONLY REAR EJECTION SEAT
7. FORWARD FUEL TANK
8. MAIN FUEL TANK
9. LE FLAP
10. TE FLAP
11. AFT FUEL TANK
12. ENGINE
13. WATER TANK
14. POSITION LIGHTS (3)
15. RUDDER
16. DRAG CHUTE COMPT
17. SPEED BRAKES
18. STABILIZER
19. ARRESTING HOOK
20. AILERON
21. WING PYLON TANK
22. SPOILERS
23. TAXI LIGHT
24. CENTERLINE PYLON TANK

GROUND SERVICE UNITS — SEE FIGURE 1-78
ANTENNA LOCATIONS — SEE FIGURE 1-40



ENGINE J-75

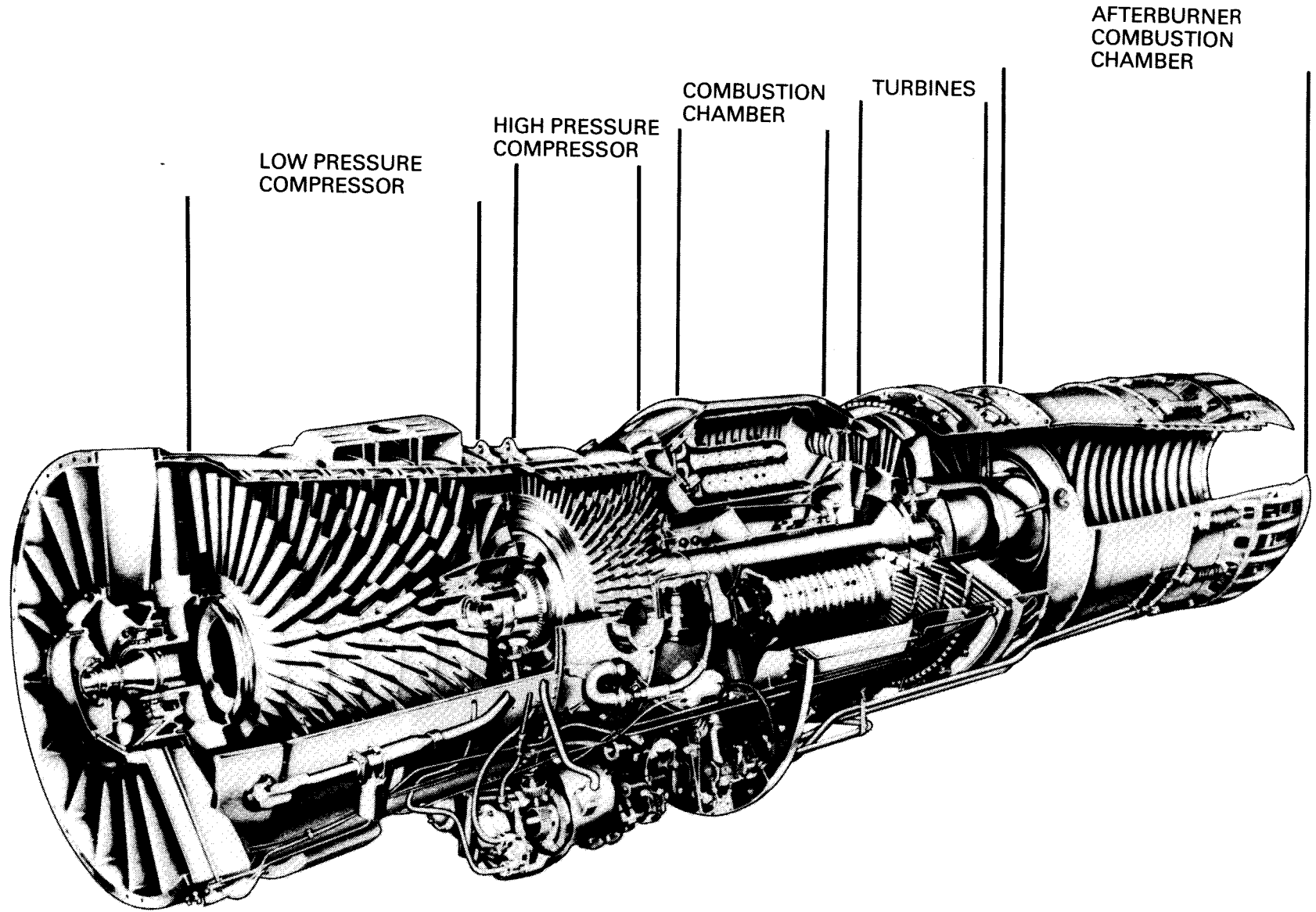
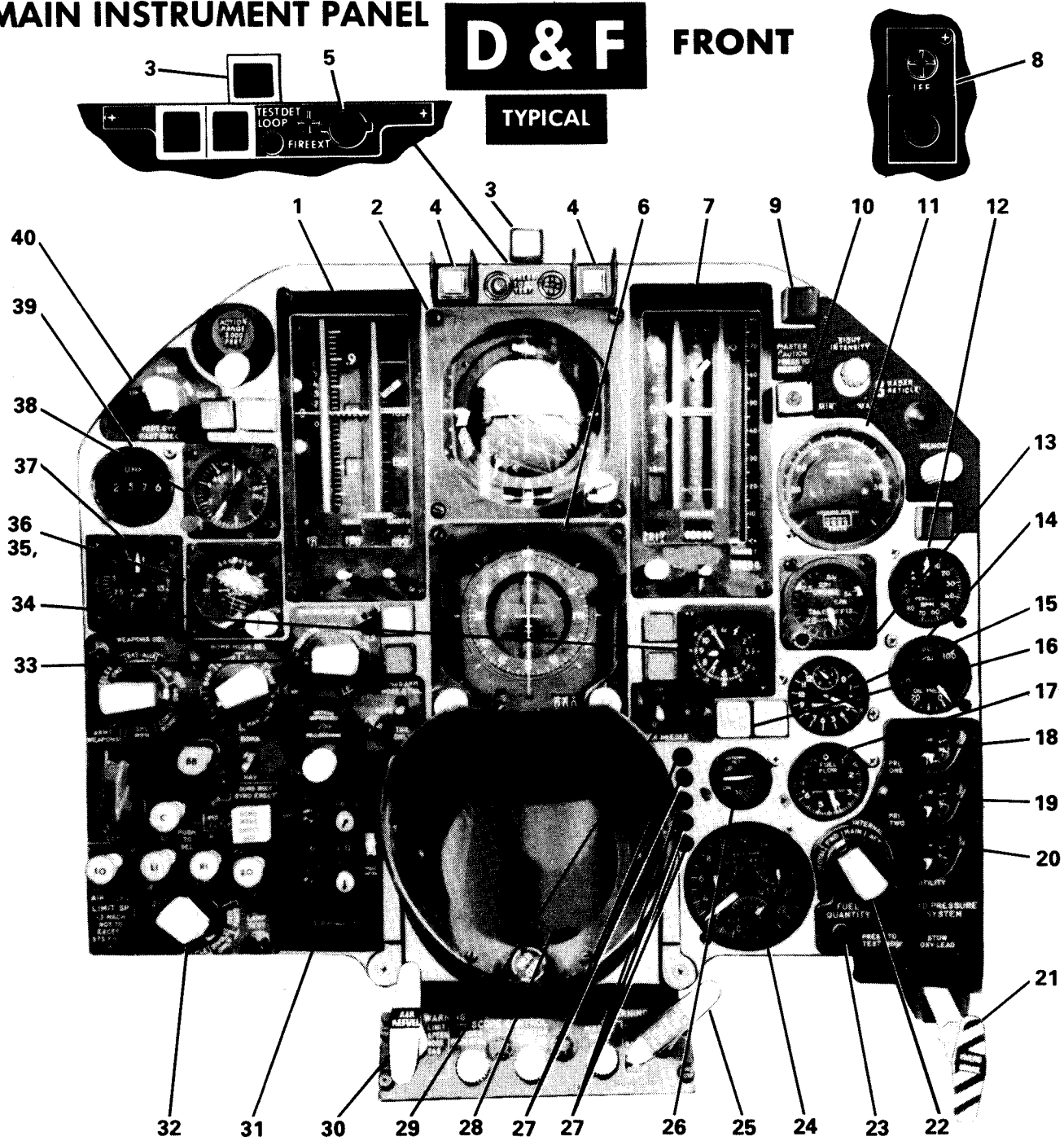


Figure 1-2

MAIN INSTRUMENT PANEL

D & F FRONT



- 1. AMI (AIRSPEED MACH INDICATOR)
- 2. ADI (ATTITUDE DIRECTOR INDICATOR)
- 3. STABILIZER LOCK LIGHT [1045] C/W
- 4. ENGINE OVERHEAT AND FIRE WARNING LIGHTS
- 5. FIRE EXTINGUISHER BUTTON
- 6. HSI (HORIZONTAL SITUATION INDICATOR)
- 7. AVVI (ALTITUDE-VERTICAL VELOCITY INDICATOR)
- 8. IFF CAUTION LIGHT
- 9. BAIL-OUT LIGHT (F ONLY)
- 10. MASTER CAUTION LIGHT

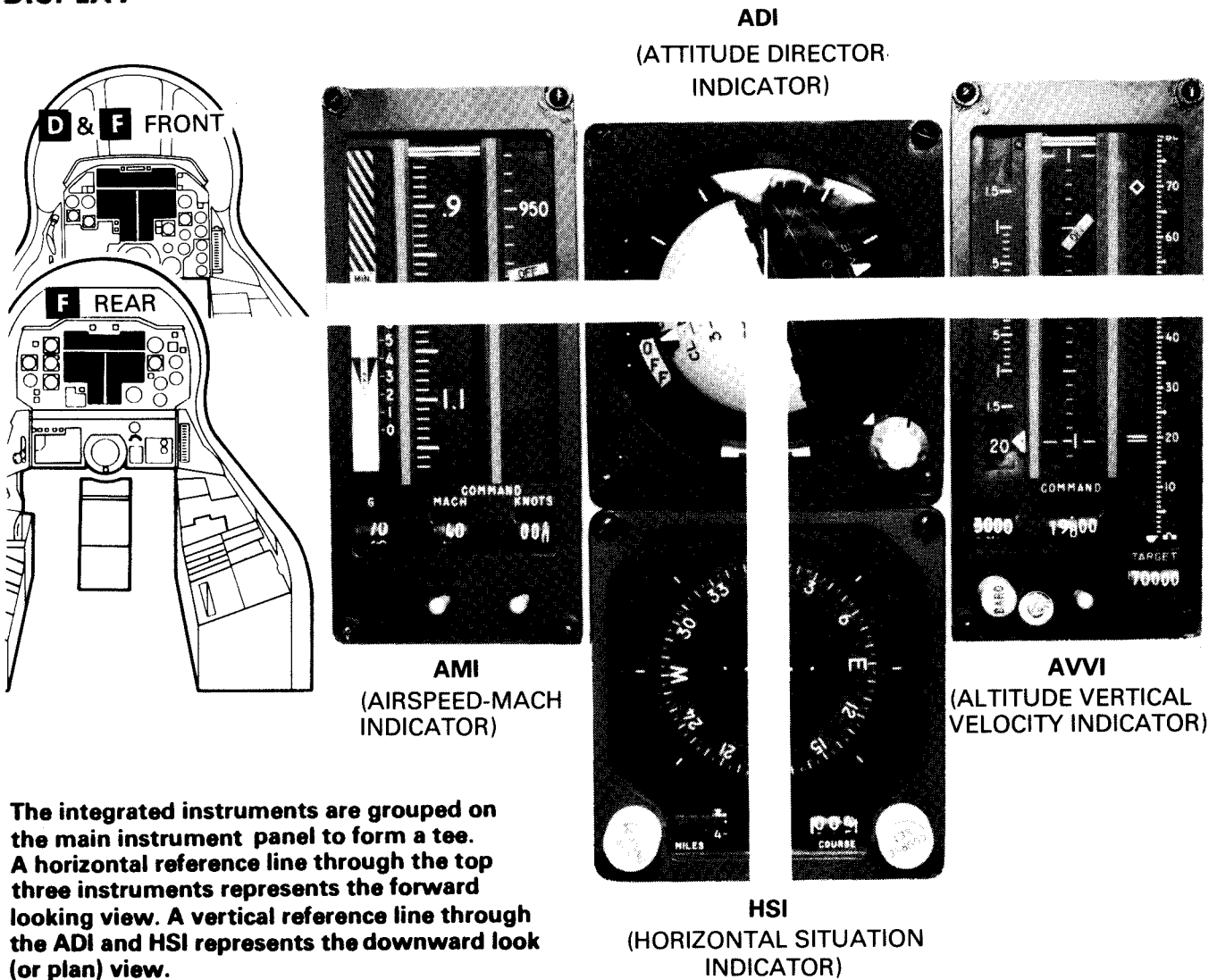
- 11. GROUND SPEED AND DRIFT ANGLE INDICATOR
- 12. TACHOMETER
- 13. PRESSURE RATIO GAGE
- 14. OIL PRESSURE GAGE

All armament controls are presented in T.O. 1F-105B-34-1-1.
 All caution, warning and indicator lights are presented in detail in Figure 1-60.
 See T.O. 1F-105G-1 for **C** cockpit configuration.

1-F105D-1-4

Figure 1-3 (Sheet 1 of 2)

INTEGRATED FLIGHT INSTRUMENT DISPLAY



The integrated instruments are grouped on the main instrument panel to form a tee. A horizontal reference line through the top three instruments represents the forward looking view. A vertical reference line through the ADI and HSI represents the downward look (or plan) view.

NOTE

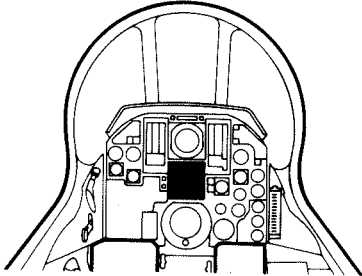
- The display in the forward looking view, along the horizontal reference line, is governed by fore and aft movements of the stick and/or throttle, and include pitch, airspeed, Mach number, vertical velocity, altitude, angle of attack and acceleration.
- The downward looking display is controlled by motions of the stick sideways and include heading, bank, turn rate, and navigational as well as tactical information.
- By scanning the horizontal or vertical reference lines, it is possible to determine as indicated by the command marker and other indicators whether or not the aircraft's performance, in relation to airspeed, altitude, and course, differs from the desired performance.

1-F105D-1-69

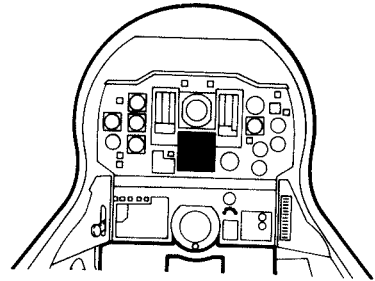
Figure 1-54

HSI (HORIZONTAL SITUATION INDICATOR)

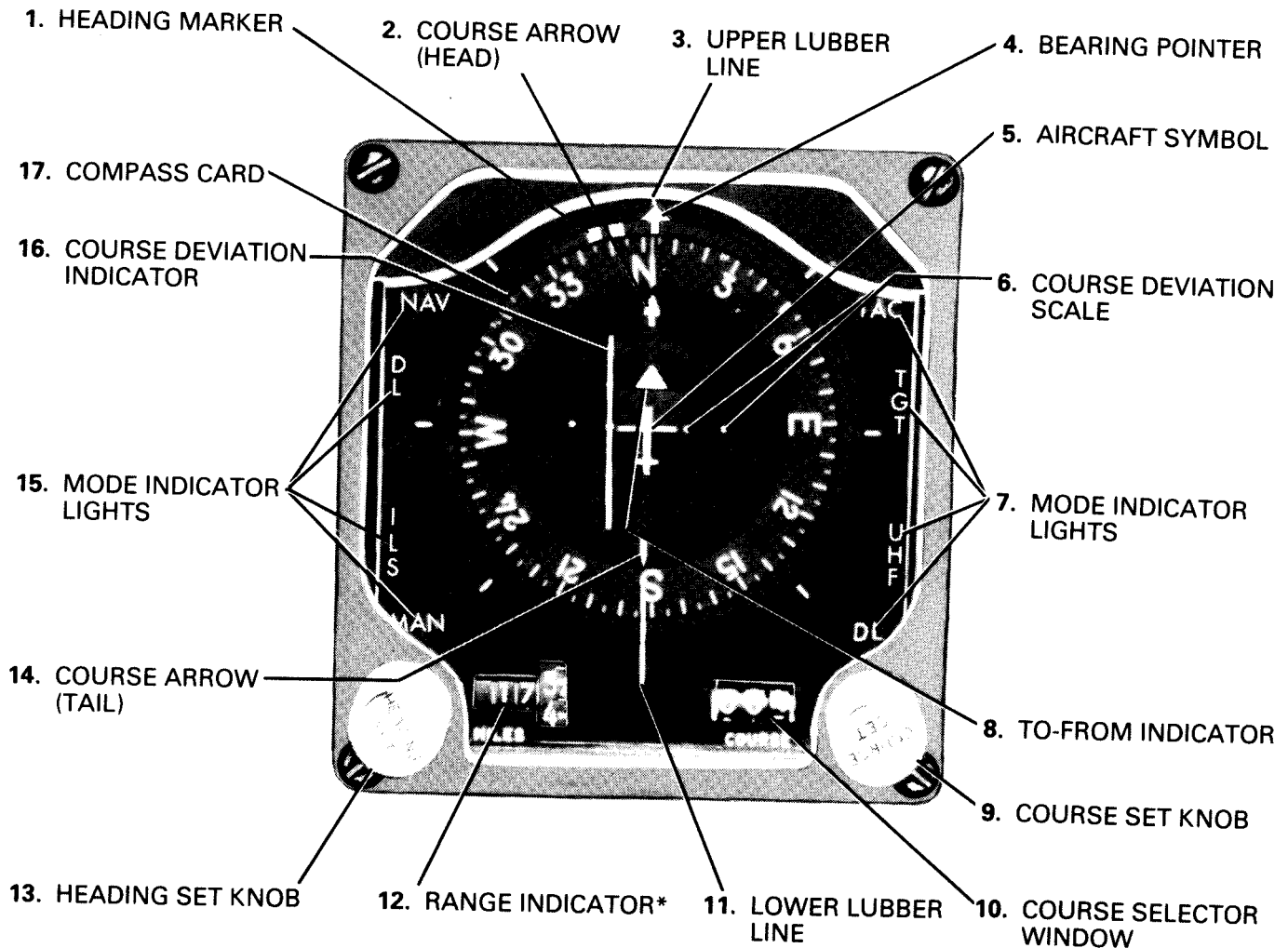
D & F FRONT



F REAR



NOTE
Situation shown is with the instrument selector at TAC and the TACAN function selector at T/R.

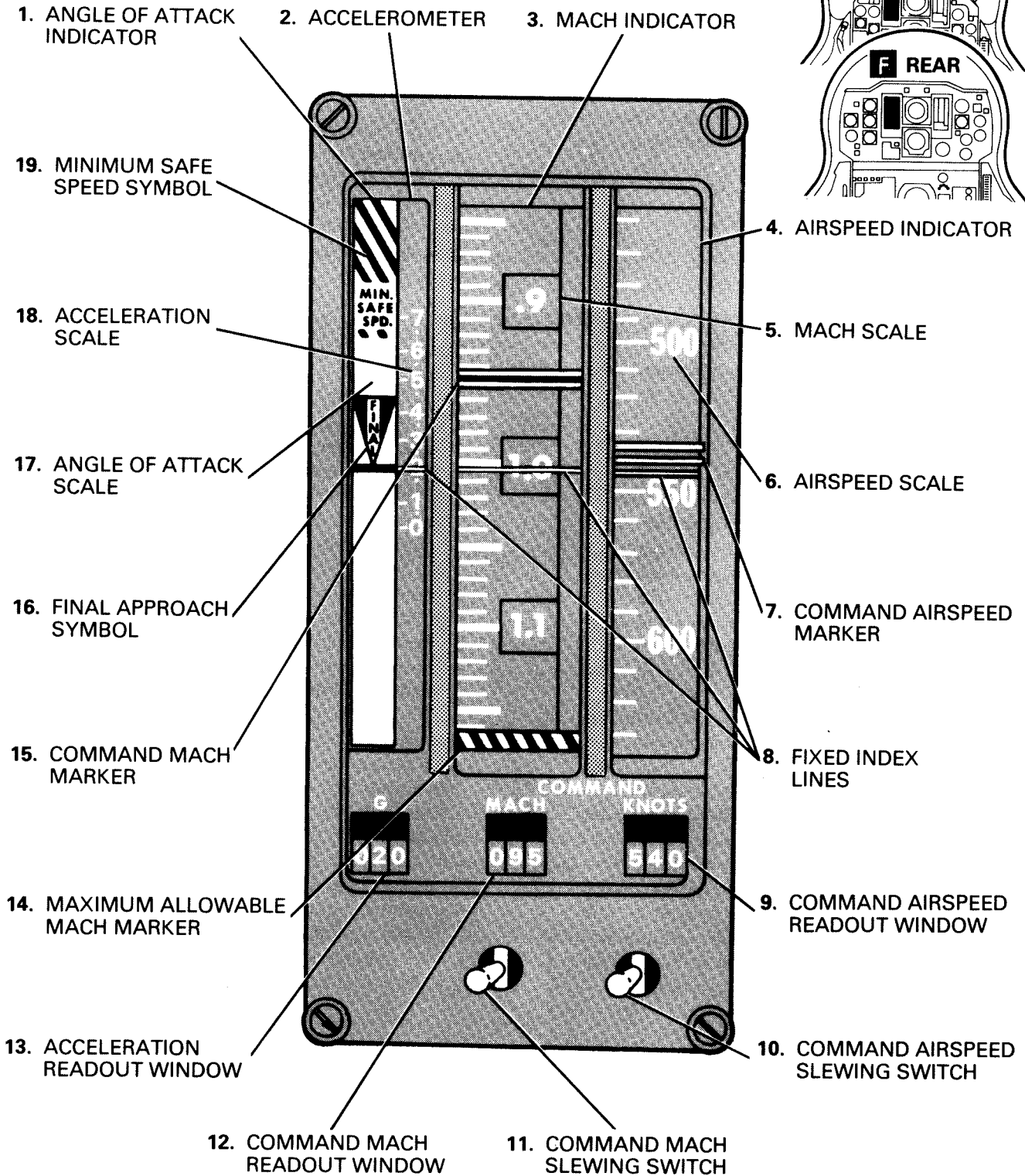


*Range warning flag not shown.

1-F1050-1-66

Figure 1-53

AMI (AIRSPEED-MACH INDICATOR)

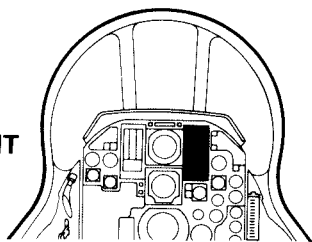


1-F105C-1-65

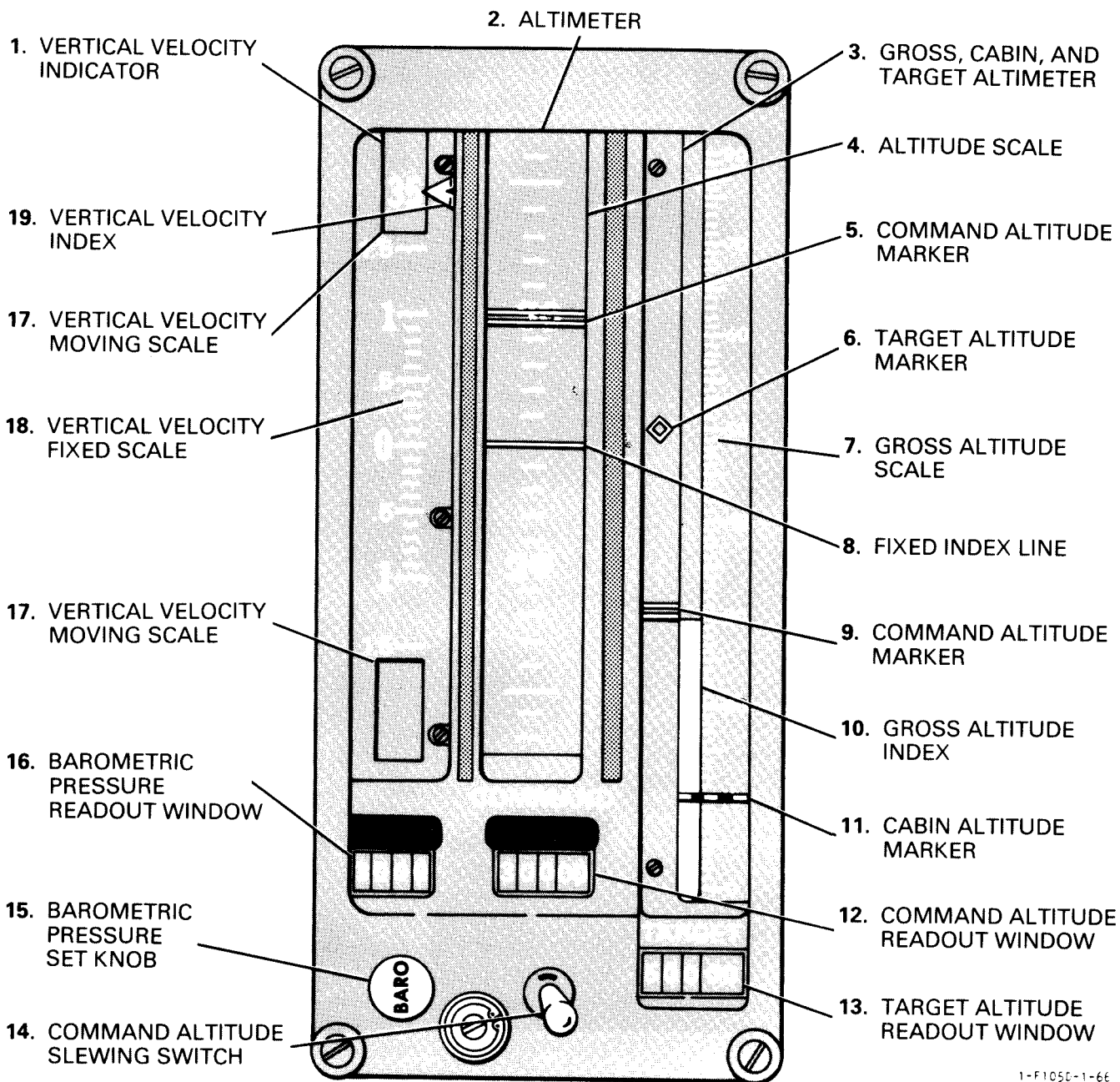
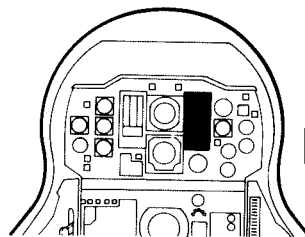
Figure 1-50

AVVI (ALTITUDE VERTICAL VELOCITY INDICATOR)

D & F FRONT



F REAR



1-F105D-1-66

Figure 1-51

**VARIABLE AIR INLET SYSTEM (VAI)
(DEACTIVATED).**

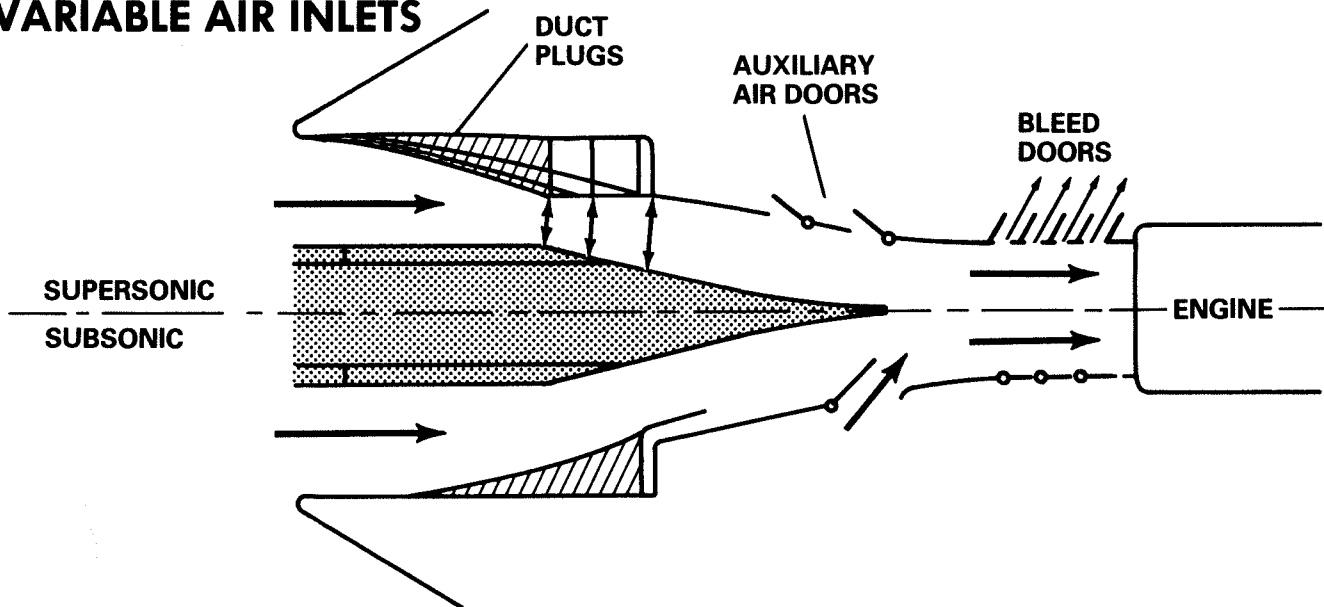
The variable air inlet (VAI) system (figure 1-8) is provided to match the inlet airflow to the engine requirements for maximum efficiency through the wide speed range of the aircraft. The system consists primarily of moveable contoured plugs located in the air inlet in each wing root and bleed doors on each side of the fuselage. Both the contoured plugs and the bleed doors are positioned by hydro-mechanically operated screw jacks, utilizing utility hydraulic system pressure. Plug movement controls the size of the air inlet area and the bleed door opening bypasses (or dumps) excess air. The amount of air flow through the inlet is controlled primarily by the projected frontal area of the lips and the engine air-flow demand imposed on the inlets. A VAI switch is provided to select automatic, emergency or cruise operation. In automatic operation during takeoff, subsonic acceleration, climb, or cruise, the plugs remain fixed in the full aft position and the bleed doors closed. On increasing speed, at approximately Mach 1.05 (± 0.05) the VAI system is energized and controlled by

signals from the central air data computer (CADC). Refer to figure 1-49 and CADC system. Between Mach 1.05 and 1.5 the bleed doors may open depending on the airspeed and temperature. Above Mach 1.5 the bleed doors start to open regardless of air temperature and the plugs start to move forward, both scheduled by a Mach number signal from the CADC. The plugs will reach their full forward position at approximately Mach 1.92. As the aircraft decelerates the plugs return to the aft position along the same schedule. Automatic operation requires DC primary, AC primary and AC secondary power.

CAUTION

At supersonic speeds, the VAI system schedules air flow intake to match the engine airflow demand at maximum thrust to avoid engine compressor stall. For this reason the throttle must be maintained full forward above 1.3 Mach.

VARIABLE AIR INLETS



DUCT PLUGS

DUCT PLUG MOVEMENT FORWARD AND AFT AS A FUNCTION OF MACH NUMBER VARIES THE SIZE OF THE DUCT THROAT AT SPEEDS ABOVE APPROXIMATELY MACH 1.5.

AUXILIARY AIR INLETS

THE AUXILIARY AIR INLETS ARE OPENED BY DIFFERENTIAL AIR PRESSURE. WHEN NEGATIVE PRESSURE EXISTS IN THE DUCTS THE AIR INLETS OPEN PROVIDED THE LANDING GEAR IS EXTENDED. WHEN THE LANDING GEAR IS RETRACTED, A MECHANICAL INTERLOCK KEEPS THE INLETS CLOSED.

BLEED DOORS

BLEED DOORS ARE POSITIONED AS A FUNCTION OF MACH NO. AND TOTAL TEMPERATURE. EXCESS AIR, WHICH WOULD TEND TO FORCE THE SHOCK WAVE OUT OF THE DUCT THROAT, IS DUMPED.

1-F105D-1-13

Figure 1-8

Air Start Buttons.

The air start button (figure 1-11) is a guarded, momentary contact, pushbutton, type switch placarded AIR START. The button is used to start the engine when it is windmilling in flight, or when making a ground start with externally supplied air. With DC primary power energized, momentarily depressing the button operates the engine ignition timer for approximately 20 seconds after the release of the button; however, ignition will not be supplied to the engine ignition plugs unless the throttle is out of the OFF position.

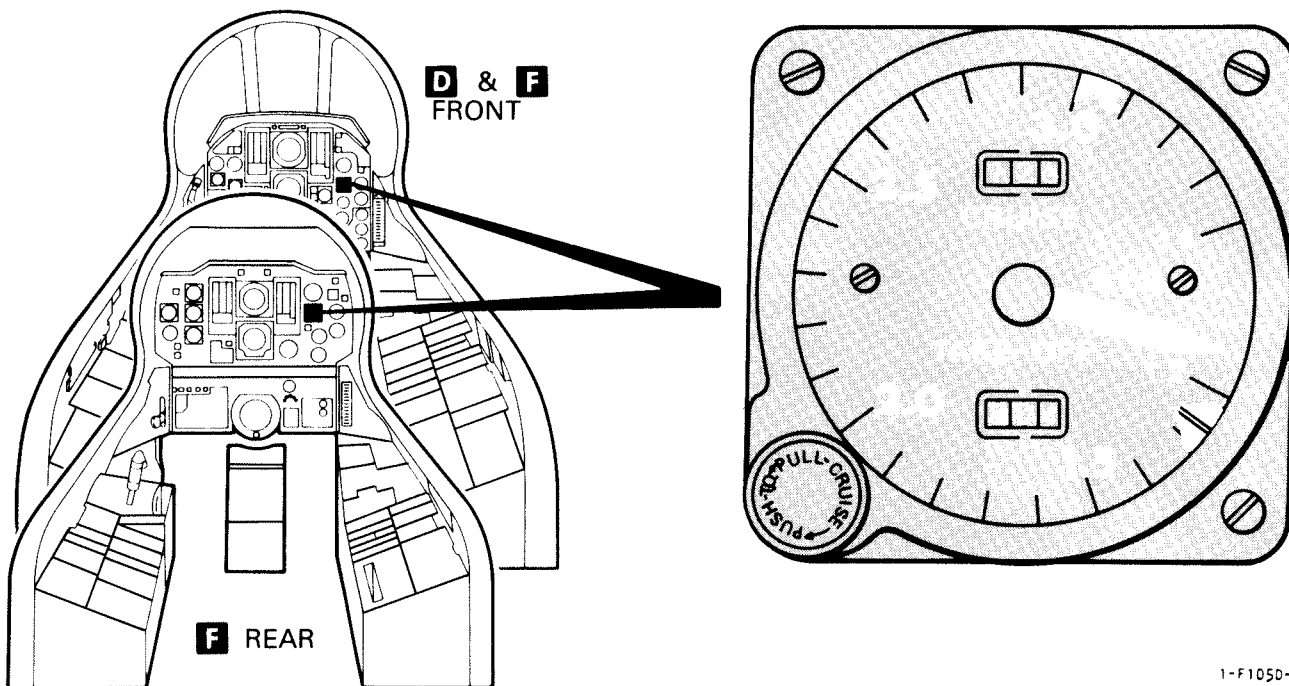
ENGINE INSTRUMENTS.

Pressure Ratio Gage:

The pressure ratio gage (figure 1-12) indicates the ratio of engine turbine discharge pressure to compressor inlet total pressure. The gage is used to determine if engine thrust output on the ground is acceptable for takeoff. The engine compressor section consists of an eight-stage low pressure compressor and a seven-stage high pressure compressor. The rotor assemblies in each compressor section are mechanically independent and therefore do not rotate at the same RPM. The tachometer indicates the percentage of RPM of the high pressure compressor rotor and provides

only an approximate indication of engine thrust. Each engine must be treated individually with respect to the RPM at which Military Thrust is obtained. Because of the maximum speed variations between engines and the inherent inaccuracies of tachometers, the engine is trimmed and power checked according to turbine discharge pressure, which does not vary as much with thrust as does RPM. A one percent variation in RPM will result in approximately five percent variation in thrust at the higher thrust settings, while a one percent variation in turbine discharge pressure results in approximately one and one-half percent variations in thrust. The pressure ratio gage gives a more accurate indication of takeoff thrust than the tachometer or exhaust gas temperature gage. The desired pressure ratio gage reading at Military Thrust depends upon outside air temperature, therefore, the gage must be adjusted just before takeoff to compensate for air temperature. Since engine pressure ratio is not used in the performance data presented in the Appendix, the engine pressure ratio gage is not used during flight. However, if RPM drops off due to an engine malfunction, the pressure ratio and exhaust gas temperature gages will also drop off. If the pressure ratio drops and RPM and EGT remain constant, it can be assumed that the malfunction is in the pressure ratio gage system. The ratio is shown by a conventional indicating dial pointer. Two windows in the dial face show recommended takeoff

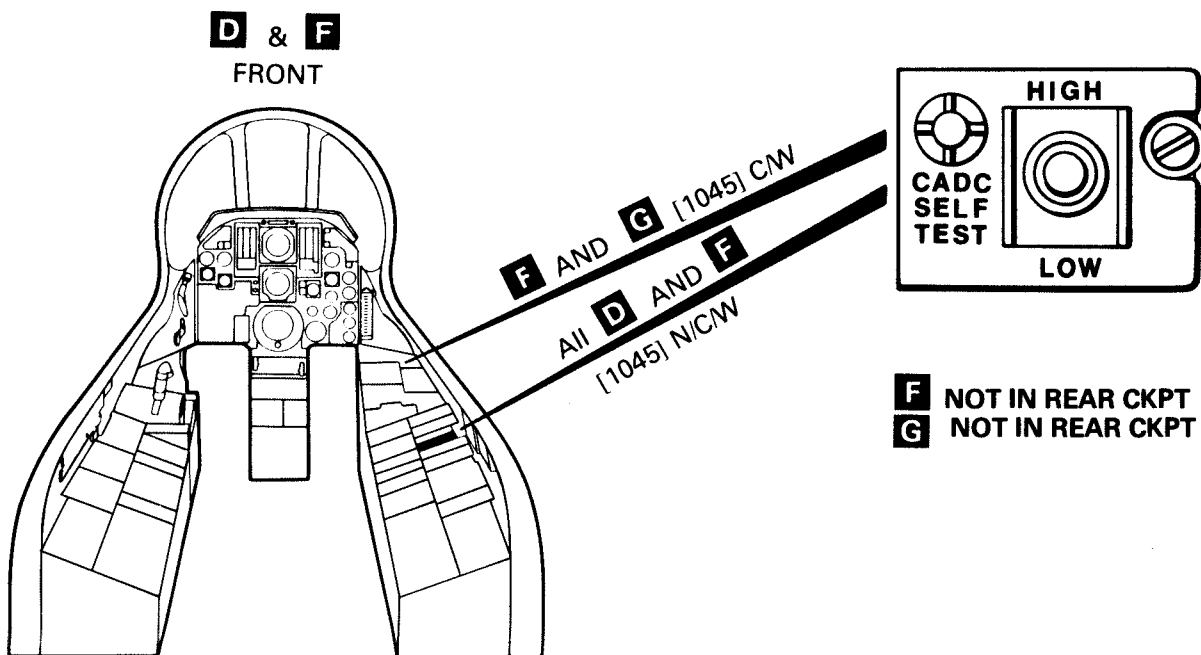
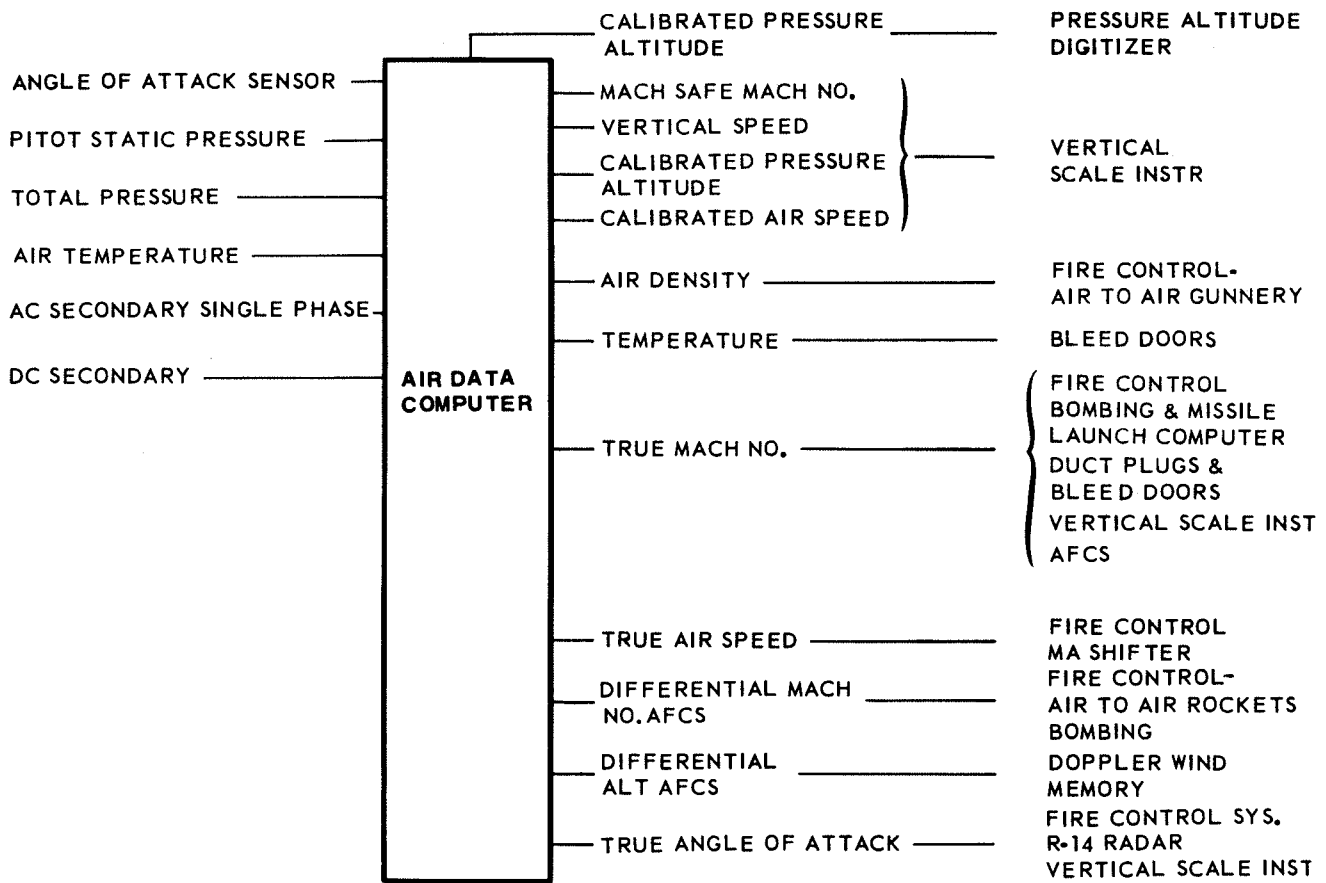
PRESSURE RATIO GAGE



1-F105D-1-18

Figure 1-12

CADC (CENTRAL AIR DATA COMPUTER) SYSTEM



1-F1050-1-64

Figure 1-49

ATM SYSTEM (AIR TURBINE MOTOR)

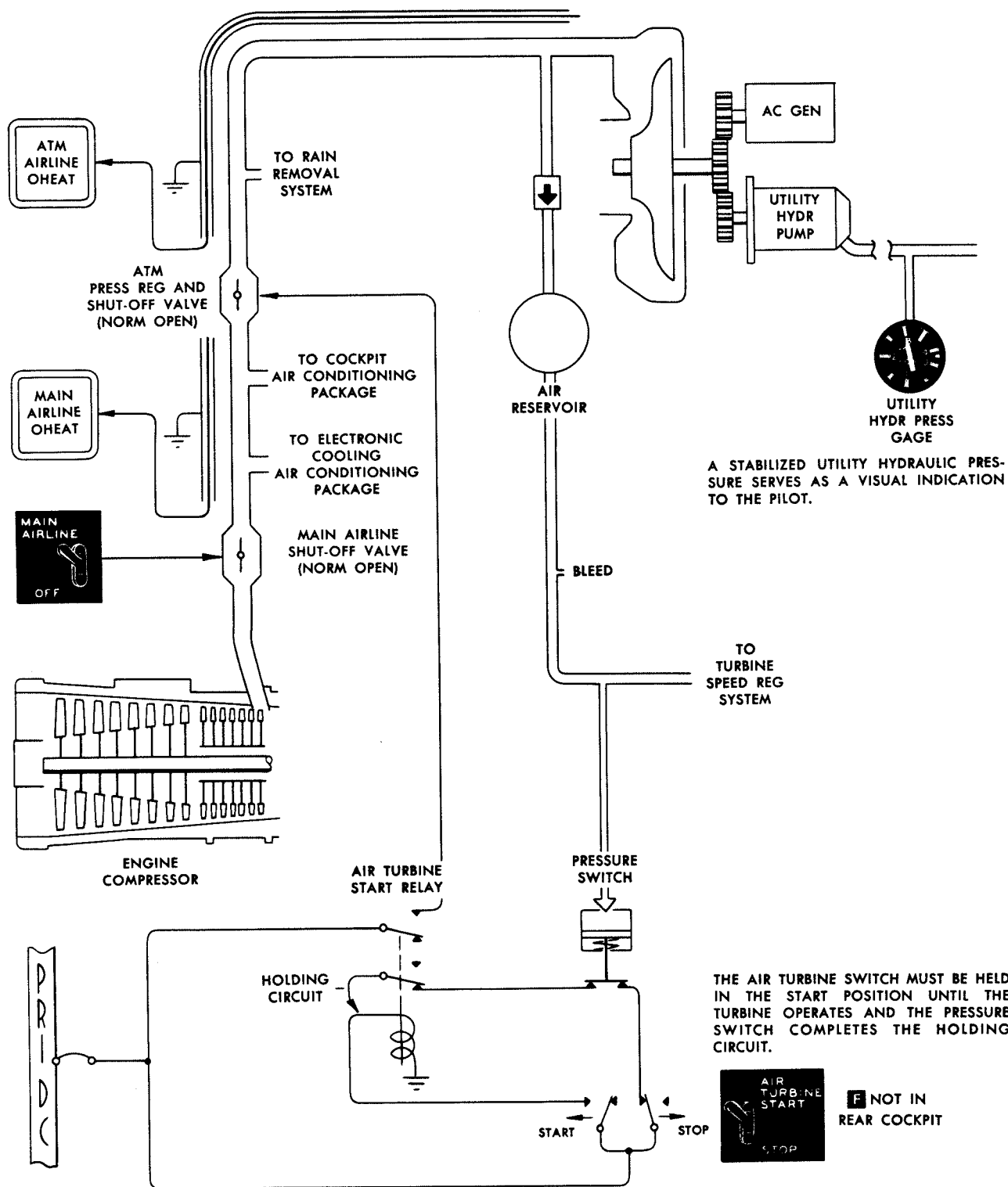
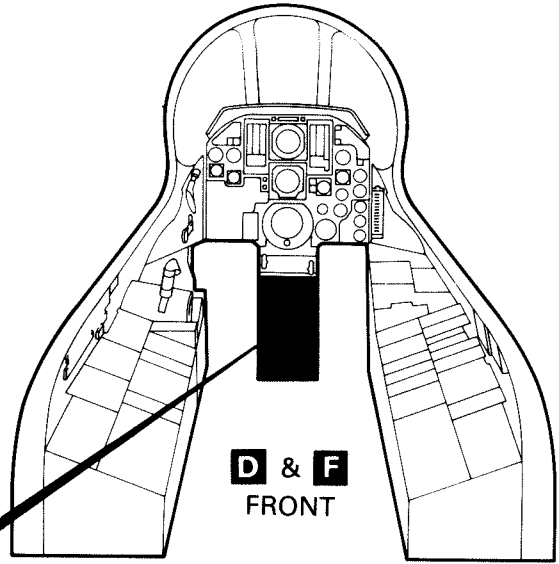
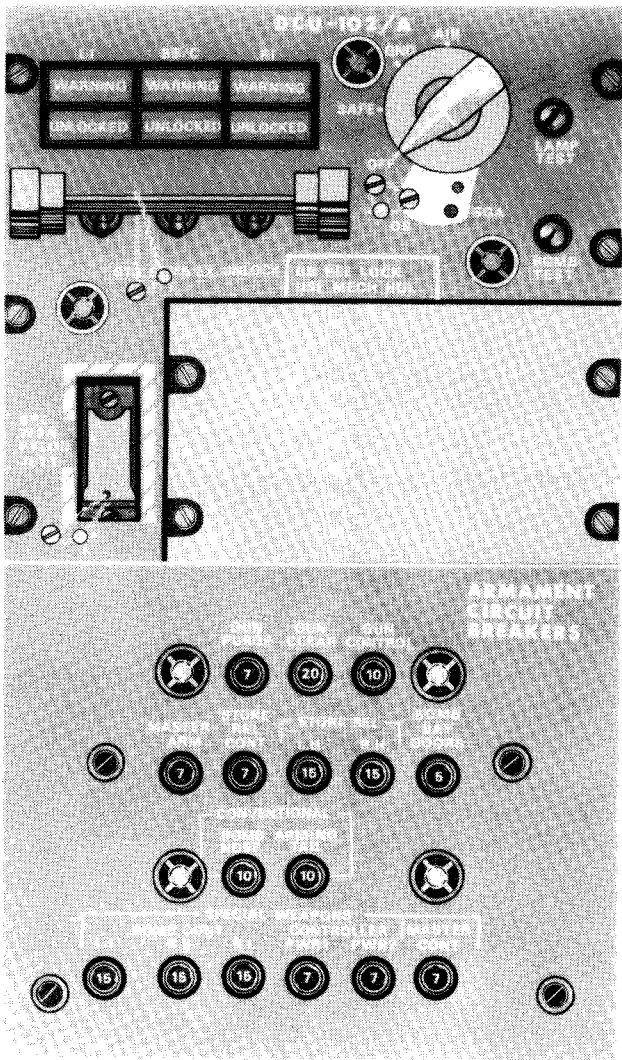


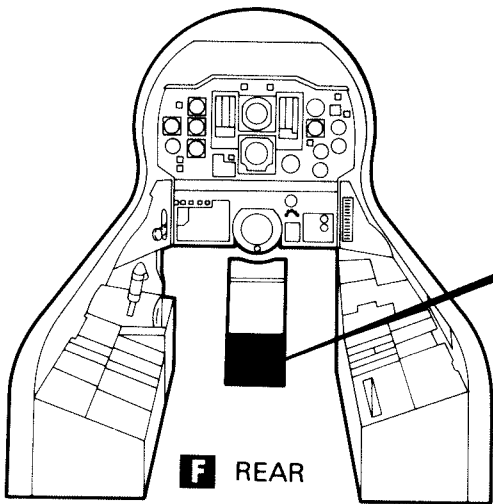
Figure 1-22

SPECIAL WEAPONS CONTROLS



D & F
FRONT

"ORANGE CRATE" CONFIGURATION



F REAR

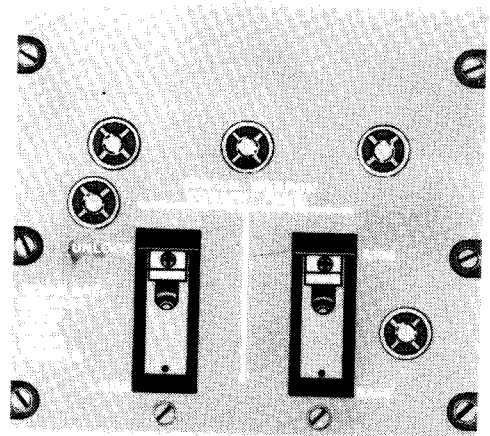
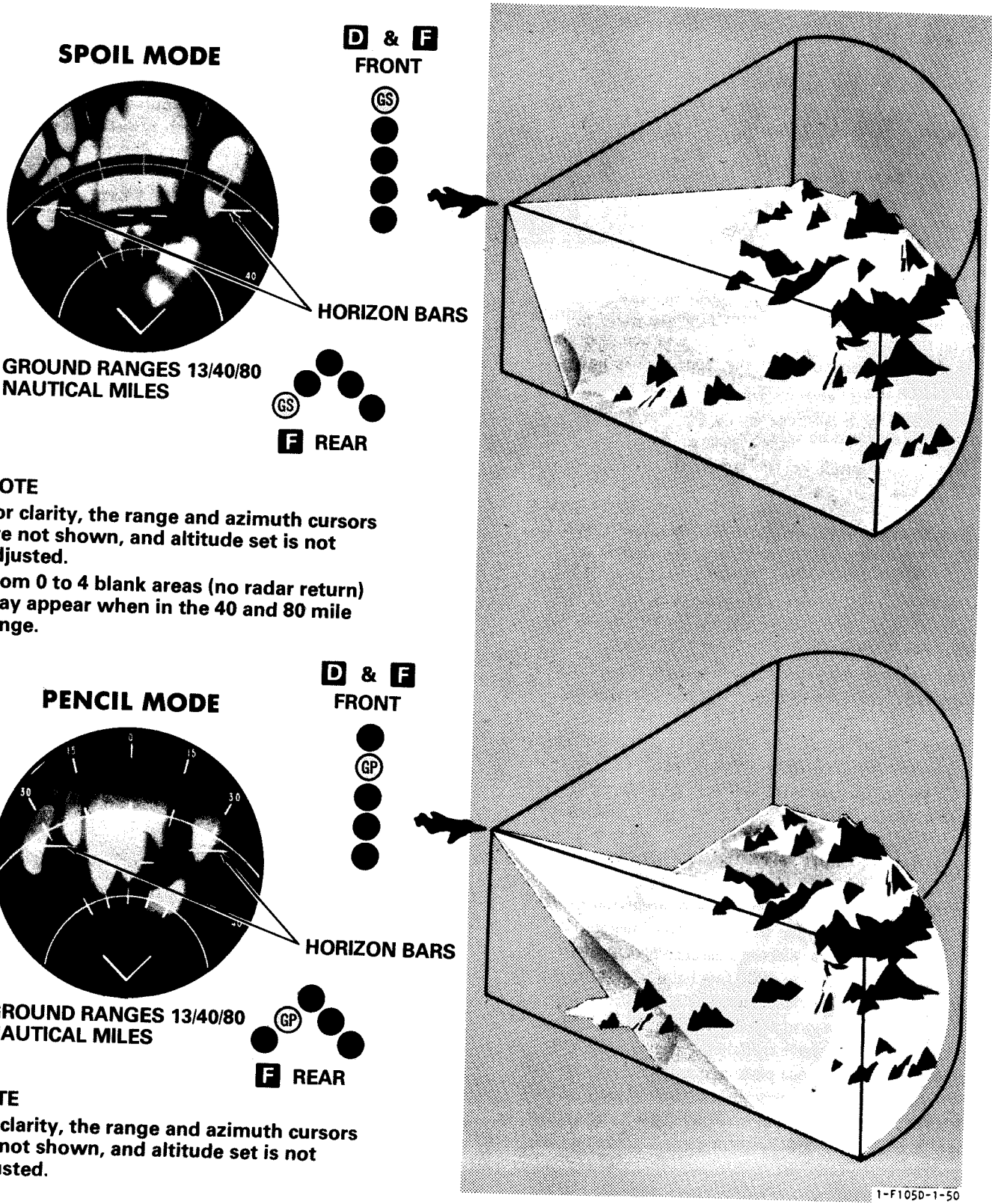


Figure 1-7

GROUND MAP MODES



NOTE

For clarity, the range and azimuth cursors are not shown, and altitude set is not adjusted.

From 0 to 4 blank areas (no radar return) may appear when in the 40 and 80 mile range.

NOTE

For clarity, the range and azimuth cursors are not shown, and altitude set is not adjusted.

1-F105D-1-50

Figure 1-34

CONTOUR MAP MODE

NOTE

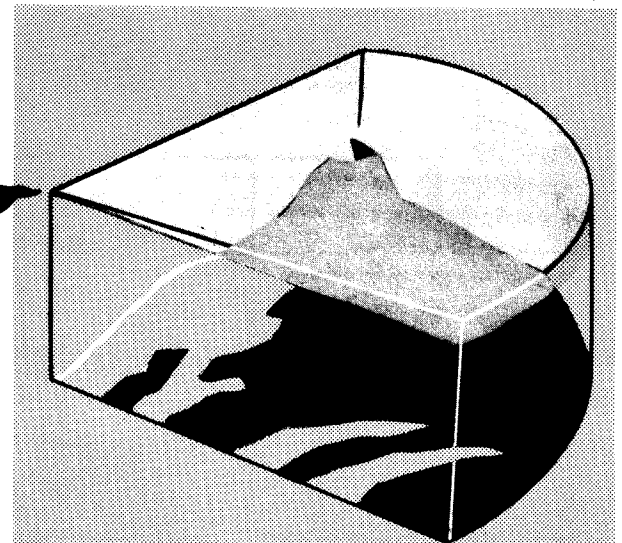
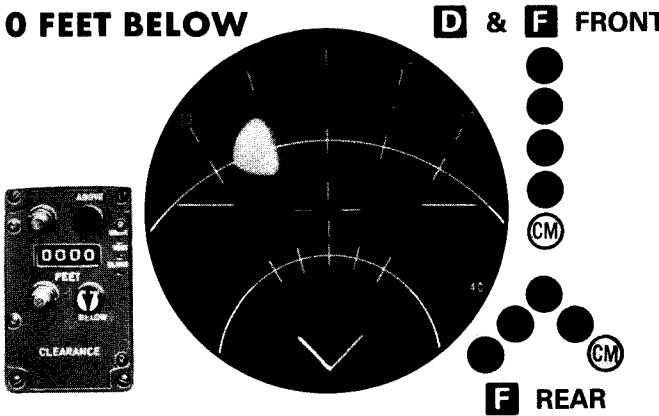
The clearance plane indicator shown is for the front cockpit.

For clarity, the range and azimuth cursors are not shown, and altitude set is not adjusted.

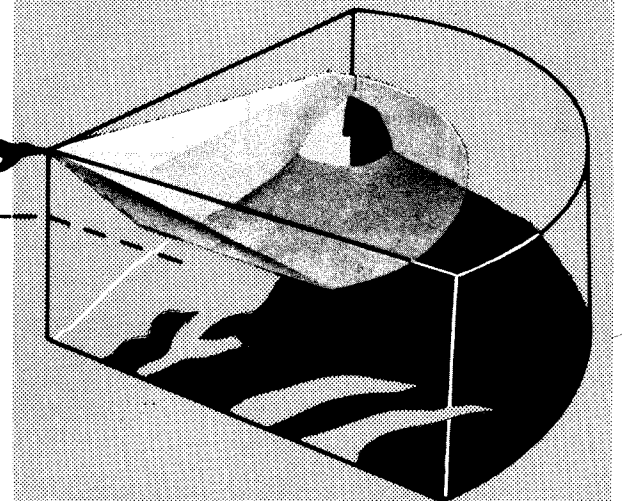
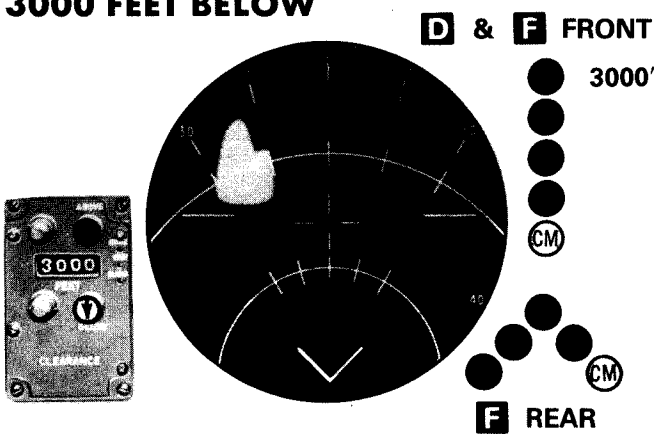
CLEARANCE PLANE PARALLEL TO TRUE HORIZON

GROUND RANGE 13 OR 40 NAUTICAL MILES

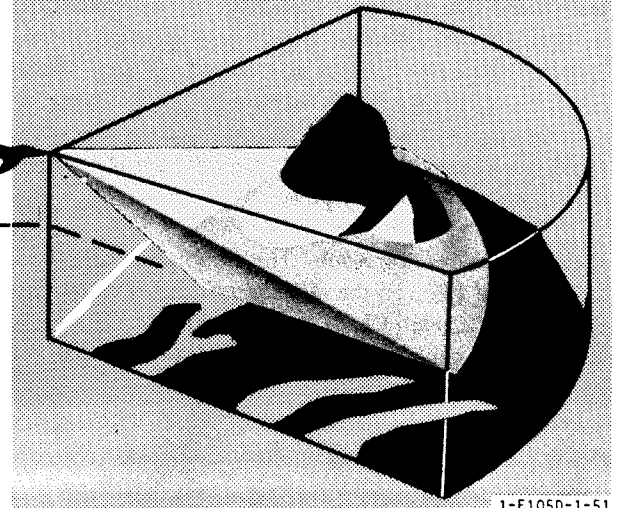
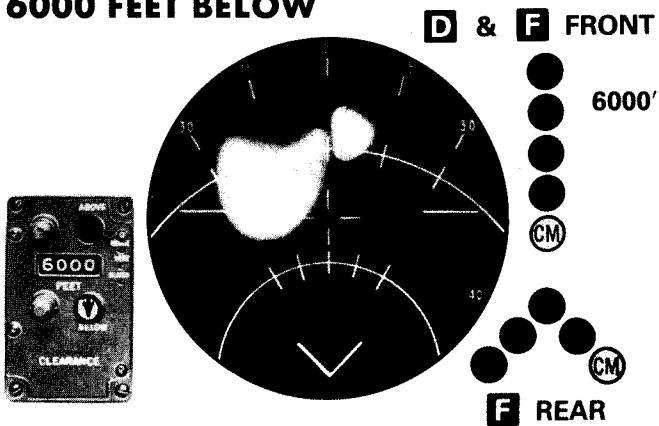
CLEARANCE PLANE SETTING 0 FEET BELOW



CLEARANCE PLANE SETTING 3000 FEET BELOW



CLEARANCE PLANE SETTING 6000 FEET BELOW



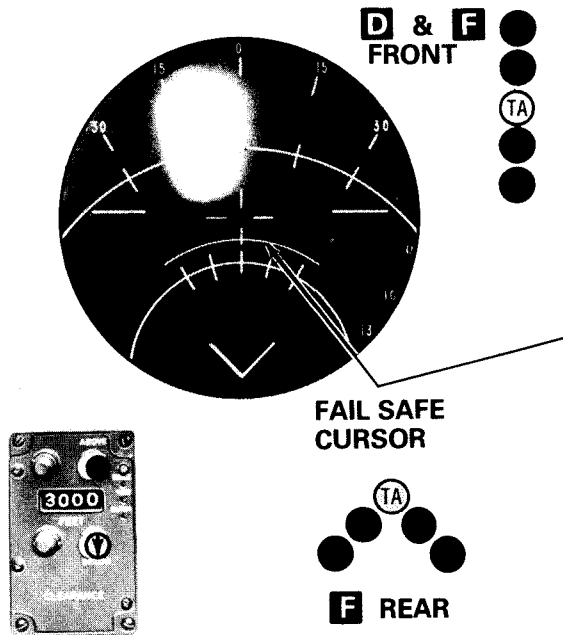
1-F105D-1-51

Figure 1-35

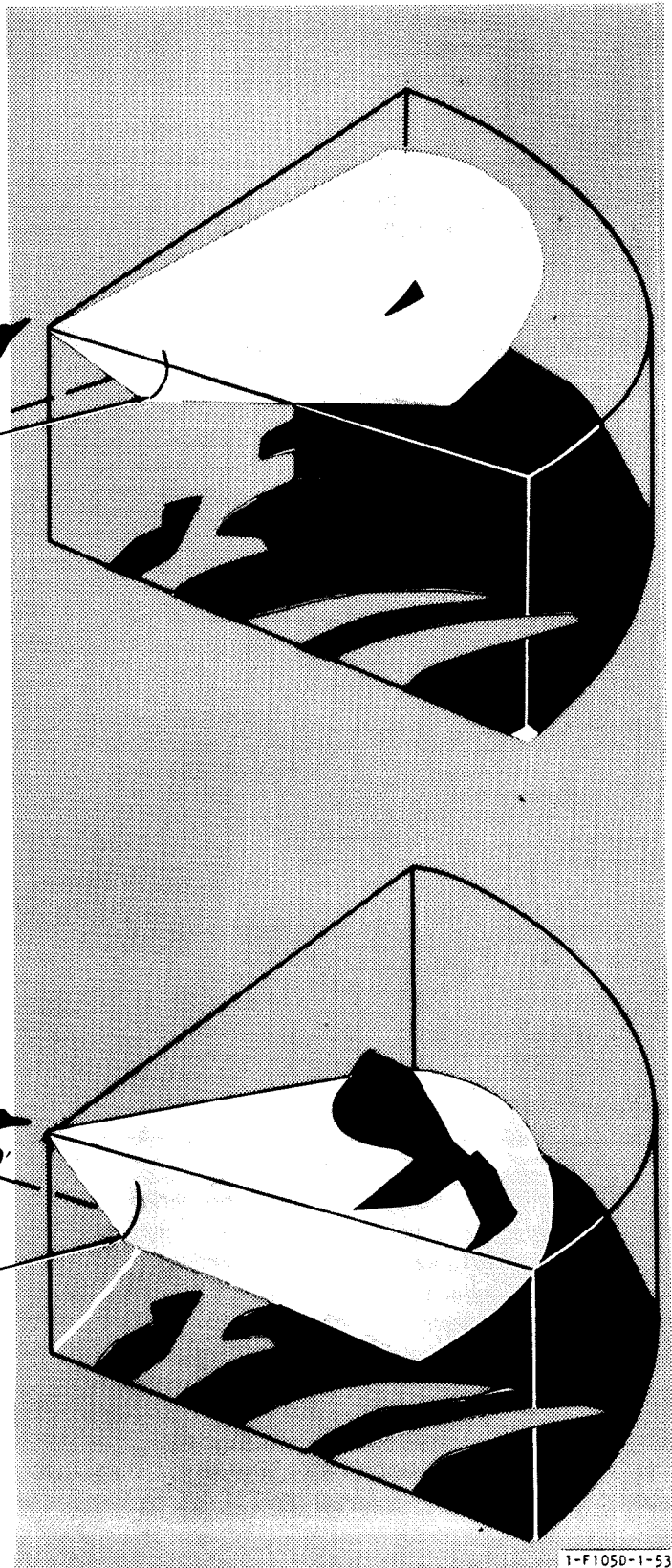
TERRAIN AVOIDANCE MODE

NOSE UP ATTITUDE

CLEARANCE PLANE SETTING
3000 FEET BELOW



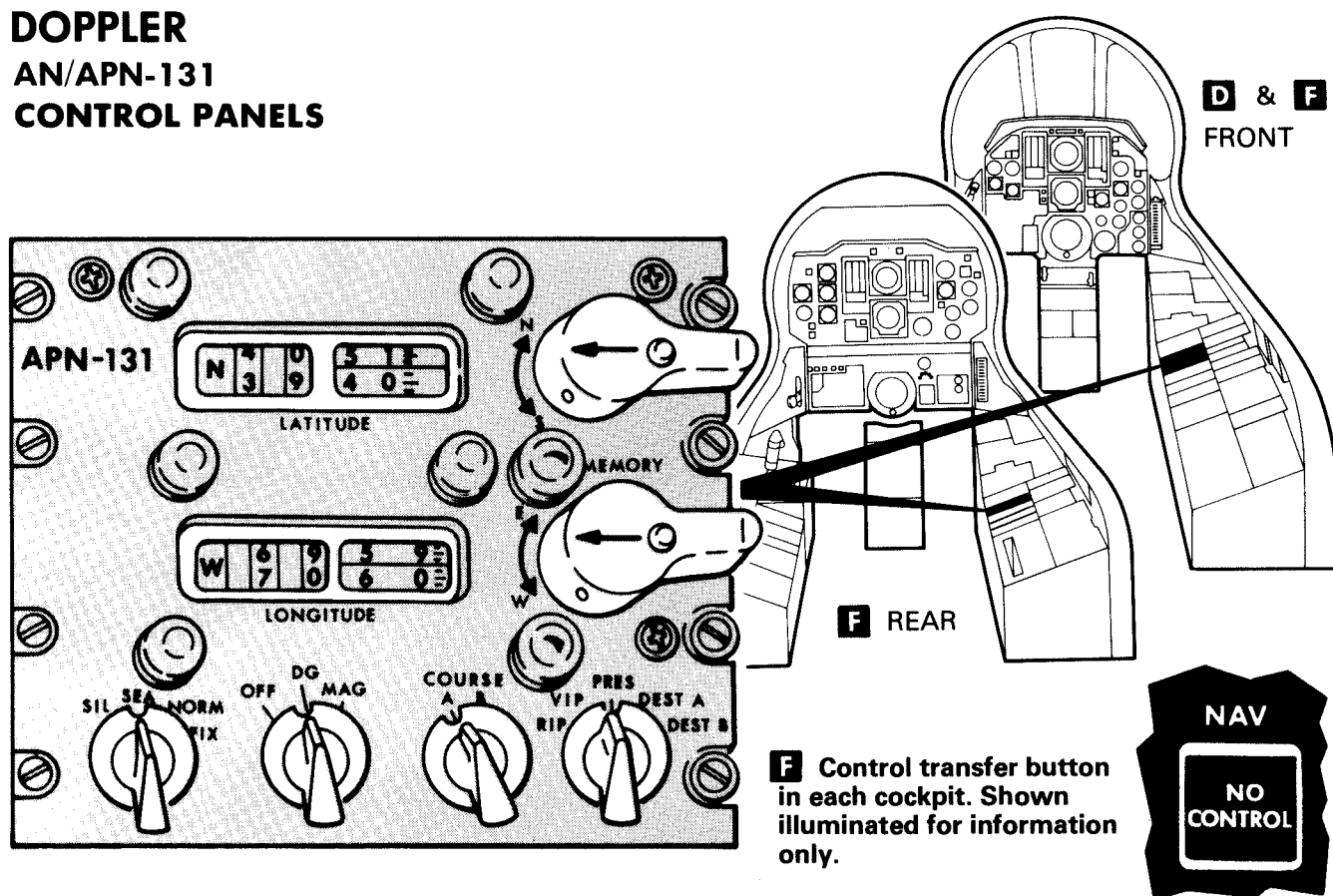
CLEARANCE PLANE PARALLEL TO AIRCRAFT FLIGHT PATH



1-F1050-1-53

Figure 1-37

DOPPLER AN/APN-131 CONTROL PANELS



1-F105D-1-74

Figure 1-58

NOTE

- The Doppler navigator uses heading information from the all-attitude directional control gyro. For conventional navigation (MAG position on heading reference switch) the compass control panel function selector knob must be in the slaved position. For polar grid navigation both the heading reference switch and the compass controller function selector knob must be set at DG.
- When the all-attitude compass function selector knob is left at SLAVED and the AN/APN-131 heading reference switch is set to DG, the present position readout will be in error.
 - DG mode will introduce errors when used with conventional charts. The extent of the error varies as a function of meridian convergence angle.

Course-Selector Switch.

The course-selector switch (figure 1-58) is a two-position rotary switch placarded COURSE, with positions A and B. When positioned to A or B, the course and distance computation to the respective preset destination (A or B) are indicated on each HSI.

Coordinate Display Switch.

The coordinate display switch (figure 1-58) is a five-position switch with positions placarded; PRES, DEST A, DEST B, RIP, and VIP, and is used to set the present position and destinations into the counters, or select visual or radar means for a position fix in flight. PRES is used to set the present position of the aircraft in latitude and longitude into the counter windows. DEST A is used to set the prime destination or a preset check point, and DEST B allows any alternate destination to be set if a prime destination was set on DEST A, or a prime destination to be set if a preset check point was set on DEST A.

GROUND SPEED and DRIFT ANGLE INDICATOR

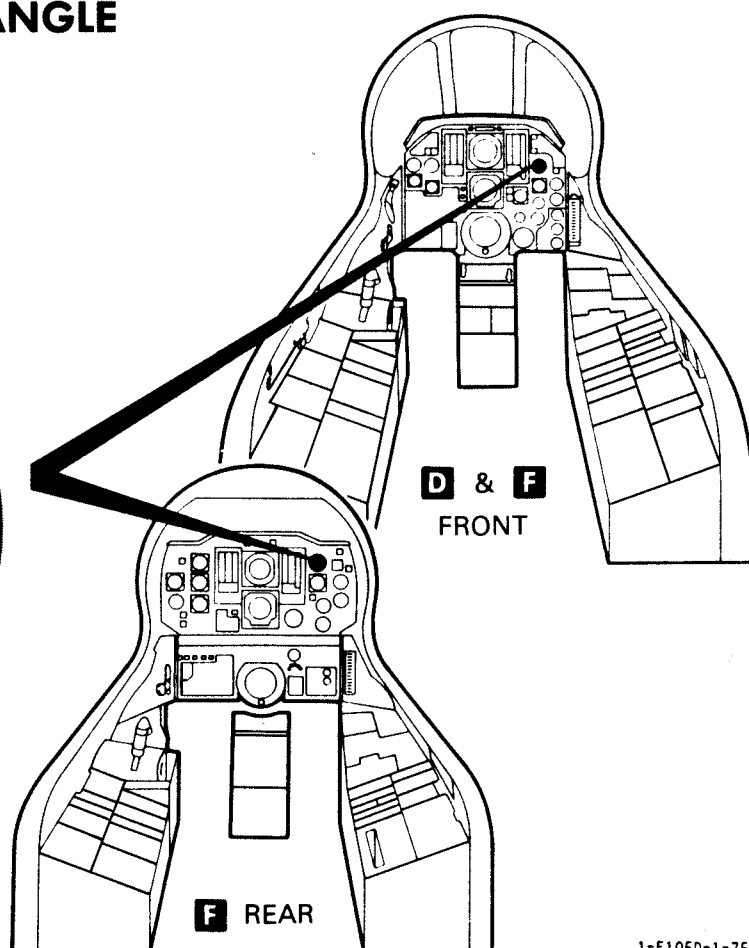
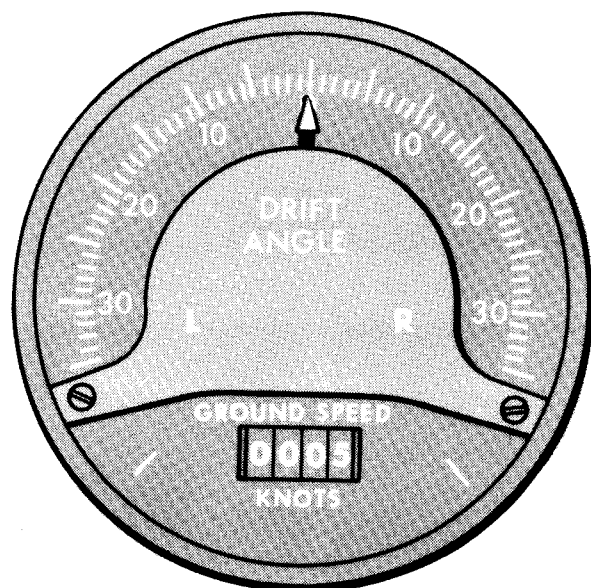


Figure 1-59

1-F105D-1-75

Operation of AN/APN-131 Doppler System.

Preflight.

NOTE

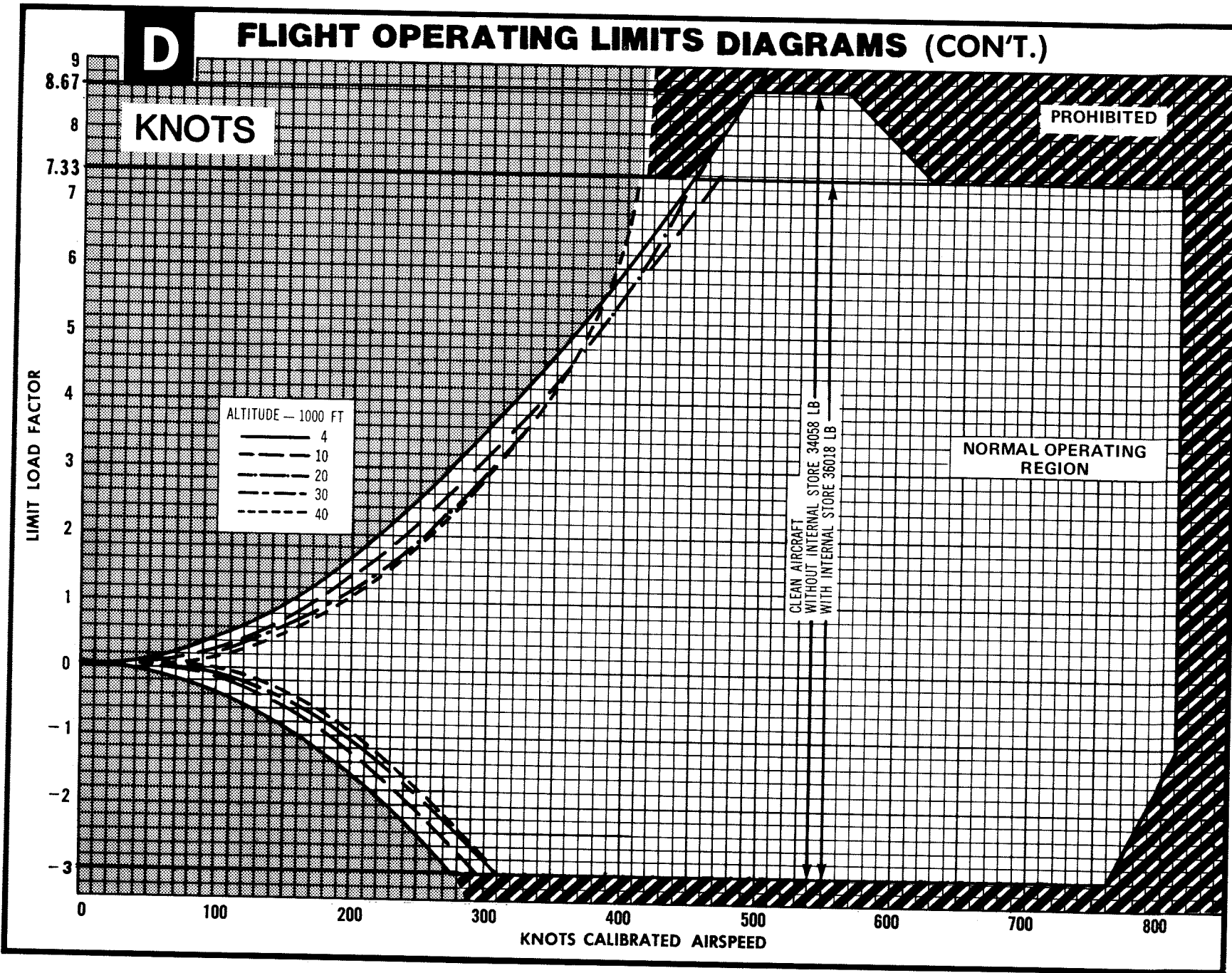
- F** Control of the Doppler system cannot be transferred from one cockpit to another unless the heading reference switch in that cockpit is at DG or MAG, prior to engaging the NAV (take-over) button. When power is initially applied to the aircraft, the front cockpit has control of the Doppler system whether or not the NAV (take-over) button is engaged.
1. Heading reference switch – Set as required.
 2. Function-switch – NORM.
- F** 3. NAV (take-over) button of cockpit in control of Doppler system – Engage.

- F** 4. FLIGHT (take-over) button of cockpit in control of Doppler system – Engage.
5. Instrument selector switch – DOPPLER. Check that the NAV mode indicator light on the HSI is illuminated. Allow a minimum of one minute warmup time before proceeding in order to prevent erroneous counts from being fed into the navigation computer from previous residual counter settings.
 6. Steering bar (needle) switch – ON.
 7. Course warning flag on ADI and range warning flag on HSI – Out of view.

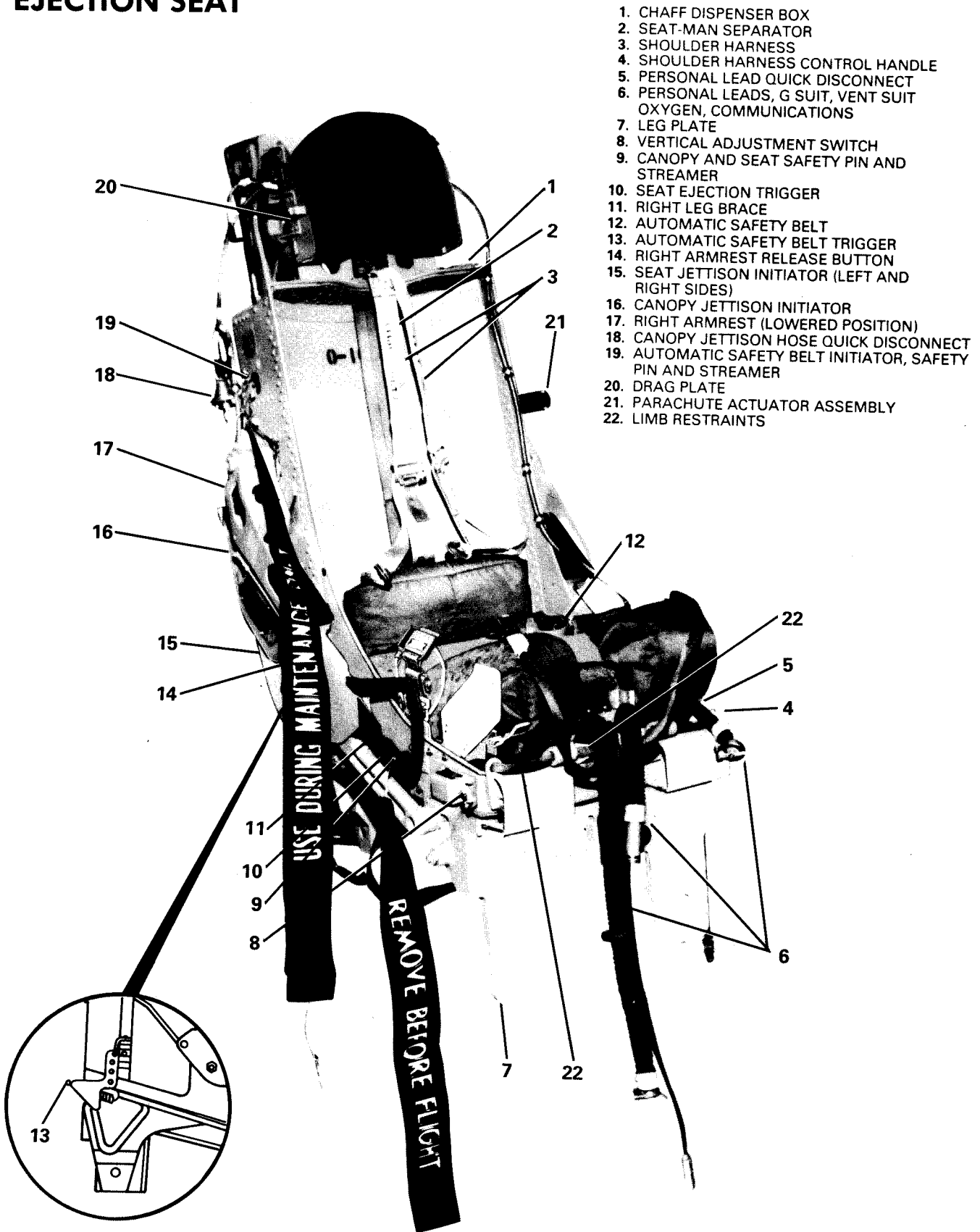
Disappearance of the flags indicates warmup is completed. If the flags do not disappear after one minute, cycle the heading reference switch to OFF and back and allow one more minute for warmup.

Figure 5-6 (Sheet 3 of 4)

1-F1050-5-9



EJECTION SEAT



1. CHAFF DISPENSER BOX
2. SEAT-MAN SEPARATOR
3. SHOULDER HARNESS
4. SHOULDER HARNESS CONTROL HANDLE
5. PERSONAL LEAD QUICK DISCONNECT
6. PERSONAL LEADS, G SUIT, VENT SUIT OXYGEN, COMMUNICATIONS
7. LEG PLATE
8. VERTICAL ADJUSTMENT SWITCH
9. CANOPY AND SEAT SAFETY PIN AND STREAMER
10. SEAT EJECTION TRIGGER
11. RIGHT LEG BRACE
12. AUTOMATIC SAFETY BELT
13. AUTOMATIC SAFETY BELT TRIGGER
14. RIGHT ARMREST RELEASE BUTTON
15. SEAT JETTISON INITIATOR (LEFT AND RIGHT SIDES)
16. CANOPY JETTISON INITIATOR
17. RIGHT ARMREST (LOWERED POSITION)
18. CANOPY JETTISON HOSE QUICK DISCONNECT
19. AUTOMATIC SAFETY BELT INITIATOR, SAFETY PIN AND STREAMER
20. DRAG PLATE
21. PARACHUTE ACTUATOR ASSEMBLY
22. LIMB RESTRAINTS

Figure 1-64

INSTALLATION OF FORCED-DEPLOYED PARACHUTE

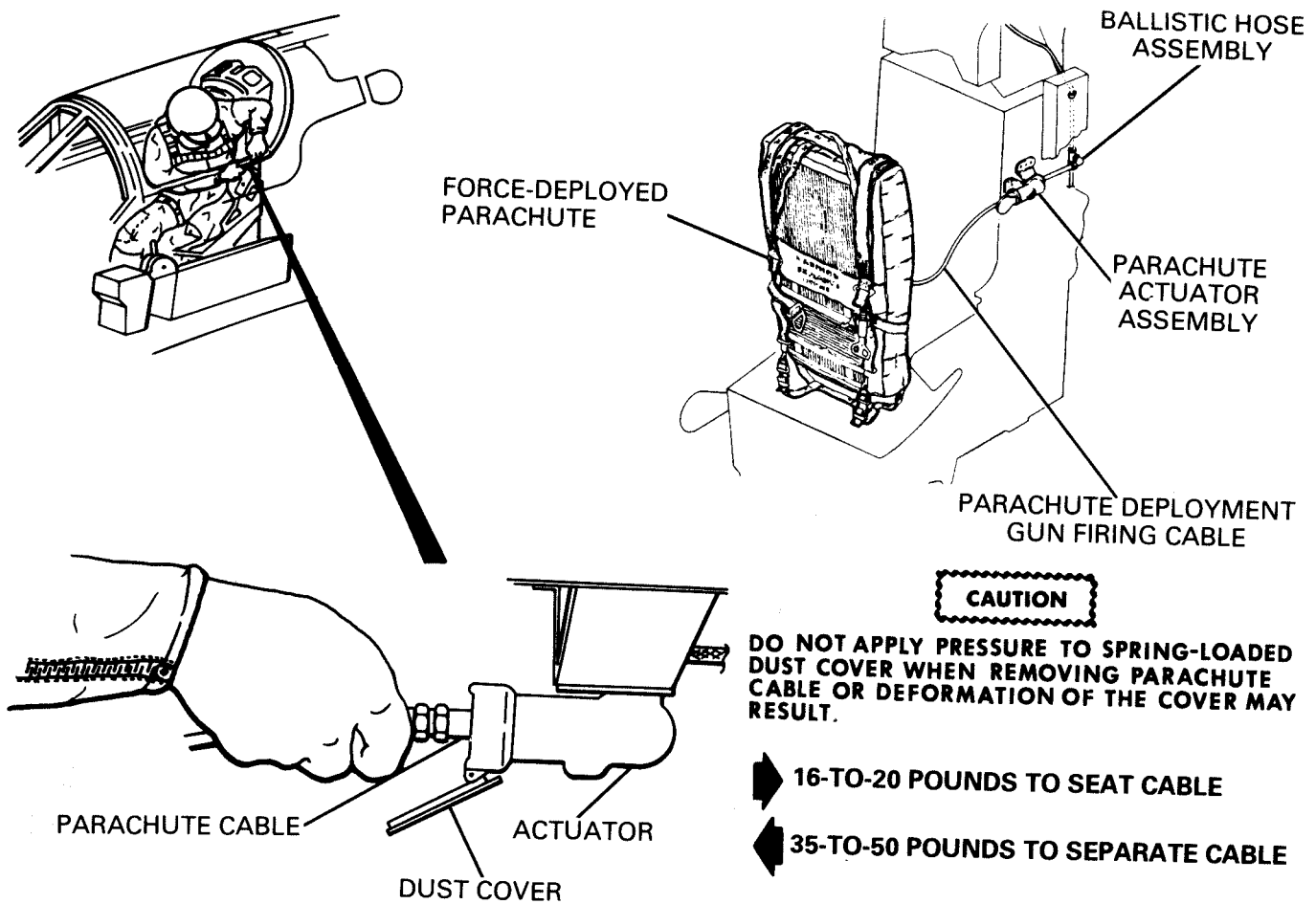


Figure 1-67

1-F105D-1-85

Manual Deployment.

For manual deployment, place the mode selector lever in the full-down position. The word **MANUAL** will be visible on the end of the mode selector lever. In this condition, raising the emergency release handle after ejection will release the survival kit. The kit deployment sequence after release is the same as for the automatic mode. The emergency release handle should be raised during the descent after parachute deployment and after the pilot has descended to an altitude not requiring oxygen.

WARNING

Do not raise the emergency release handle during descent until after parachute deployment to

prevent the kit or the lanyard from fouling the parachute and to prevent over inflation with possible rupture of the life raft.

Ground Egress.

The emergency release handle may be used when an emergency escape other than ejection is required, such as escape from the aircraft after a crash landing. Raising the handle, when the seat has not been ejected, releases the left and right harness wedge connectors from the survival kit. The kit lid is also opened.

ACCELERATION AND JETTISON LIMITATIONS (CON'T.)

SINGLE STORES

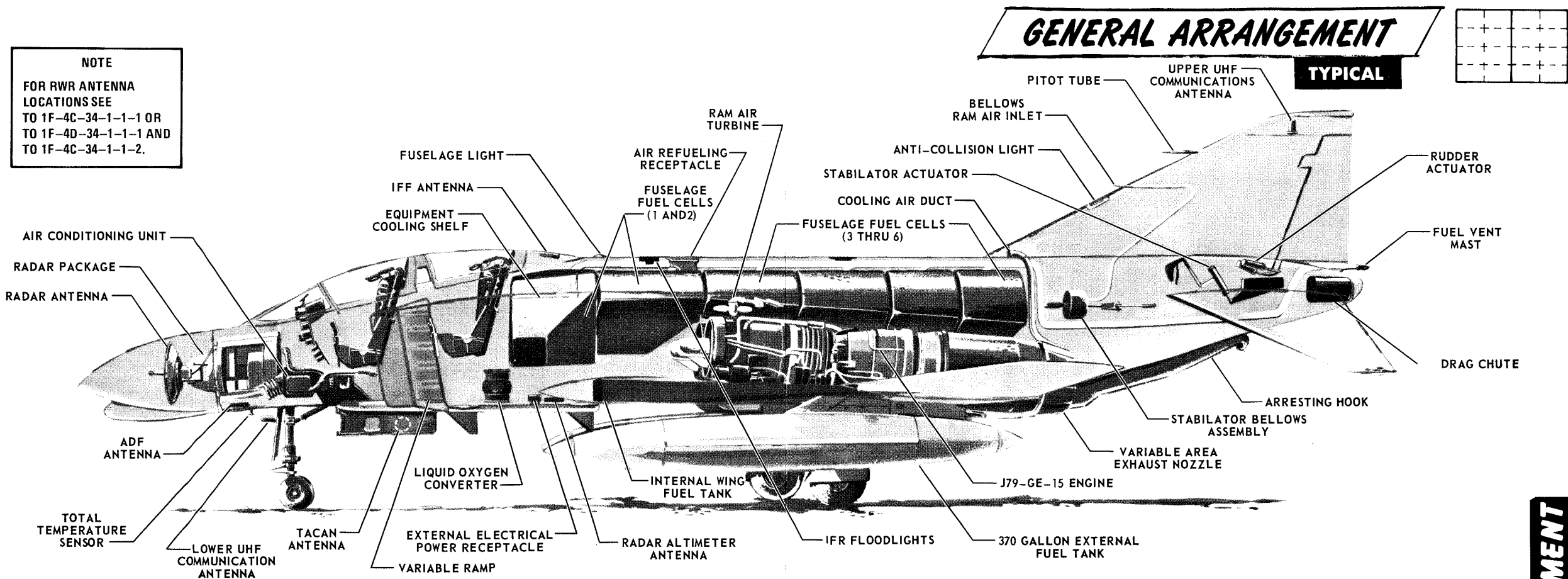
<u>STORE</u>	<u>INDEX NO.</u>	<u>STORE</u>	<u>INDEX NO.</u>
AGM-45	1,2	MC-1	49,50,54
AN/ALE-2	7	MK-20	34
AN/ALQ-71(V)-2,-3	8	MK-82	36,37,38,39
AN/ALQ-101(V)-3,-4,-6	8	MK-82 S/E	36,38,39
BDU-33	9	MK-83	41,42,43
BLU-1 (F)	10,11,12	MK-84	43,44
BLU-1 STD FILL (U/F)	13	MXU-648	45
BLU-1 (U/F)	11,12,14	M-117	46,47,49,50,54
BLU-1 (W/SK430560 FINS)	14	M-117-B,-D	48
BLU-27	15,16,17	M-118	51,52
BLU-52	18,19,20,21	M-129	53,54,55
CBU-7	22,23	NO STORE	56,57
CBU-24, -49, -52, -58, -71	24,25,26	PYLON ONLY	58
CBU-30, -38	29,30	QRC-160-1,-2,-8	59
CBU-46/A	31	SUU-21	62,63
LAU-3, -68	32,33	SUU-25	64

MIXED STORES

<u>STORES</u>	<u>INDEX NO.</u>	<u>STORES</u>	<u>INDEX NO.</u>
AGM-78 W/AGM-45	3,4,5	M-117 W/MC-1	50,54
AGM-78 W/AGM-45; CBU-24,-49,-52,-58,-71	4	M-117 W/SUU-21	54
AGM-78 W/CBU-24,-49,-52,-58,-71	4	M-129 W/ANY CERT STORE	55
AGM-78 W/QRC-160-1,-2,-8	4,5	M-129 W/LAU-3,-68	54
AGM-78/QRC-160-1,-2,-8; CBU-24,-49,-52,-58,-71	4	M-129 W/MC-1	54
AGM-78 W/QRC-335	5	M-129 W/M-117	54
AGM-78 W/450 GAL. TK	6	M-129 W/QRC-160-1,-2,-8	54,55
AGM-78 W/450 GAL. TK; AGM-45	6	M-129 W/SUU-21	54
BLU-1 (F) W/ANY CERT STORE	11	QRC-160-1,-2,-8 W/LAU-3,-68	54
BLU-1 (F) W/BLU-1 (U/F)	11	SUU-20 W/ANY CERT STORE	60
BLU-52 W/QRC-160-1,-2,-8	21	450 GAL. TK W/AGM-45 (SGL OR DUAL RAIL)	65
CBU-24,-49,-52,-58,-71	24,26,27,28	450 GAL. TK W/AN/ALE-2	65
CBU-46/A W/ANY CERT STORE	31	450 GAL. TK W/CBU-7	65
LAU-3,-68 W/SUU-21	54	450 GAL. TK W/CBU-24,-49,-52,-58,-71	65
LAU-3,-68 W/ANY CERT STORE	33	450 GAL. TK W/CBU-30,-38	65
LAU-3,-68 W/QRC-160-1,-2,-8	33	450 GAL. TK W/LAU-3,-68	65
MC-1 W/ANY CERT STORE	50	450 GAL. TK W/MC-1	65
MC-1 W/LAU-3,-68	54	450 GAL. TK W/MK-82	65
MC-1 W/SUU-21	54	450 GAL. TK W/MK-82 S/E	65
MK-82 AND MIAL FUSE EXT W/650 GAL TK	40	450 GAL. TK W/MK-82 (W/MIAL FUSE EXT)	65
MK-82 S/E W/MK-82	39	450 GAL. TK W/MK-83	65
MK-82 S/E W/QRC-160-1,-2,-8	37,39	450 GAL. TK W/M-117	65
MK-82 W/ANY CERT STORE	37	450 GAL. TK W/M-117D	65
MK-82 W/QRC-160-1,-2,-8	37,39	450 GAL. TK W/M-117R	65
MK-82 W/650 GAL TK	40	450 GAL. TK W/M-129	65
MK-83 W/MK-84	43	450 GAL. TK W/QRC-160,-1,-2,-8	65
MK-84 W/QRC-160-1,-2,-8	43	450 GAL. TK W/650 GAL. TK	66,67
M-117 W/ANY CERT STORE	50	650 GAL. TK; B/B TK W/M-118	68
M-117 W/LAU-3,-68	54	650 GAL. TK; B/B TK W/QRC-160-1,-2,-8	68

1-F105D-5-22

Figure 5-5 (Sheet 3 of 39)



GENERAL ARRANGEMENT

4C-1-(90)C

Figure FO-1

Figure FO-1
 FO-3/(FO-4 blank)

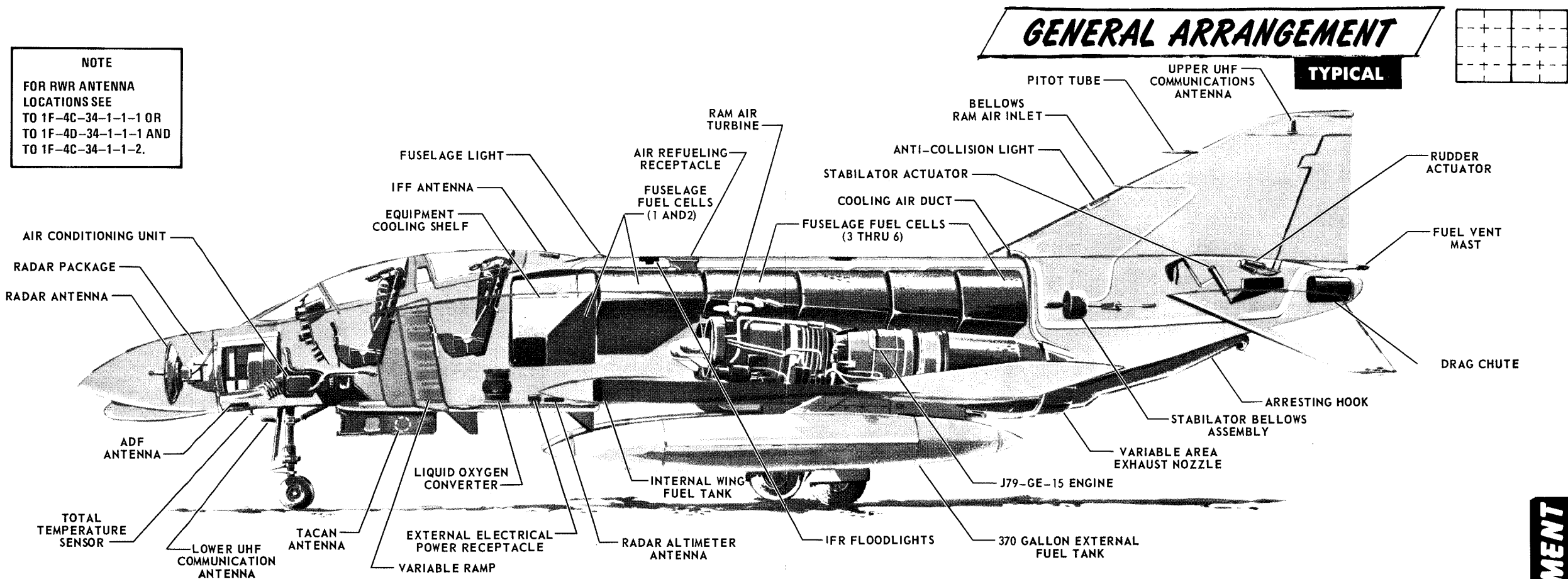


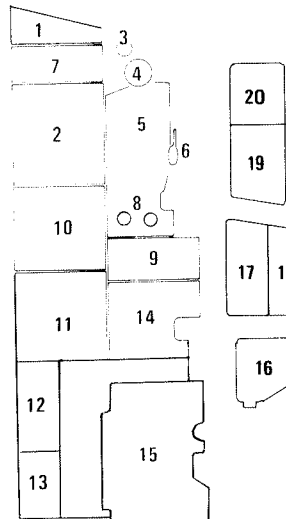
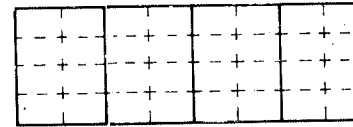
Figure FO-1

Figure FO-1
FO-3/(FO-4 blank)

FRONT COCKPIT

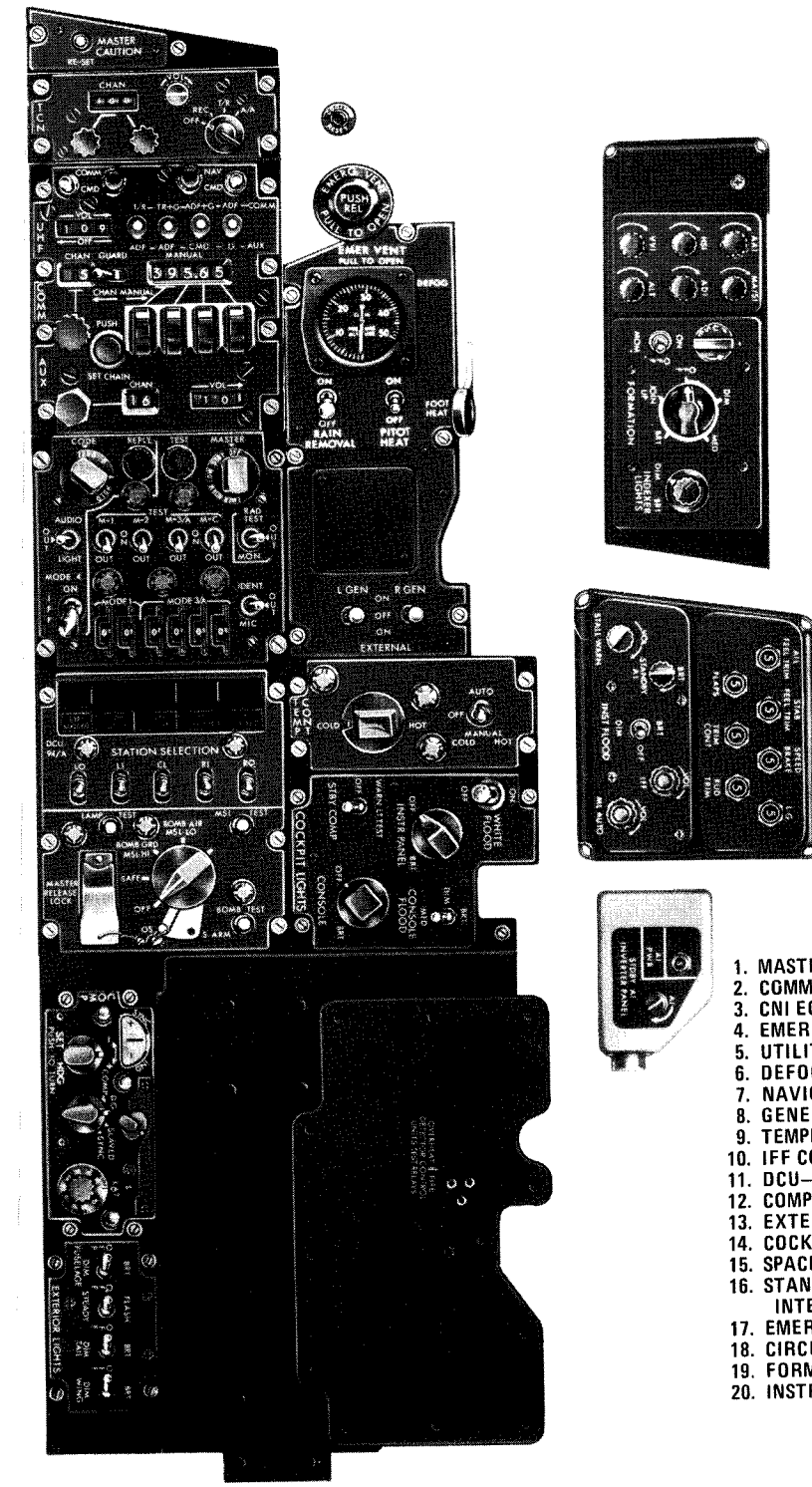
AFTER TO 1F-4D-582
OR TO 1F-4D-583

F-4D



1. MASTER CAUTION RE-SET
2. COMMUNICATION CONTROL PANEL
3. CNI EQUIPMENT COOLING RESET BUTTON
4. EMERGENCY VENT HANDLE
5. UTILITY PANEL (RIGHT)
6. DEFOG/FOOT HEAT CONTROL HANDLE
7. NAVIGATION CONTROL PANEL
8. GENERATOR CONTROL SWITCHES
9. TEMPERATURE CONTROL PANEL
10. IFF CONTROL PANEL
11. DCU-94A BOMB CONTROL-MONITOR PANEL
12. COLOSS CONTROL PANEL
13. EXTERIOR LIGHTS CONTROL PANEL
14. COCKPIT LIGHTS CONTROL PANEL
15. SPACE FOR AVTR
16. STANDBY ATTITUDE CIRCUIT BREAKER AND INTENSITY CONTROL PANEL
17. EMERGENCY FLOODLIGHTS PANEL
18. CIRCUIT BREAKER PANEL
19. FORMATION LIGHTS CONTROL PANEL
20. INSTRUMENT LIGHTS INTENSITY CONTROL PANEL

RIGHT CONSOLE AREA



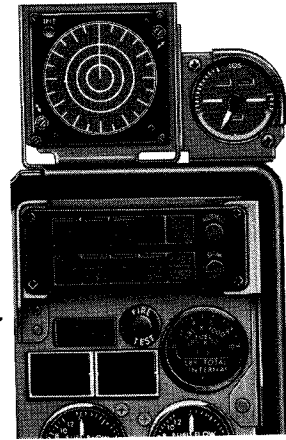
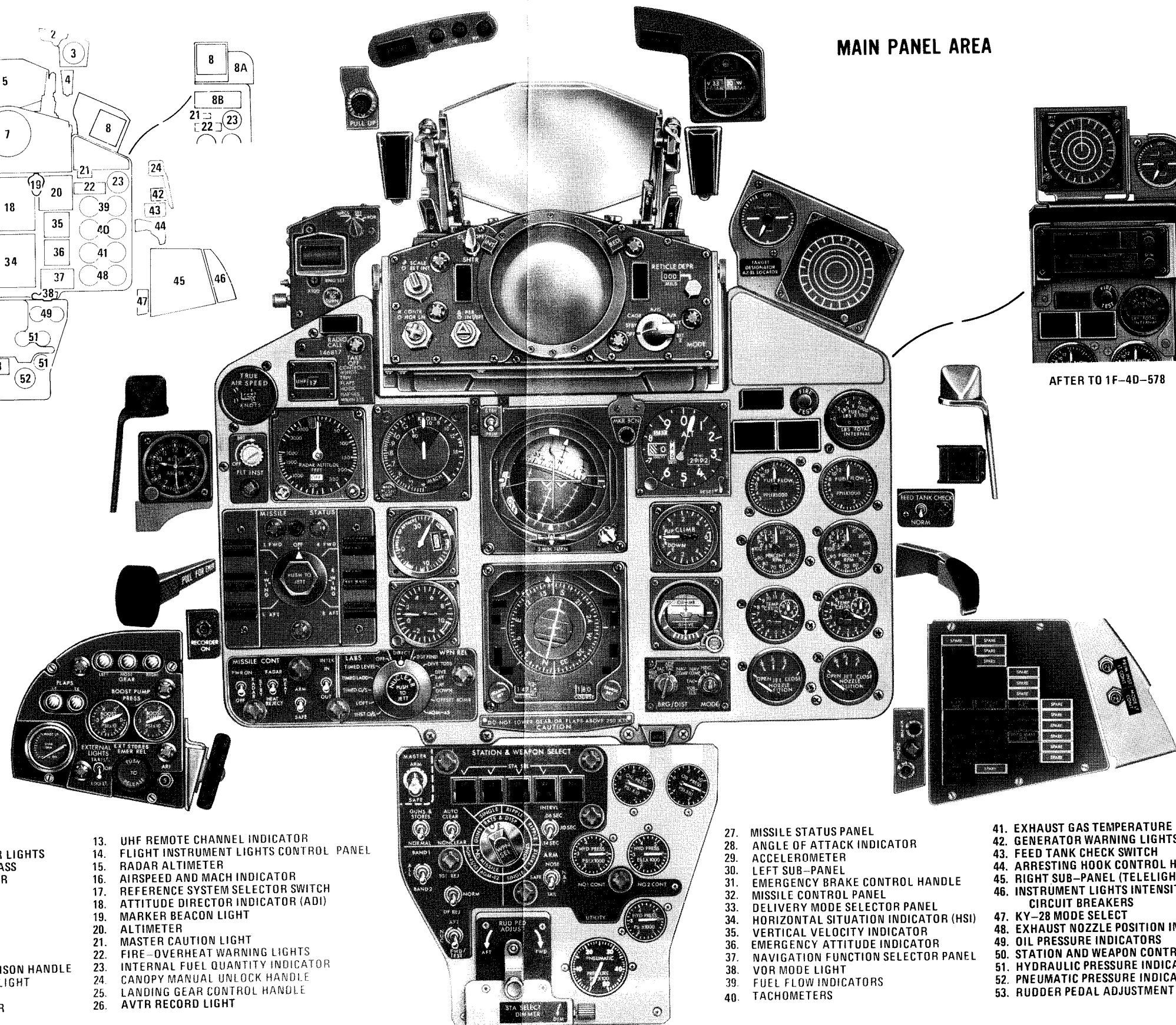
FRONT COCKPIT F-4D

4C-1-(342)C
RGY

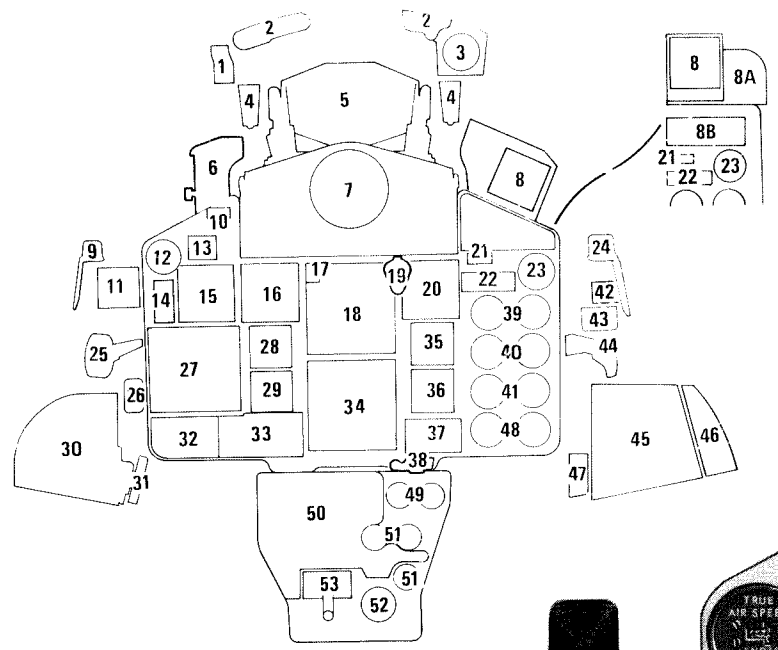
Figure FO-13

Figure FO-13
FO-27/(FO-28 blank)

MAIN PANEL AREA

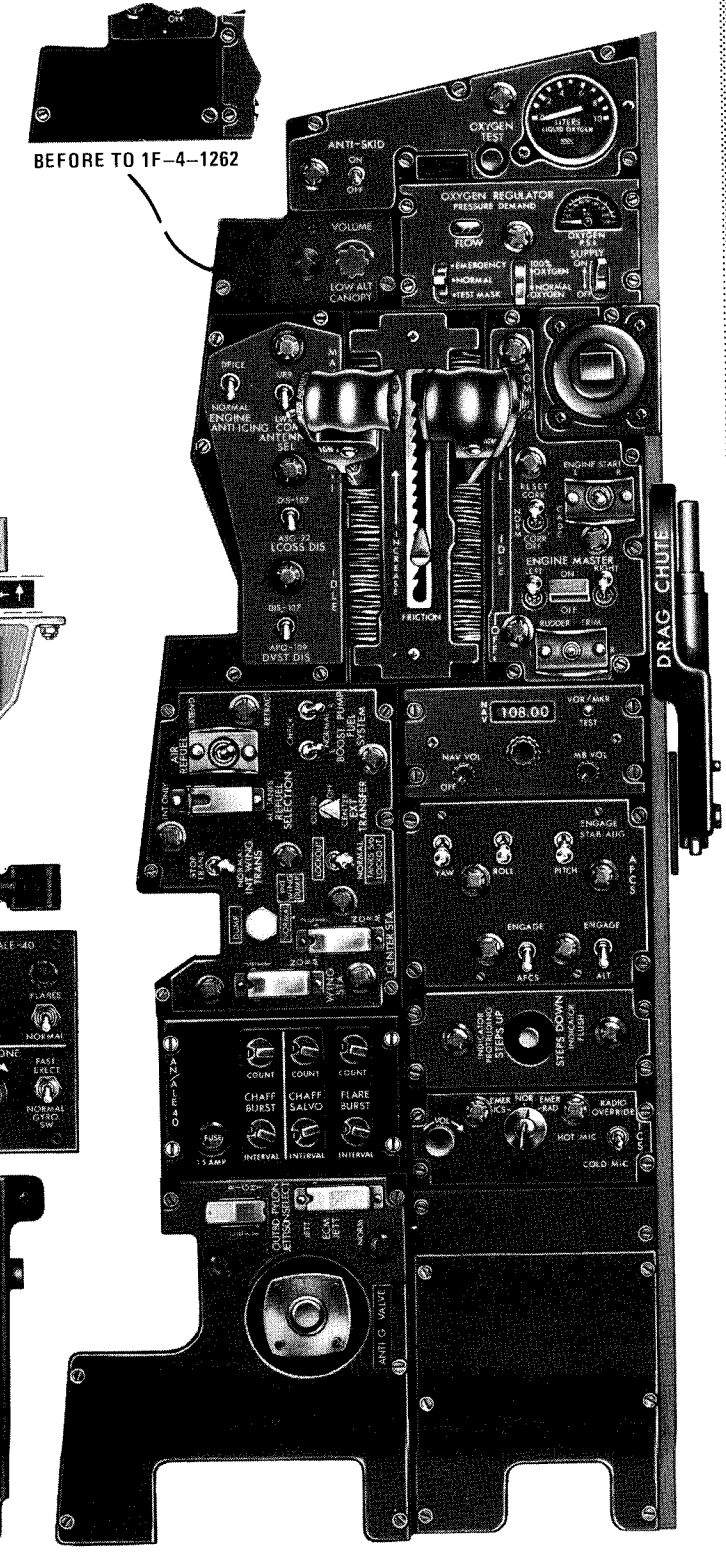


AFTER TO 1F-4D-578



1. LABS PULL-UP LIGHT
2. AIR REFUELING INDICATOR LIGHTS
3. STANDBY MAGNETIC COMPASS
4. ANGLE OF ATTACK INDEXER
5. OPTICAL SIGHT UNIT
6. RANGE INDICATOR
7. RADAR SCOPE
8. CRT AZIMUTH INDICATOR
- 8A. LOS INDICATOR
- 8B. THREAT DISPLAY
9. CANOPY EMERGENCY JETTISON HANDLE
10. LANDING GEAR WARNING LIGHT
11. EIGHT DAY CLOCK
12. TRUE AIRSPEED INDICATOR
13. UHF REMOTE CHANNEL INDICATOR
14. FLIGHT INSTRUMENT LIGHTS CONTROL PANEL
15. RADAR ALTIMETER
16. AIRSPEED AND MACH INDICATOR
17. REFERENCE SYSTEM SELECTOR SWITCH
18. ATTITUDE DIRECTOR INDICATOR (ADI)
19. MARKER BEACON LIGHT
20. ALTIMETER
21. MASTER CAUTION LIGHT
22. FIRE-OVERHEAT WARNING LIGHTS
23. INTERNAL FUEL QUANTITY INDICATOR
24. CANOPY MANUAL UNLOCK HANDLE
25. LANDING GEAR CONTROL HANDLE
26. AVTR RECORD LIGHT
27. MISSILE STATUS PANEL
28. ANGLE OF ATTACK INDICATOR
29. ACCELEROMETER
30. LEFT SUB-PANEL
31. EMERGENCY BRAKE CONTROL HANDLE
32. MISSILE CONTROL PANEL
33. DELIVERY MODE SELECTOR PANEL
34. HORIZONTAL SITUATION INDICATOR (HSI)
35. VERTICAL VELOCITY INDICATOR
36. EMERGENCY ATTITUDE INDICATOR
37. NAVIGATION FUNCTION SELECTOR PANEL
38. VOR MODE LIGHT
39. FUEL FLOW INDICATORS
40. TACHOMETERS
41. EXHAUST GAS TEMPERATURE INDICATORS
42. GENERATOR WARNING LIGHTS
43. FEED TANK CHECK SWITCH
44. ARRESTING HOOK CONTROL HANDLE
45. RIGHT SUB-PANEL (TELELIGHTS)
46. INSTRUMENT LIGHTS INTENSITY CIRCUIT BREAKERS
47. KY-28 MODE SELECT
48. EXHAUST NOZZLE POSITION INDICATORS
49. OIL PRESSURE INDICATORS
50. STATION AND WEAPON CONTROL PANEL
51. HYDRAULIC PRESSURE INDICATORS
52. PNEUMATIC PRESSURE INDICATORS
53. RUDDER PEDAL ADJUSTMENT CRANK

LEFT CONSOLE AREA



BEFORE TO 1F-4-1262

1. UTILITY PANEL (LEFT)
2. OXYGEN CONTROL PANEL
3. AGM-128 (GAM-83) CONTROL HANDLE
4. ENGINE CONTROL PANEL (INBOARD)
5. DRAG CHUTE CONTROL HANDLE
6. VOR/ILS CONTROL PANEL
7. AUTOMATIC FLIGHT CONTROL SYSTEM CONTROL PANEL
8. BOARDING STEPS POSITION INDICATOR
9. INTERCOM SYSTEM CONTROL PANEL
10. BLANK PANEL
11. BLANK PANEL
12. ARMAMENT SAFETY OVERRIDE SWITCH
13. ANTI-G SUIT CONTROL VALVE
14. OUTBOARD PYLON JETTISON SELECT SWITCH
15. ECM POD JETTISON SWITCH
16. AN/ALE-40 PROGRAMMER
17. AUXILIARY ARMAMENT CONTROL PANEL
18. FUEL CONTROL PANEL
19. RAM AIR TURBINE CONTROL HANDLE
20. EXTRA PICTURE SWITCH
21. CANOPY SELECTOR
22. FLAP CONTROL PANEL
23. EJECT LIGHT/SWITCH
24. ENGINE CONTROL PANEL (OUTBOARD)
25. THROTTLES

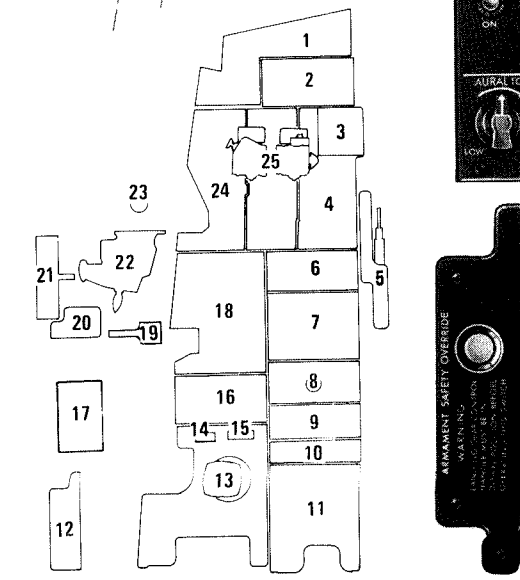
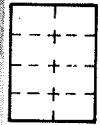
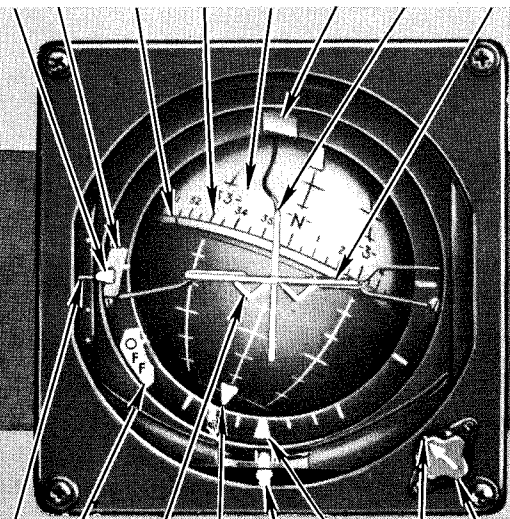


Figure FO-13

ADI/HSI (ATTITUDE DIRECTOR INDICATOR/ HORIZONTAL SITUATION INDICATOR)



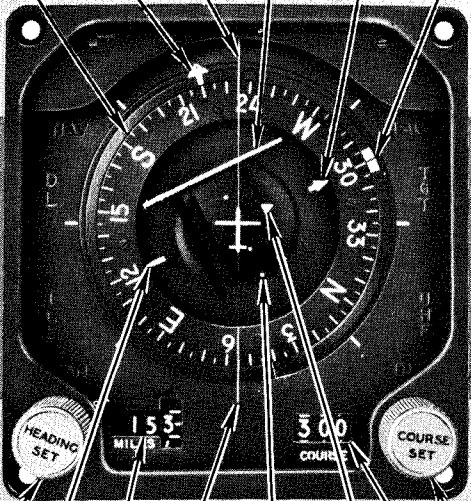
1 2 3 4 5 6 7 8



1. GLIDE SLOPE INDICATOR
2. GLIDE SLOPE WARNING FLAG
3. HORIZON BAR
4. HEADING REFERENCE SCALE
5. ATTITUDE SPHERE
6. COURSE WARNING BAR
7. BANK STEERING BAR
8. PITCH STEERING BAR
9. PITCH TRIM KNOB
10. PITCH TRIM INDEX
11. BANK SCALE
12. TURN AND SLIP INDICATOR
13. BANK POINTER
14. MINIATURE AIRCRAFT
15. ATTITUDE WARNING FLAG
16. GLIDE SLOPE DEVIATION SCALE

16 15 14 13 12 11 10 9

1 2 3 4 5 6



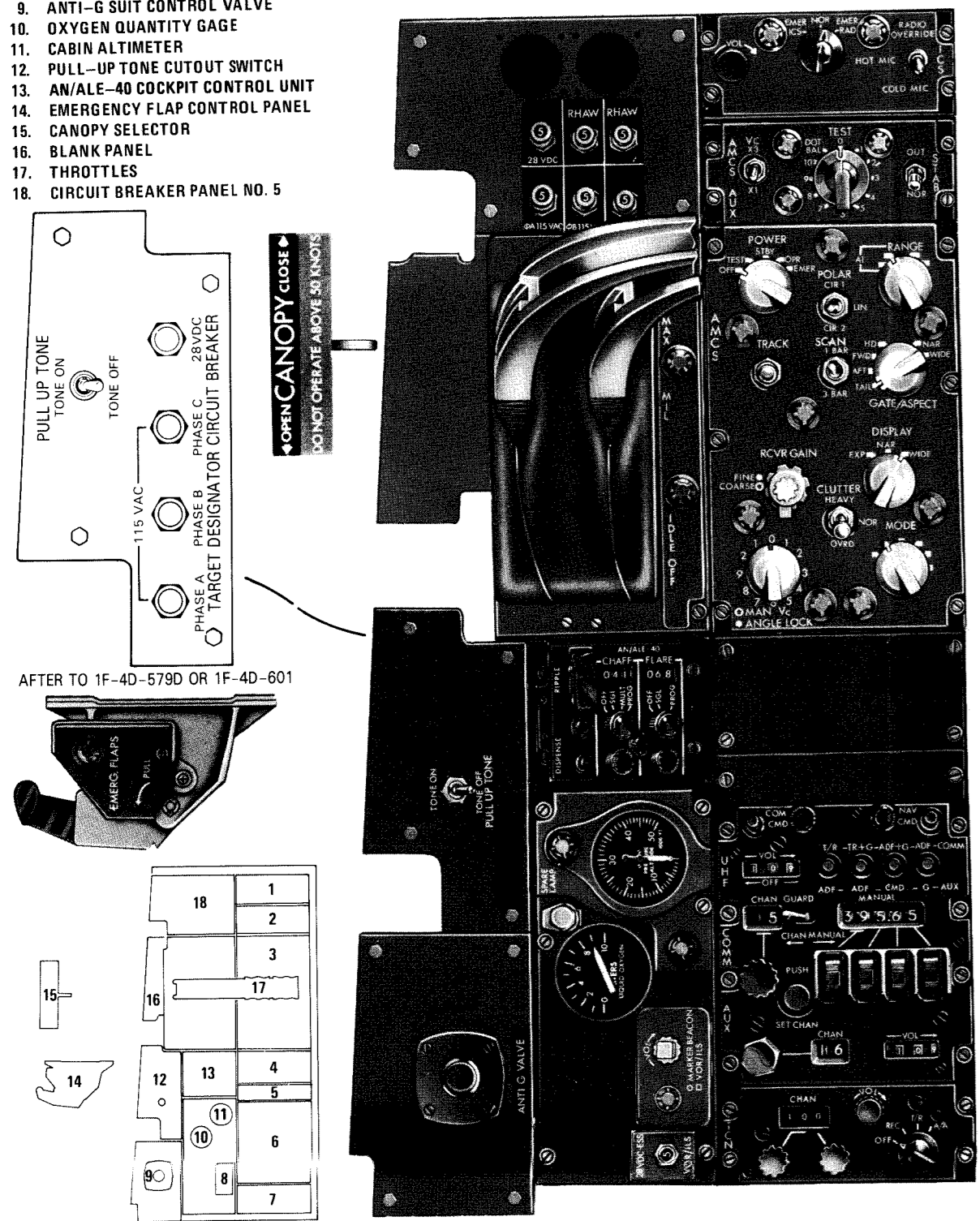
1. COMPASS CARD
2. BEARING POINTER
3. UPPER LUBBER LINE
4. COURSE DEVIATION INDICATOR
5. COURSE ARROW (HEAD)
6. HEADING MARKER
7. COURSE SET KNOB
8. COURSE SELECTOR WINDOW
9. TO-FROM INDICATOR
10. COURSE DEVIATION SCALE
11. LOWER LUBBER LINE
12. RANGE INDICATOR AND WARNING FLAG
13. COURSE ARROW (TAIL)
14. HEADING SET KNOB

14 13 12 11 10 9 8 7

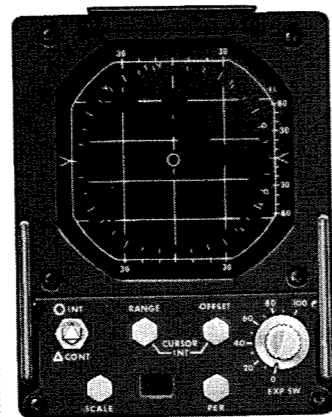
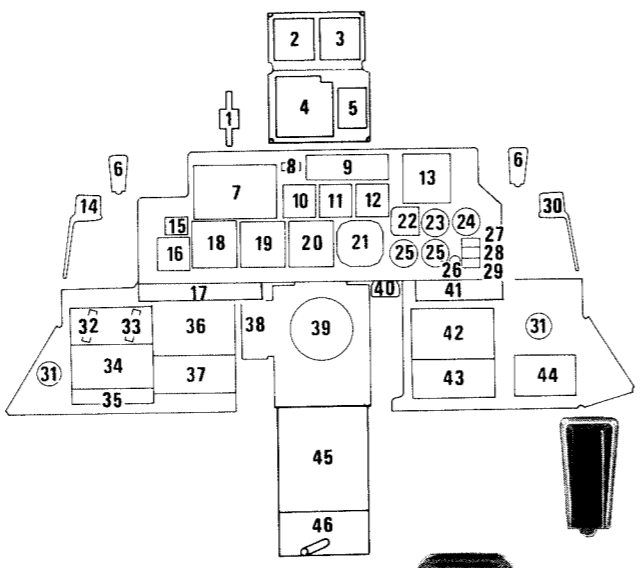
Figure 1-13

1. INTERCOM CONTROL PANEL
2. AUXILIARY RADAR CONTROL PANEL
3. RADAR CONTROL PANEL
4. BLANK PANEL
5. BLANK PANEL
6. COMMUNICATION CONTROL PANEL
7. NAVIGATION CONTROL PANEL
8. MARKER BEACON VOR/ILS AUDIO CONTROL
9. ANTI-G SUIT CONTROL VALVE
10. OXYGEN QUANTITY GAGE
11. CABIN ALTIMETER
12. PULL-UP TONE CUTOUT SWITCH
13. AN/ALE-40 COCKPIT CONTROL UNIT
14. EMERGENCY FLAP CONTROL PANEL
15. CANOPY SELECTOR
16. BLANK PANEL
17. THROTTLES
18. CIRCUIT BREAKER PANEL NO. 5

LEFT CONSOLE AREA



AFTER TO 1F-4D-579D OR 1F-4D-601

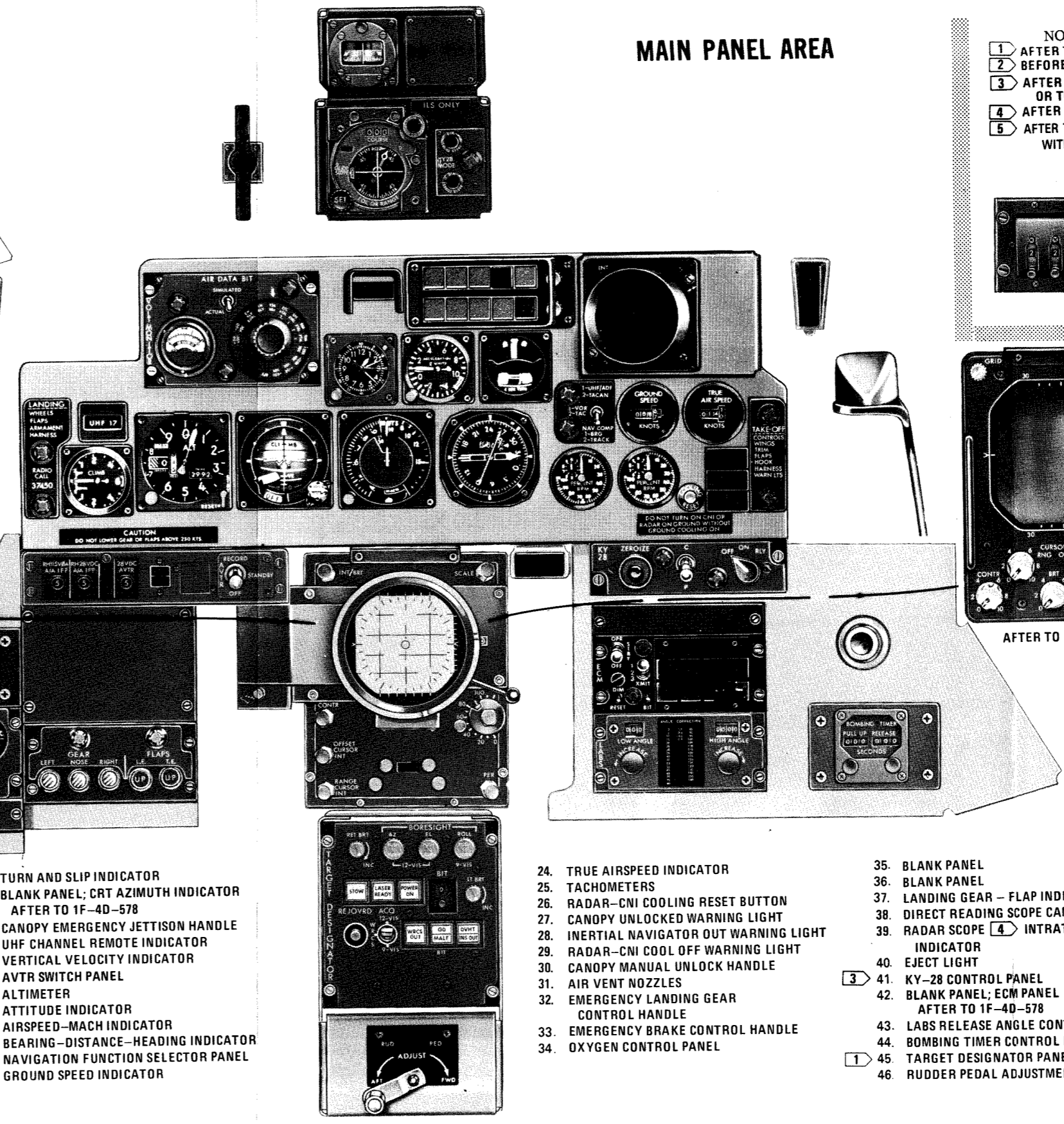


BLK 30-33

1. COMMAND SELECTOR VALVE
2. STANDBY MAGNETIC COMPASS
3. EIGHT DAY CLOCK [5] BLANK PANEL
4. COURSE INDICATOR
5. KY-28 MODE LIGHTS
6. ANGLE OF ATTACK INDEXER
7. VOLTAGE MONITOR PANEL
8. MASTER CAUTION LIGHT
9. BLANK PANEL; THREAT DISPLAY AFTER TO 1F-4D-578
10. BLANK PANEL [5] EIGHT DAY CLOCK
11. ACCELEROMETER

12. TURN AND SLIP INDICATOR
13. BLANK PANEL; CRT AZIMUTH INDICATOR AFTER TO 1F-4D-578
14. CANOPY EMERGENCY JETTISON HANDLE
15. UHF CHANNEL REMOTE INDICATOR
16. VERTICAL VELOCITY INDICATOR
17. AVTR SWITCH PANEL
18. ALTIMETER
19. ATTITUDE INDICATOR
20. AIRSPEED-MACH INDICATOR
21. BEARING-DISTANCE-HEADING INDICATOR
22. NAVIGATION FUNCTION SELECTOR PANEL
23. GROUND SPEED INDICATOR

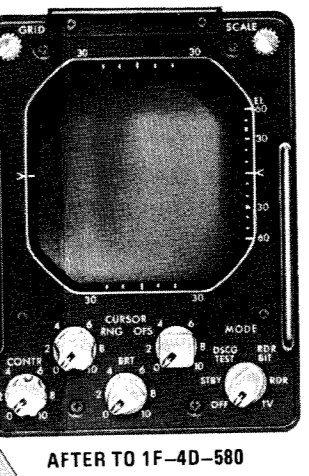
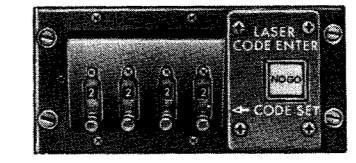
MAIN PANEL AREA



24. TRUE AIRSPEED INDICATOR
25. TACHOMETERS
26. RADAR-CNI COOLING RESET BUTTON
27. CANOPY UNLOCKED WARNING LIGHT
28. INERTIAL NAVIGATOR OUT WARNING LIGHT
29. RADAR-CNI COOL OFF WARNING LIGHT
30. CANOPY MANUAL UNLOCK HANDLE
31. AIR VENT NOZZLES
32. EMERGENCY LANDING GEAR CONTROL HANDLE
33. OXYGEN CONTROL PANEL

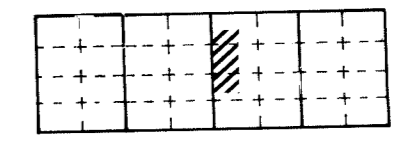
35. BLANK PANEL
36. BLANK PANEL
37. LANDING GEAR - FLAP INDICATOR PANEL
38. DIRECT READING SCOPE CAMERA
39. RADAR SCOPE [4] INTRATARGET DATA INDICATOR
40. EJECT LIGHT
41. KY-28 CONTROL PANEL
42. BLANK PANEL; ECM PANEL AFTER TO 1F-4D-578
43. LABS RELEASE ANGLE CONTROL PANEL
44. BOMBING TIMER CONTROL PANEL
45. TARGET DESIGNATOR PANEL
46. RUDDER PEDAL ADJUSTMENT CRANK

- NOTES
- 1 AFTER TO 1F-4D-566.
 - 2 BEFORE TO 1F-4D-566.
 - 3 AFTER TO 1F-4D-582 OR TO 1F-4D-583
 - 4 AFTER TO 1F-4D-580.
 - 5 AFTER TO 1F-4D-604 WITHOUT LORAN



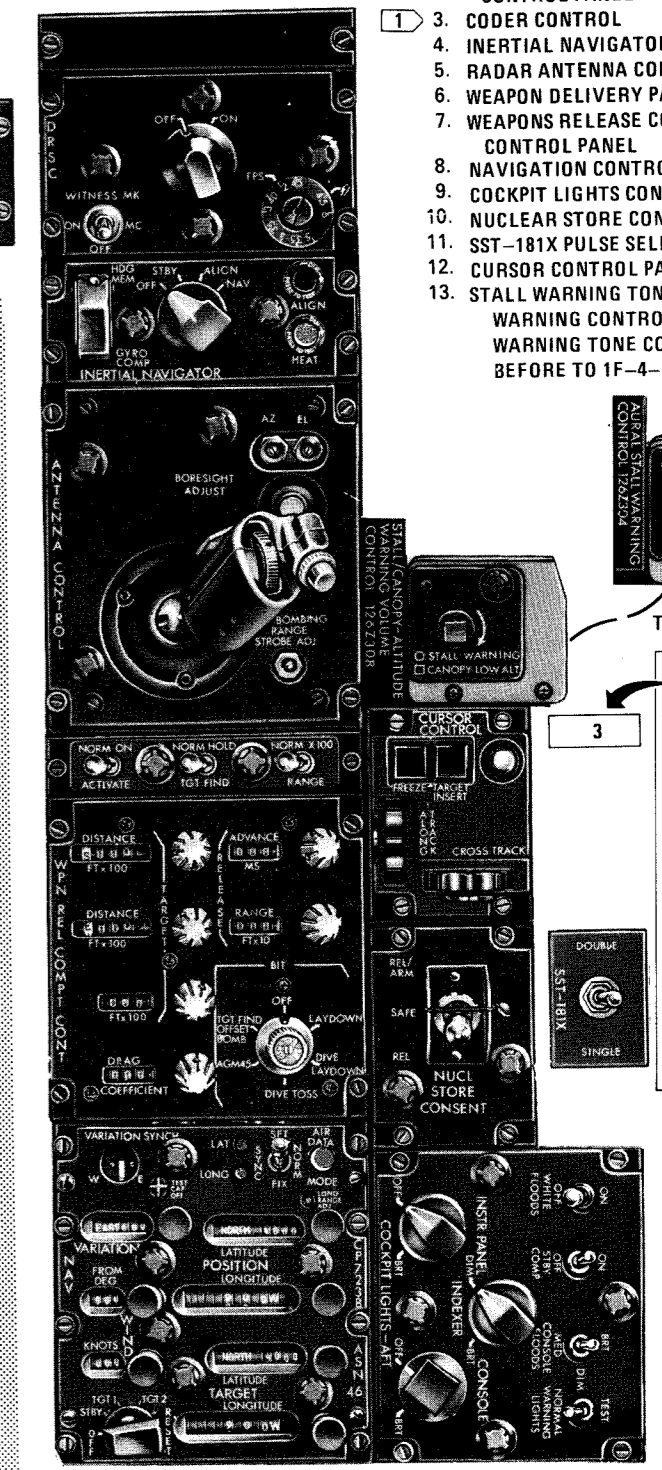
AFTER TO 1F-4D-580

RIGHT CONSOLE AREA



REAR COCKPIT TYPICAL F-4D

1. BLANK PANEL
2. DIRECT RADAR SCOPE CAMERA CONTROL PANEL
3. CODER CONTROL
4. INERTIAL NAVIGATOR CONTROL PANEL
5. RADAR ANTENNA CONTROL PANEL
6. WEAPON DELIVERY PANEL
7. WEAPONS RELEASE COMPUTER CONTROL PANEL
8. NAVIGATION CONTROL PANEL
9. COCKPIT LIGHTS CONTROL PANEL
10. NUCLEAR STORE CONSENT SWITCH
11. SST-181X PULSE SELECTOR SWITCH
12. CURSOR CONTROL PANEL
13. STALL WARNING TONE AND VOICE WARNING CONTROL PANEL; STALL WARNING TONE CONTROL PANEL BEFORE TO 1F-4-1262



BEFORE TO 1F-4-1262

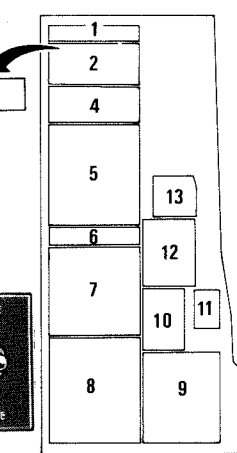
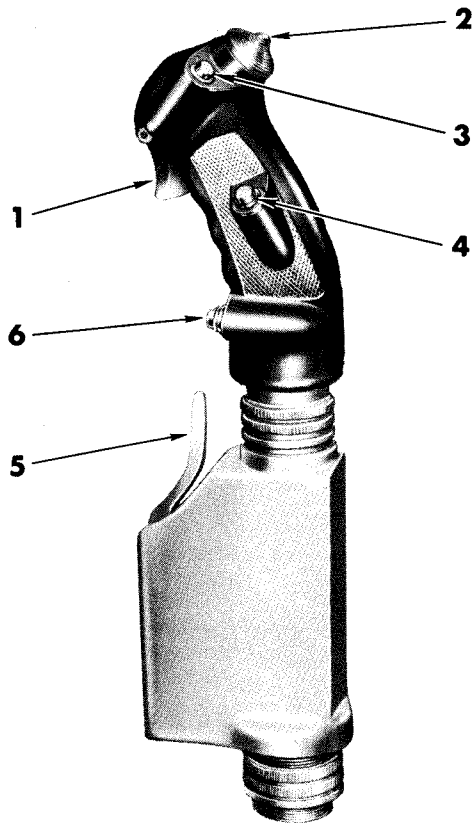
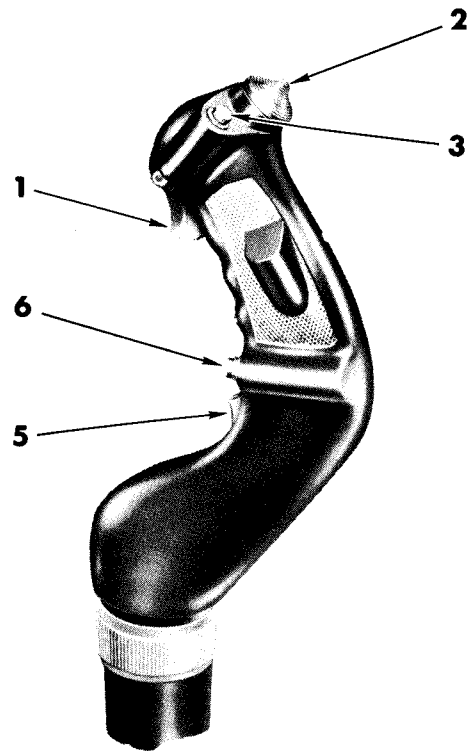


Figure FO-14

REAR COCKPIT F-4D

CONTROL STICKS**FRONT COCKPIT****REAR COCKPIT**

- | | |
|------------------------------------|--|
| 1. TRIGGER | 5. EMERGENCY QUICK
RELEASE LEVER |
| 2. TRIM SWITCH | 6. NOSE GEAR STEERING BUTTON/
HEADING HOLD RELEASE BUTTON |
| 3. BOMB RELEASE BUTTON | |
| 4. AIR REFUELING RELEASE
BUTTON | |

4C-1-(10)C

Figure 1-7

disengage switch is held pressed. When the switch is released, the ARI (10°) and the yaw stab aug (5°) rudder authority is regained. Regardless of the amount of ARI rudder authority, the pilot can easily override the ARI system with the rudder pedals.

NOTE

- To disengage the ARI, pull the rudder trim circuit breaker. This will completely disable the ARI. Rudder feel will revert to low gradient regardless of airspeed due to loss of the rudder feel trim system. The ARI may be disengaged by pulling the ARI circuit breaker on the left utility panel and turning the yaw stab aug off. The anti-skid is disabled when the ARI circuit breaker is pulled.

The ARI will still have 5° of rudder authority if the yaw stab aug is not off with the ARI circuit breaker pulled.

- Rudder jumps will occur when the ARI cuts in or out with lateral control stick input. This will normally occur when flaps are raised or lowered during a turn.

THROTTLES

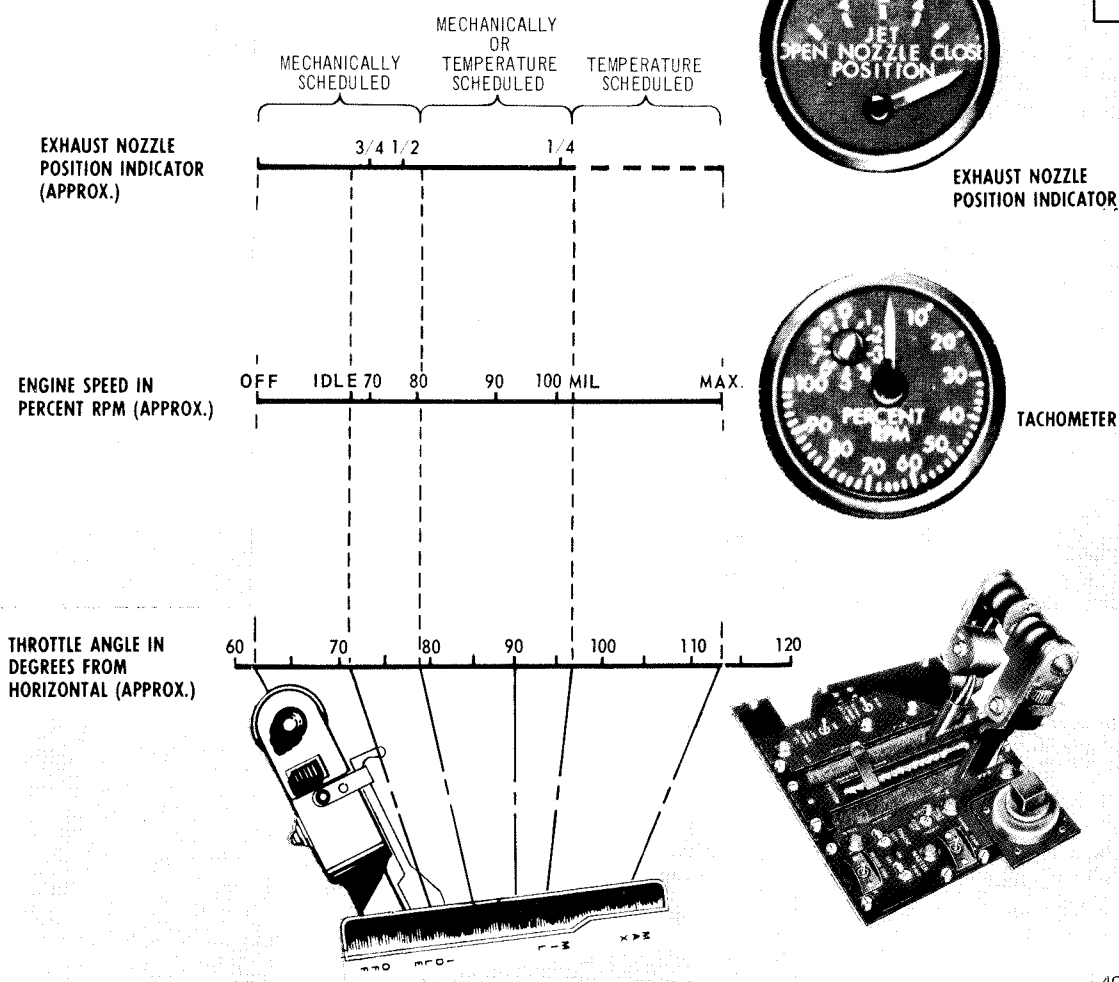
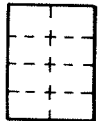


Figure 1-3

Throttles

A throttle for each engine is on the front and rear cockpit left console. Movement of the throttle is transmitted by mechanical linkage to the engine fuel control. A friction adjusting lever is mounted between the front cockpit throttles to permit adjustment of throttle friction to suit individual requirements. Afterburner light-off can be initiated anywhere within the afterburner modulation range by shifting the throttles outboard and moving forward from the MIL position. As the throttles are advanced from minimum to the maximum afterburner position, the increase in thrust will be smooth and continuous. Movement of the throttles from IDLE to OFF actuates a switch which closes the fuel shutoff valve, stopping fuel flow to the engine. Throttle movement through the cutouts is as follows: To move from OFF to IDLE or MIL, advance the throttles straight forward. To move from MIL to MAX, shift throttles outboard; throttles can then be moved forward in the afterburner range. The throttles in the front cockpit are equipped with finger lifts,

enabling rapid throttle chops to IDLE while preventing inadvertent shutoff. The finger lifts, on forward side of throttles, must be raised before the throttles in either cockpit can be retarded to OFF. The rear cockpit throttles are linked to the front cockpit throttles so that only the pilot can start the engines or move the throttles into the afterburner thrust range. The rear cockpit throttles can be moved from the OFF position with no front seat assistance. The rear cockpit throttles can be used to control thrust throughout the entire range (providing the pilot selects afterburner). The throttles can be retarded from MAX to IDLE from the rear cockpit although OFF position must be selected from the front cockpit. The rear cockpit throttles each contain a load limiting device to prevent damage of the teleflex cable in the event an opposing force is applied to both front and rear cockpit throttles simultaneously. The rear cockpit throttles become disengaged from the airframe throttle system when a force of 55 to 100 pounds is applied to the rear cockpit throttles (opposing front cockpit throttles) in either the forward or aft direction. Under this condition, selection of maximum afterburner may be restricted. The rear cockpit throttles can be reset



ANGLE OF ATTACK DISPLAYS

INDICATOR	INDEXER	ANGLE OF ATTACK UNIT	AIRSPEED	ATTITUDE
		20.3-30	VERY SLOW	
		19.7-20.3	SLIGHTLY SLOW	
		18.7-19.6	ON SPEED	
		18.1-18.6	SLIGHTLY FAST	
		0-18.0	VERY FAST	

4C-1-(11)
R

Figure 1-8

at approximate cruise (7.9 units), and approach (19.2 units), and stall (30.0 units) angles of attack. The indicator reference mark set at an approximate cruise (7.9 units), pertains to maximum range cruise at optimum cruise altitude for the existing gross weight. Airflow around the AOA probe is altered by extension or retraction of the nosewheel door. As a result of this effect, with nose gear up, the actual AOA is approximately 2 units higher than indicated AOA and ON SPEED AOA is about 5 knots slow. When electrical power to the indicator is interrupted, the word OFF appears in a window in the face of the indicator. The AOA indicator contains switches that light the indexer lights and actuate the stall warning vibrator.

ANGLE OF ATTACK INDEXERS

The AOA indexers (figure 1-8), are located on each side of the windshield (front cockpit) and above the instrument panel (rear cockpit). Except for the F-4D with AGM-45 selected, the indexers provide a visual indication of aircraft AOA in relation to a pre-determined on-speed AOA by lighting appropriate symbols.

AOA AURAL TONE SYSTEM

The AOA system provides a continuous aural indication of AOA in the headsets of both crewmembers to describe the aircraft AOA (see figure 1-9). The aural tone operates directly off the AOA probe; however, there is a built in lag of about 1 second between the actual AOA and the aural tone indication. The aural tone is present under all flight conditions above 15 units AOA; however, the volume control knob, on the instrument emergency flood lights control panel in the front cockpit and another in the rear cockpit may be used to eliminate the tone up to 20.3 units AOA. Above 20.3 units AOA, the tone cannot be eliminated by the volume control and the only means of turning off the tone is by pulling the AOA probe heater control circuit breaker (C7, No. 3 panel). After TO 1F-4-1262, the rear cockpit volume control knob shares the same panel with the voice warning volume control knob.

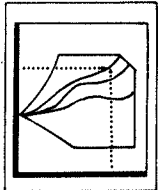
F-4C D V-N ENVELOPE SYMMETRICAL FLIGHT

AIRPLANE CONFIGURATION
CLEAN
OR
(4) AIM-7

GROSS WEIGHT - 37,500 POUNDS

REMARKS
ENGINE(S): (2) J79-GE-15
ICAO STANDARD DAY

GUIDE



DATE: 1 AUGUST 1968
DATA BASIS: FLIGHT TEST

FUEL GRADE: JP-4
FUEL DENSITY: 6.5 LB/GAL

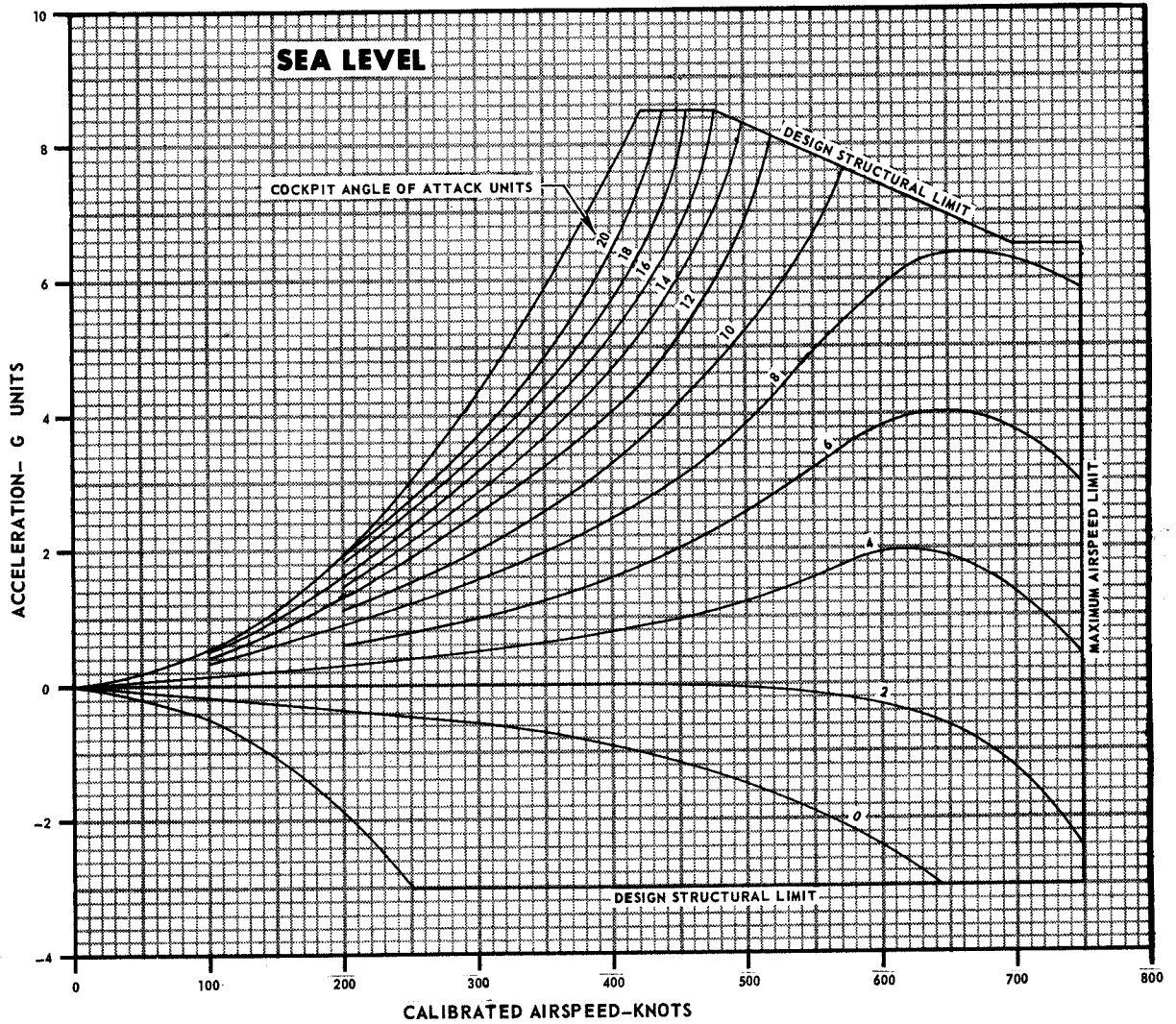
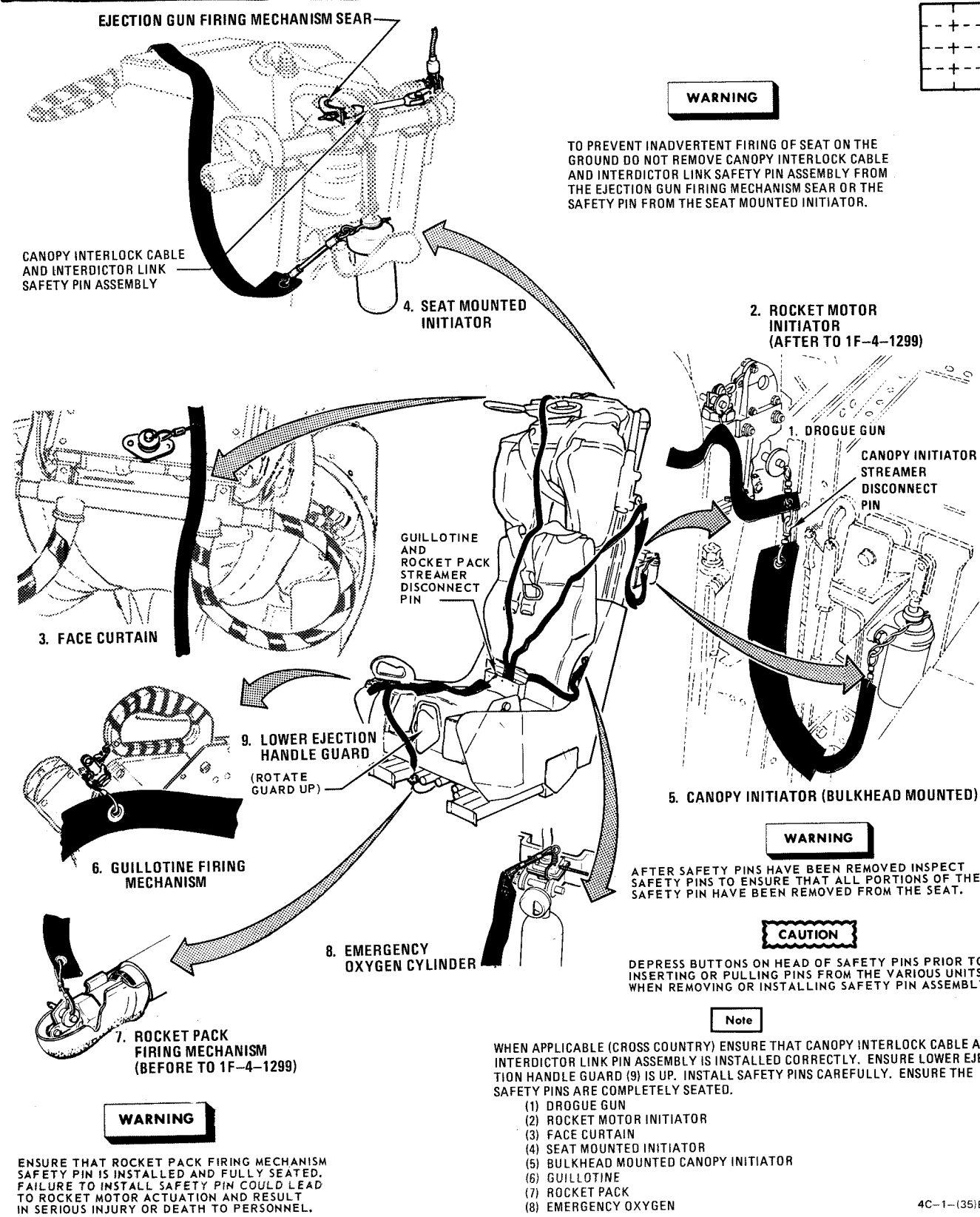


Figure A9-62

EJECTION SEAT AND CANOPY INITIATOR SAFETY PINS



WARNING

TO PREVENT INADVERTENT FIRING OF SEAT ON THE GROUND DO NOT REMOVE CANOPY INTERLOCK CABLE AND INTERDICTOR LINK SAFETY PIN ASSEMBLY FROM THE EJECTION GUN FIRING MECHANISM SEAR OR THE SAFETY PIN FROM THE SEAT MOUNTED INITIATOR.

WARNING

AFTER SAFETY PINS HAVE BEEN REMOVED INSPECT SAFETY PINS TO ENSURE THAT ALL PORTIONS OF THE SAFETY PIN HAVE BEEN REMOVED FROM THE SEAT.

CAUTION

DEPRESS BUTTONS ON HEAD OF SAFETY PINS PRIOR TO INSERTING OR PULLING PINS FROM THE VARIOUS UNITS WHEN REMOVING OR INSTALLING SAFETY PIN ASSEMBLY.

Note

WHEN APPLICABLE (CROSS COUNTRY) ENSURE THAT CANOPY INTERLOCK CABLE AND INTERDICTOR LINK PIN ASSEMBLY IS INSTALLED CORRECTLY. ENSURE LOWER EJECTION HANDLE GUARD (9) IS UP. INSTALL SAFETY PINS CAREFULLY. ENSURE THE SAFETY PINS ARE COMPLETELY SEATED.

- (1) DROGUE GUN
- (2) ROCKET MOTOR INITIATOR
- (3) FACE CURTAIN
- (4) SEAT MOUNTED INITIATOR
- (5) BULKHEAD MOUNTED CANOPY INITIATOR
- (6) GUILLOTINE
- (7) ROCKET PACK
- (8) EMERGENCY OXYGEN

WARNING

ENSURE THAT ROCKET PACK FIRING MECHANISM SAFETY PIN IS INSTALLED AND FULLY SEATED. FAILURE TO INSTALL SAFETY PIN COULD LEAD TO ROCKET MOTOR ACTUATION AND RESULT IN SERIOUS INJURY OR DEATH TO PERSONNEL.

Figure 2-2

LEG RESTRAINERS

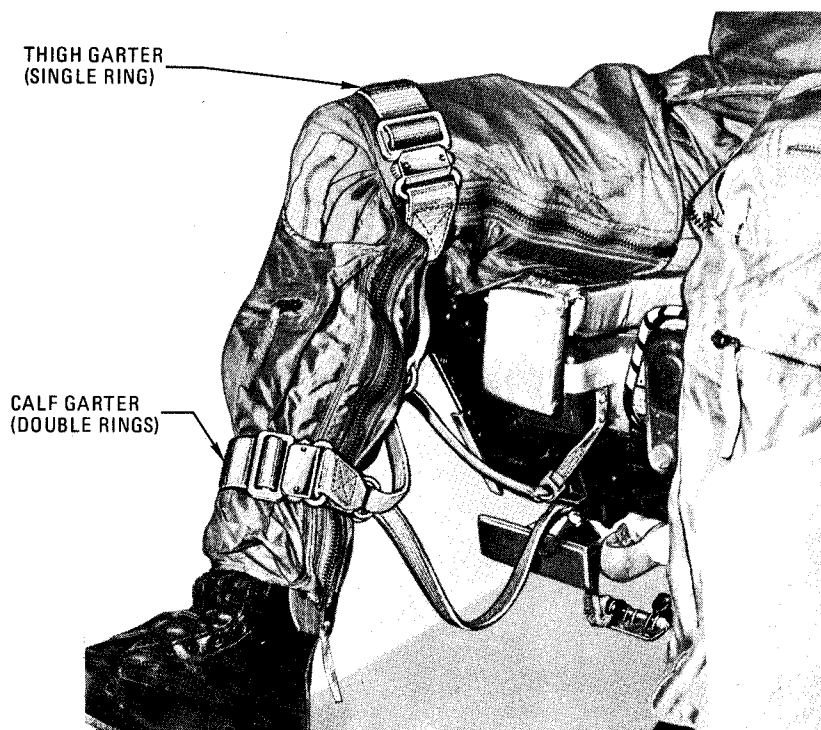
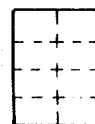


Figure 1-25

4C-1-(28)A

Leg Restraint Release Handle

The leg restraint release handle is on the forward left side of the seat bucket. The rear position releases the lockpins from the snubbers. The leg lines can then slide out of the garters.

Seat Positioning Switch

A contact switch on the right forward side of the seat bucket permits vertical adjustment of the seat.

Emergency Harness Release Handle

The emergency harness release handle is on the right edge of the seat bucket. It provides a single action release of the crewmember with parachute from the ejection seat. When the handle is pulled, the guillotine fires to cut the parachute withdrawal line, and the leg restraints, lap belt, shoulder harness restraints and parachute restraint straps are released. With only partial rotation, the crewmember may fire the guillotine and still have all other straps secure.

Emergency Oxygen Knob

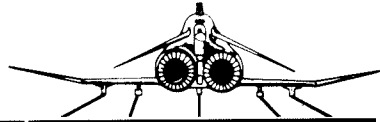
The green emergency oxygen knob is on the forward left side of the seat bucket. Emergency oxygen is actuated automatically upon ejection. It may be actuated at any time with the emergency oxygen knob. The emergency oxygen bottle provides oxygen for about 10 minutes or until the crewmember separates from the seat.

Personal Parachute

The personal parachute is in a hardshell container on the back of the seat. Springs are compressed between the container and the seat to push the container from the seat when the restraint straps are released. The container separates from the crewmember when the chute deploys. Straps are attached across the parachute risers to prevent canopy collapse if a shoulder harness fitting is disengaged. The canopy incorporates two pull down vent lines (PDVL) for faster canopy inflation and to reduce opening shock. They are designed to be broken by the parachute opening. Do not be concerned by these dangling lines. The PDVL may not break if ejecting below about 300 knots. This is not a malfunction. If the PDVL do not break, the canopy will be slightly flattened, oscillation increased and descent

EXTERNAL STORES LIMITATIONS

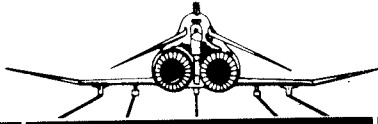
FUEL TANKS AND SPECIAL WEAPONS



STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
							AIRSPEED		ACCEL G		MIN	MAX
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS
600 Gallon High Performance Centerline Tank	BRU-5/A	Empty, Subsonic	●				660	2.0	+8.5 -2.0	+6.8 0.0		660 2.0
		Empty, Supersonic	●						+6.5 -2.0	+5.2 0.0		*
		Empty to Full	●						+5.0 -2.0	+4.0 0.0		560 2.0 **
Royal Jet 600 Gallon Centerline Tank	Aero 27/A	Empty to 10% Full	●				600	1.8	+5.0 0.0	+4.0 0.0	175	425
		10% Full to 75% Full	●				600	1.8	+5.0 0.0	+4.0 0.0	Not Authorized	
		75% Full to Full	●				600	1.8	+3.0 0.0	+2.0 0.0	175	425
Sargent-Fletcher 370 Gallon Wing Tank	Pylon Installed as part of Wing Tank	● Empty to 10% Full ●					750	1.6	+6.0 -2.0	+4.8 0.0	(1G Level Flight) 175 to 375 (2G Sym Flight) 400 to 445 (3G Sym Flight) 425 to 510	
		● 10% Full to 75% Full ●					550	1.6	+5.0 -2.0	+4.0 0.0		
		● 75% Full to Full ●					550	1.6	+4.0 -1.0	+2.0 0.0		
B43 BOMB, OR BDU-8/B PRACTICE BOMB MAXIMUM LOAD-3	Aero 27/A		●				✈	✈	+6.5 -3.0	+5.2 0.0	175	✈
	MAU-12 (With Adapter)		●		●		750	1.8	+5.5 -2.0	+4.4 0.0	175	750
B57 BOMB, B57 TYPE III TRAINING BOMB OR BDU-12/B PRACTICE BOMB Maximum Load-3	Aero 27/A 30 inch		●				✈	✈	+6.5 -3.0	+5.2 0.0	175	600
	MAU-12 14 inch		●		●		✈	✈	+5.5 -2.0	+4.4 0.0	175	550
	MAU-12 14 inch (With Adapter)		●		●		750	1.8	+6.0 -3.0	+4.8 0.0	175	750

Figure 5-10 (Sheet 2 of 25)

EXTERNAL STORES LIMITATIONS

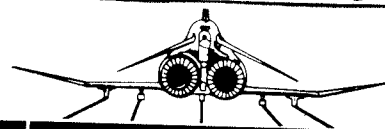


SPECIAL WEAPONS
AND MISSILES

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
							AIRSPEED		ACCEL G		MIN	MAX
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS
B61 Bomb, B61-() Type III Training Bombs or BDU-38/B Practice Bomb Maximum Load -3	Aero 27/A			●			✈	✈	+6.5 -3.0	+5.2 0.0	175	✈
	MAU-12 (With Adapter)		●		●		750	1.8	+6.0 -3.0	+4.8 0.0	175	750
AIM-7E-3 and AIM-7E-3 with AN/AWM-19 Missiles Maximum Load-4	Aero-7A	MISSILE STATIONS					✈	✈	✈	✈	175	✈
			3	4	6	7						
		FWD		■	■							
AFT	■				■							
AIM-9B/E/J/N/P (BASIC, -1, -2 and -3 Configuration and Captive Training Missile) Maximum Load - 4	Aero-3/B or LAU-7A/A Launcher With or Without 3-inch spacers		✈✈		✈✈		**	**	✈ ***	✈ ***	NA	NA
AGM-65A or AGM-65B (Maverick) Missile Maximum Load - 6 TGM-65 (Maverick Trainer) Maximum Load-6	LAU-88 Launcher		✈✈		✈✈		✈	✈	+6.0 -3.0	+4.8 0.0	175 (Maximum Jettison Altitude is 33,000 Feet)	550

Figure 5-10 (Sheet 4 of 25)

EXTERNAL STORES LIMITATIONS

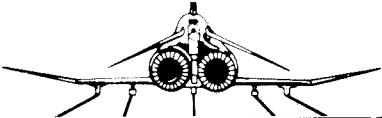


MISSILES,
MISSILES MIXED LOADS
GP AND INCENDIARY
BOMBS

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
		1	2	5	8	9	AIRSPEED		ACCEL G		MIN KNOTS	MAX KNOTS
							KNOTS	MACH	SYM.	UNSYM.		
AGM-45A, B ATM-45 Missile Maximum Load-4	LAU-34/A Launcher	✱	✱		✱	✱	✈	✈	+6.0 -3.0	+4.8 0.0	175	550
AIM-9B/E/J/N/P (BASIC, -1, -1, AND -3 Configuration and Captive Training Missile) with ALQ-71(V)-2, 71(V)-3, ALQ-72, ALQ-87	LAU-7A/A or Aero 3/B with 3-inch spacer on MAU-12 Pylon		✱		✱		*	*	+6.0 -3.0	+4.8 0.0	175	750
AIM-9B/E/J/N/P (BASIC, -1, -2, AND -3 Configuration and Captive Training Missile) with ALQ-101(V)-10			✱		✱							
AIM-9 (Captive Training Missile) with BDU-33B/B, D/B	LAU-7 A/A or Aero 3/B with 3-inch spacers on MAU-12 pylon and TER		✱		✱		550	0.95	+5.0 -1.0	+4.0 0.0	175	550
AIM-9 (Captive Training Missile) with MXU-648 Cargo Pod	LAU-7A/A or Aero 3/B with 3-inch spacers on MAU-12 pylon.		✱		✱		500	0.95	+3.0 0.0	+2.4 +0.5	NA	NA
M36E2 Cluster Incendiary Bomb Maximum Load-10	MER (Fwd)			✱			550	0.9	+5.0 -1.0	+4.0 0.0	300	500
	TER		✱		✱	175						
	MAU-12	✱			✱							
Matra 250Kg Bomb (unretarded) Maximum Load -6	TER-9A		✱		✱		500	0.9	+5.0 -1.0	+4.0 0.0	175	500
MK-82/BSU-49/B (AIR) Maximum Load: Single-24 Ripple-21	MER (FWD)	✱		✱		✱	600	1.2	+5.0 -1.0	+4.0 0.0	175	650
	TER		✱		✱		650	1.4	+4.0 0.0	+3.2 0.0	175	550
MK-84/BSU-50/B (AIR) Maximum Load-4	MAU-12	✱	✱		✱	✱	600	1.3	5.5 -3.0	4.4 0.0	175	550
							700	1.4	3.0 0.0	2.4 0.0		

Figure 5-10 (Sheet 6 of 25)

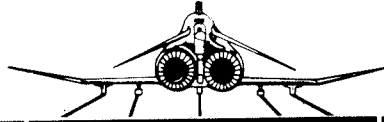
EXTERNAL STORES LIMITATIONS

GP BOMBS												JETTISON 1G LEVEL FLIGHT	
STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON		
		1	2	5	8	9	AIRSPEED		ACCEL G		MIN	MAX	
							KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS	
M117 GP Bomb Maximum Load -17	MER (Fwd)						550	1.1	+5.0 -1.0	+4.0 0.0	275	550	
							600	1.3	+3.0 0.0	+2.4 0.0			
	TER										275	450	
											275	550	
M117D (Destructor) M117R (Retarded) M117R (Low drag configuration), W/MAU-91 A/B, B/B FIN Maximum Load Single - 16 Ripple - 4	MER (Fwd)	Single Release Only					550	1.1	+5.0 -1.0	+4.0 0.0	375	500	
							600	1.3	+3.0 0.0	+2.4 0.0			
	TER										275	450	
											175	600	
M118GP Bomb	AERO-27/A						600	1.1	+5.0 -1.0	+4.0 0.0	175	600	
M129E1, M129E2 Leaflet Bomb Maximum Load-18	MAU-12						550	1.1	+5.0 -1.0	+4.0 0.0	175	550	
	MER (Fwd)										275	550	
											275	450	
	TER										175	550	
MC-1 Gas Bomb Maximum Load-17	MAU-12						550	1.1	+5.0 -1.0	+4.0 0.0	175	550	
	MER (Fwd)										275	550	
											275	450	
	TER										175	550	
MK 81 LDGP Bomb Maximum Load-24	MER (Fwd)						550	1.1	+5.0 -1.0	+4.0 0.0	275 Single Speed 275		
											175	450	
	TER										175	550	

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Figure 5-10 (Sheet 8 of 25)

EXTERNAL STORES LIMITATIONS



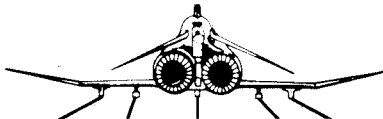
**GP BOMBS AND
GP BOMBS WITH
FUZE EXTENDERS**

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT					
							AIRSPEED		ACCEL G		MIN	MAX				
							KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS				
MK 82 LDGP or MK 36 Destructor with MK-82 FIN or MK-15 (banded closed) FIN Maximum Load-24	MER (Fwd)	●●		●●		●●	550	1.1	+5.0 -1.0	+4.0 0.0	175	450				
						650	1.3	+3.0 0.0	+2.4 0.0							
	TER		●●		●●						175	550				
MK 83 LDGP Bomb Maximum Load-13	MER (Outboard Aft) (Centerline Fwd)	Singles	●●		●●		550	1.1	+5.0 -1.0	+4.0 0.0	175	450				
			▽		▽											
	TER		●●		●●										175	550
	MER	Ripple	●●		●●						●●				175	450
▽				▽		▽										
MK 84 LDGP Bomb Maximum Load-3	MAU-12		●			●	600	1.3	+5.5 -3.0	+4.4 0.0	175	600				
	AERO-27/A			●			650	1.4	+3.0 0.0	+2.4 0.0						
MK 82 Snakeye 1 or MK 36 Destructor W/MK 15 Mod 3A or Mod 4 Fins (high or low drag) Maximum Load: Single-24 Ripple - 21	MER (Fwd)	Single or ripple release	●●		●●		550	1.1	+5.0 -1.0	+4.0 0.0	175	450				
	TER			●●	**	●●										
MK 81 with M1A1 Fuze Extender	MER (Fwd)			●●			550	1.1	+5.0 -1.0	+4.0 0.0	175	450				
		●●		●●		●●					275	275				
	TER		●●		●●									175	550	
MK 82 with M1A1 Fuze Extender	MER (Fwd)		●●	●●		●●					175	450				
	TER		●●		●●						175	550				
MK 83 with M1A1 Fuze Extender	MER (Fwd)			●●							175	450				
	MER (Aft)		●●			●●					175	550				
	TER		●●		●●						175	550				
MK 84 with M1A1 Fuze Extender	Aero 27			●							175	550				
	MAU-12		●			●					175	550				
M118 GP with M1A1 Fuze Extender	Aero 27			●			600	1.1	+5.0 -1.0	+4.0 0.0	175	600				

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Figure 5-10 (Sheet 10 of 25)

EXTERNAL STORES LIMITATIONS



DISPENSERS AND CLUSTER BOMB UNITS

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT						
							AIRSPEED		ACCEL G		JETTISON						
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	MIN	MAX					
BLU-52/B A/B (CS-1 Filled) Maximum Load-4	MER (Aft)			▼			550	1.1	+5.0 -1.0	+4.0 0.0	275	500					
		▼				▼	600	1.3	+3.0 0.0	+2.4 0.0	250	500					
	MAU-12	●				●					175	550					
CBU-	SUU-	MER (Fwd)	FULL			▼				550	1.1	+5.0 -1.0	+4.0 0.0	325 Single Speed 325			
12/A 12A/A 46/A, A/A	7B/A 7C/A 7C/A			▼				▼									
				▼				▼									
				▼				▼									
				EMPTY			▼									300 Single Speed 300	
					▼				▼								
Dispenser and Bomb Maximum Load-5																	
CBU-	SUU-	MER (Fwd)			▼		550	1.1	+5.0 -1.0	+4.0 0.0	300	500					
24B/B 49B/B 52B/B 58/B, A/B 71/B, A/B	30B/B 30B/B 30H/B 30H/B 30H/B	TER	▼			▼	600	1.3	+3.0 0.0	+2.4 0.0	175	500					
		MER (Fwd)	▼			▼					375	500					
		MAU-12	●	●		●					175	550					
Dispenser and Bomb Maximum Load -15																	
B L-755 Cluster Bomb (MK 1, MK 2 No. 1, and MK 2 No. 1A) Maximum Load-6		TER		▼		▼	550	1.1	+5.0 -1.0	+4.0 0.0	175	550					
		MER (Fwd)			▼			600	1.3	+3.0 0.0	+2.4 0.0	300	500				

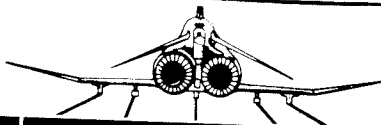
Figure 5-10 (Sheet 12 of 25)

EXTERNAL STORES LIMITATIONS

STORE		SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
								AIRSPEED		ACCEL G		JETTISON	
			1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	MIN	MAX
UNFINNED		MER (Fwd)	FULL					550	0.9	+5.0 -1.0	+4.0 0.0	275	400
CBU--	SUU--											250	500
7A/A 30/A 38/A 38A/A 38B/A, C/A	13A/A 13/A 13A/A 13B/A 13C/A	TER	EMPTY					550	0.9	+5.0 -1.0	+4.0 0.0	400	400
Dispenser and Bomb Maximum Load-18		TER										275	375
Mk 20 Mod 2, 3, 4 CLUSTER BOMB (ROCKEYE II) Maximum Load-12		MER (Fwd)	FULL					550	1.1	+5.0 -1.0	+4.0 0.0	175	450
		TER										175	550
SUU-20/A SUU-20A/A SUU-20 A/M SUU-20B/A Bomb and Rocket Dispenser with MK 106, BDU-33B/B, D/B Maximum Load-2		MAU-12	FULL					550	1.2	+5.0 -2.0	+4.0 0.0	375 Single Speed 375	
								650	1.3	+3.0 0.0	+2.4 0.0		
SUU-21/A Bomb Dispenser with MK 106 BDU-33B/B, D/B Maximum Load-5		Aero 27/A	FULL					550	1.3	+6.5 -3.0	+5.2 0.0	NA	NA
		MAU-12						550	1.1	+5.5 -1.0	+4.4 0.0	NA	NA

Figure 5-10 (Sheet 14 of 25)

EXTERNAL STORES LIMITATIONS



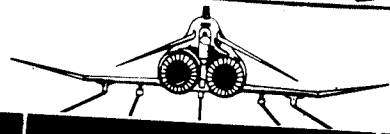
PRACTICE BOMBS,
CHAFF DISPENSER AND
ROCKET LAUNCHERS (FFAR)

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
		1	2	5	8	9	AIRSPEED		ACCEL G		JETTISON	
							KNOTS	MACH	SYM.	UNSYM.	MIN	MAX
BDU-33B/B, D/B Practice Bomb	MER (Shifted Fwd)						550	0.95	+5.0 -1.0	+4.0 0.0	350	450
											275	450
	TER										175	550
ALE-38 Chaff Dispenser Maximum Load-2	MAU-12						550	1.2	+4.0 0.0	+3.2 0.0	275	375
ALE-40 Chaff/Flare Dispenser (2 Disp per pylon) Maximum Load-4	MAU-12										NA	NA
LAU-3/A Rocket Launcher Maximum Load-15	MER (Aft)	FULL					550	1.1	+5.0 -1.0	+4.0 0.0	175	275
	TER										175	450
	MAU-12					175					450	
	MER (Aft)					250					500	
	TER	EMPTY									250	275
	MAU-12										175	450
										175	550	

Figure 5-10 (Sheet 16 of 25)

EXTERNAL STORES LIMITATIONS

ROCKET LAUNCHERS (FFAR),
FLARE DISPENSERS, CARGO
AND IRCM PODS



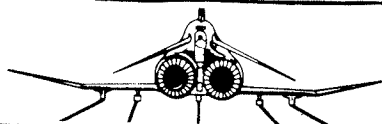
STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
		1	2	5	8	9	AIRSPEED		ACCEL G		JETTISON	
							KNOTS	MACH	SYM.	UNSYM.	MIN	MAX
											KNOTS	KNOTS
LAU-68A/A 68B/A Maximum Load 4	TER		▼		▼		550	1.1	+5.0 -1.0	+4.0 0.0	200	450
	MAU-12		●		●							
SUU-25B/A Flare Dispenser With LUU-1/B, -2/B, -2A/B, -2B/B, -5/B Maximum Load-6	MAU-12	●				●	550	1.1	+5.0 -1.0	+4.0 0.0	250	440
	MER (Fwd)			▼		▼					200	300
			▼			▼					400	450
SUU-25C/A or SUU-25E/A Flare Dispenser With LUU-1/B, -2/B, -2A/B, -2B/B, -5/B Maximum Load-6	MAU-12	●				●	550	1.1	+5.0 -1.0	+4.0 0.0	325	550
	MER (Fwd)	▼			▼	400					450	
				▼							200	300
MXU-648 Cargo Pod	MAU-12		●		●		500	.95	+3.0 0.0	+2.4 +0.5	NA	NA
CTU-2A Supply Container Maximum Load-3	MER (Fwd)	▼				▼	400	.95	+5.0 -1.0	+4.0 0.0	NA	NA
				▼								

Figure 5-10 (Sheet 18 of 25)

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EXTERNAL STORES LIMITATIONS

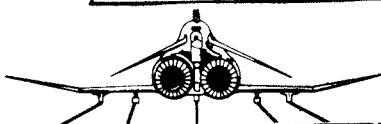
**ACMI, ECM AND GUN
PODS, SPRAY TANKS
AND TARGET SYSTEMS**



STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
							AIRSPEED		ACCEL G		JETTISON	
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	MIN KNOTS	MAX KNOTS
SUU-16/A SUU-23/A Gun Pod Maximum Load-3	MAU-12	●				●	→	→	+6.0 -3.0	+4.8 0.0	175 **	275 **
	Q Adapter			●			→	→	→*	→*		
	MAU-12		●		●		→	→	+6.0 -3.0	+4.8 0.0	500	550
TMU-28/B Spray Tank Maximum Load-2	MAU-12	●					550	1.1	+5.0 -1.0	+4.0 0.0	275	
Modified A/A-37U-15 Tow Target System Maximum Load-1 Configuration limited to Tow target only; or tow target, wing tank, and/or centerline tank.	Tow Target Adapter Target Stowed	●●					250	NE	+1.5 +0.5	NA	NA	NA
	Target Deployment	●●					NA	NA	NA	NA		
	Target Towed	●					500	1.1	+5.0 -1.0	NA		
	Target Released	●					500	1.1	+5.0 -1.0	+4.0 0.0		
A/A-37U-33 Aerial Gunnery Target System Maximum Load-2	MAU-12 Target Stowed	●	●			●	500	0.95	+5.0 -1.0	+4.0 0.0	250 *	300
	Target Deployment	●	●			●						
	Target Towed	●				●						
	Cable Released	●				●						
ALQ-71(V)-2, -3 ALQ-72 ALQ-87 ALQ-101(V)-10 ALQ-119(V)-15, -17 ALQ-131(V)TT (D00111) QRC 80-01(V) ECM Pod	MAU-12		●			●	→	→	→	→	NA	NA
	Missile Well Adapter	MISSILE STATIONS										
			3	4	6	7						
			●		●							
AN/ASQ-T-11, -T-13, -T-17, -T-20, -T-21 AIS Pod (ACMI System Maximum Load-4	Aero-3/B Launcher (F-4D) LAU-7A/A (F-4C) W OR W/O 3" spacer	●●			●●		→	→	→*	→*	NA	

Figure 5-10 (Sheet 20 of 25)

EXTERNAL STORES LIMITATIONS

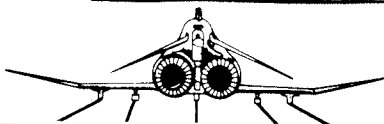


**SUSPENSION
EQUIPMENT AND
MISCELLANEOUS**

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
							AIRSPEED		ACCEL G		MIN	MAX
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS
AN/AVQ-23 Pave Spike Pod Maximum Load-1	Missile Well Adapter	MISSILE STATIONS					550	1.2	+6.0	+4.0	NA	NA
			3	4	6	7			-1.0	0.0		
		FWD		●			600	1.2	+3.0	+2.4		
						*	*	0.0	0.0			
Empty MER	MAU-12	▽				➔	➔	➔	➔	350	550	
Maximum Load-3	↳ Adapter			▽				*	*	275	450	
Empty TER	MAU-12		▽		▽		➔	➔	➔	175	550	
Maximum Load-2								*	*			
Empty Aero-3/B or LAU-7A/A Launchers	MAU-12		+		+		➔	➔	➔	NA	NA	
								*	*			

Figure 5-10 (Sheet 22 of 25)

EXTERNAL STORES LIMITATIONS



GUIDED BOMBS

STORE	SUSPENSION	STATION LOADING					CARRIAGE				JETTISON 1G LEVEL FLIGHT	
							AIRSPEED		ACCEL G		MIN	MAX
		1	2	5	8	9	KNOTS	MACH	SYM.	UNSYM.	KNOTS	KNOTS
GBU-10/B, A/B, C/B, D/B, E/B (MK, 84 LGB) Maximum Load-4	MAU-12	●	●		●	●	550	0.95	+5.0 -1.0	+4.0 0.0	175	650
							650	1.4	+3.0 0.0	+2.4 0.0		
GBU-8/B (MK-84EO) Maximum Load-4	MAU-12	●	●		●	●	550	0.95	+5.0 -1.0	+4.0 0.0	175	550
			●		●		650	1.4	+3.0 0.0	+2.4 0.0		
GBU-11A/B (M118 LGB) Maximum Load-2	MAU-12		●		●		550	0.95	+4.0 -1.0	+3.0 0.0	200	550
GBU-12/B, A/B, B/B C/B, D/B (MK-82 LGB) High and Low Speed Versions Maximum Load-4	MAU-12	●	●		●	●	550	1.1	+5.0 -1.0	+4.0 0.0	175	550
GBU 12 B/B, C/B, DB Maximum Load 6	TER		◡		◡							

Figure 5-10 (Sheet 24 of 25)

TO 1F-15A-1

FLIGHT MANUAL



**USAF SERIES
F-15A/B/C/D AIRCRAFT
BLOCK 7 AND UP**

McDonnell Aircraft

F33657-70-C-0300
F33657-87-C-2027 F09603-87-D-0554

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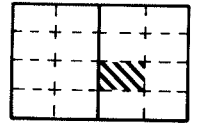
Published under authority of the Secretary of the Air Force.

AIR FORCE 20 OCT 89-4835

15A-1-(10)R

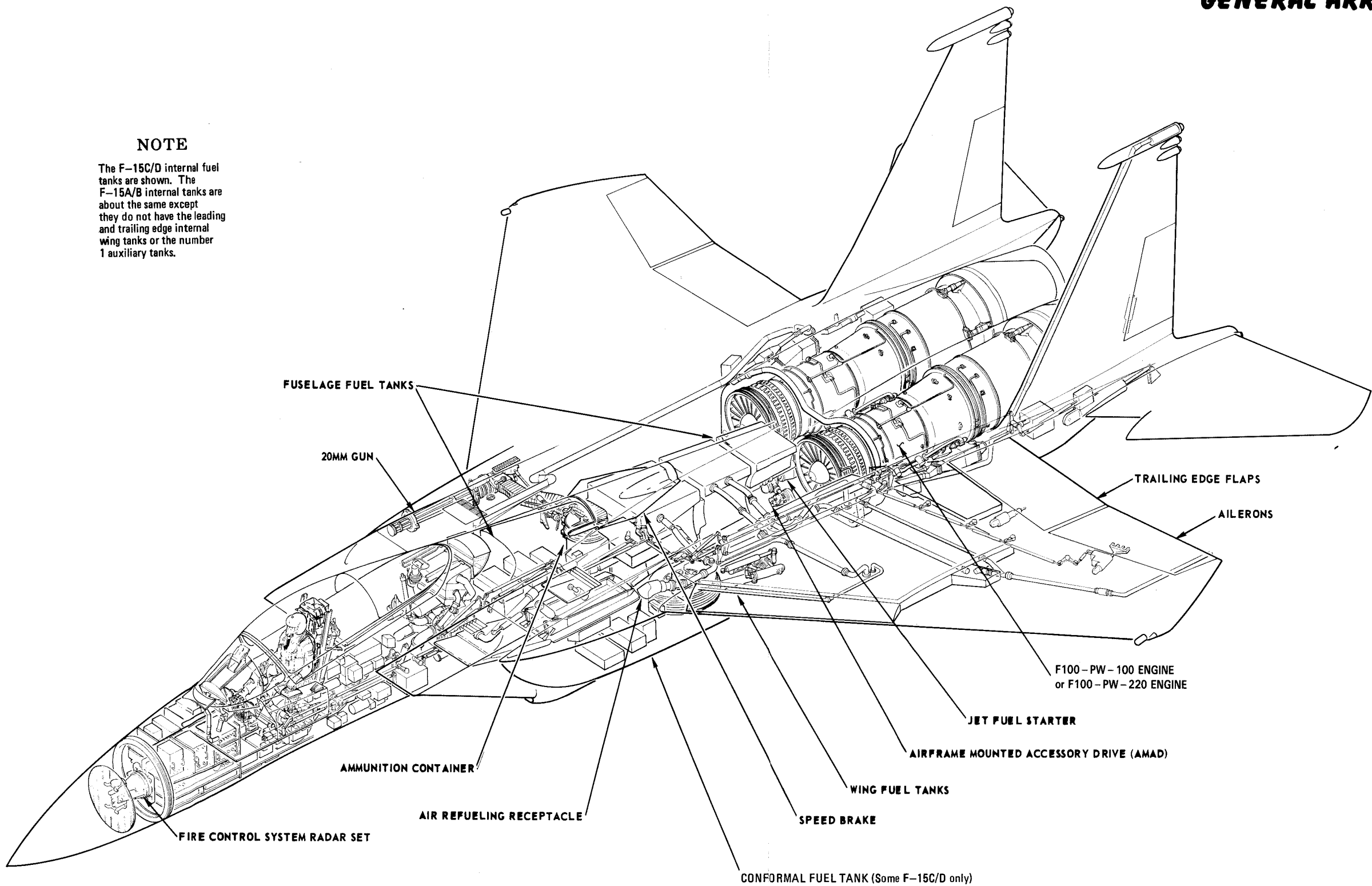
I 1 JULY 1989

GENERAL ARRANGEMENT



NOTE

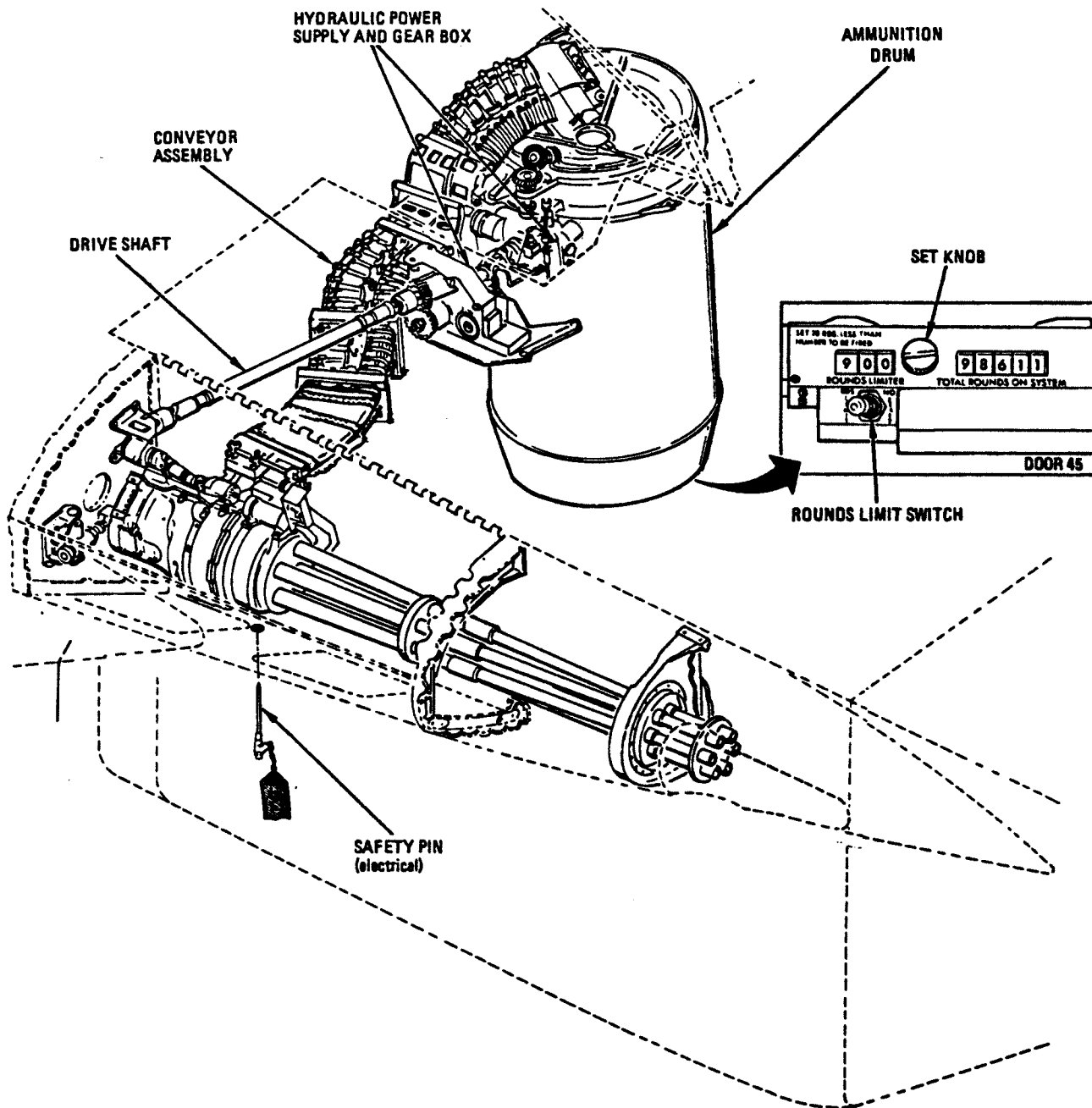
The F-15C/D internal fuel tanks are shown. The F-15A/B internal tanks are about the same except they do not have the leading and trailing edge internal wing tanks or the number 1 auxiliary tanks.



GENERAL ARRANGEMENT

Figure FO-1

M61A1 GUN SYSTEM



16C-34-1-1-111A

Figure 1-52

ENGINE LIMITATIONS

GROUND

CONDITION	FTIT °C	RPM %	OIL PSI	REMARKS
START	680	-	-	NOTE 5
IDLE	-	-	15-80	NOTE 5
MILITARY / AB	960	94	30-80	NOTES 2, 5, 6, 8, & 9
TRANSIENT	970	94	30-80	NOTES 2, 5, 8, & 10
FLUCTUATION	±10	±1	±10	NOTES 2, 3, 4, & 6

FLIGHT

CONDITION	FTIT °C	RPM %	OIL PSI	REMARKS
AIRSTART	800	-	-	
IDLE	-	-	15-80	
MILITARY / AB	970	96	30-80	NOTES 1, 2, & 7
TRANSIENT	990	96	30-80	NOTES 2, & 11
FLUCTUATION	±10	±1	±10	NOTES 2, 3, 4, & 6

NOTES

1. USE OF THE V_{max} SWITCH IS PROHIBITED.
2. LIMITATIONS INCLUDE FLUCTUATIONS.
3. IN PHASE FLUCTUATION OF MORE THAN ONE INSTRUMENT, OR SHORT TERM CYCLIC FLUCTUATIONS ACCOMPANIED BY THRUST SURGES, INDICATE ENGINE CONTROL PROBLEMS.
4. NOZZLE FLUCTUATIONS ARE LIMITED TO ±2% AT MILITARY POWER AND ABOVE. FLUCTUATIONS ARE NOT PERMITTED BELOW MILITARY POWER.
5. ANY OIL PRESSURE FROM 0 TO 100 (PEGGED) PSI IS ACCEPTABLE DURING START AND INITIAL OPERATION FOR A PERIOD NOT EXCEEDING 1 MINUTE AFTER REACHING IDLE.
6. OIL PRESSURE FLUCTUATIONS OF ±10 PSI ARE ACCEPTABLE.
7. AT LESS THAN 0 G, OIL PRESSURE MAY DROP AS LOW AS 0 PSI.
8. FOR ENGINE OPERATION AT MILITARY OR ABOVE, OIL PRESSURE MUST INCREASE 15 PSI MINIMUM ABOVE IDLE OIL PRESSURE.
9. ENGINE NOZZLE POSITION IS LIMITED TO 30% OPEN OR LESS AT MILITARY POWER.
10. MAXIMUM TEMPERATURE LIMITED TO 30 SECONDS.
11. MAXIMUM TEMPERATURE LIMITED TO 10 SECONDS.

Figure 5-2

ENGINE AIR INDUCTION SYSTEM

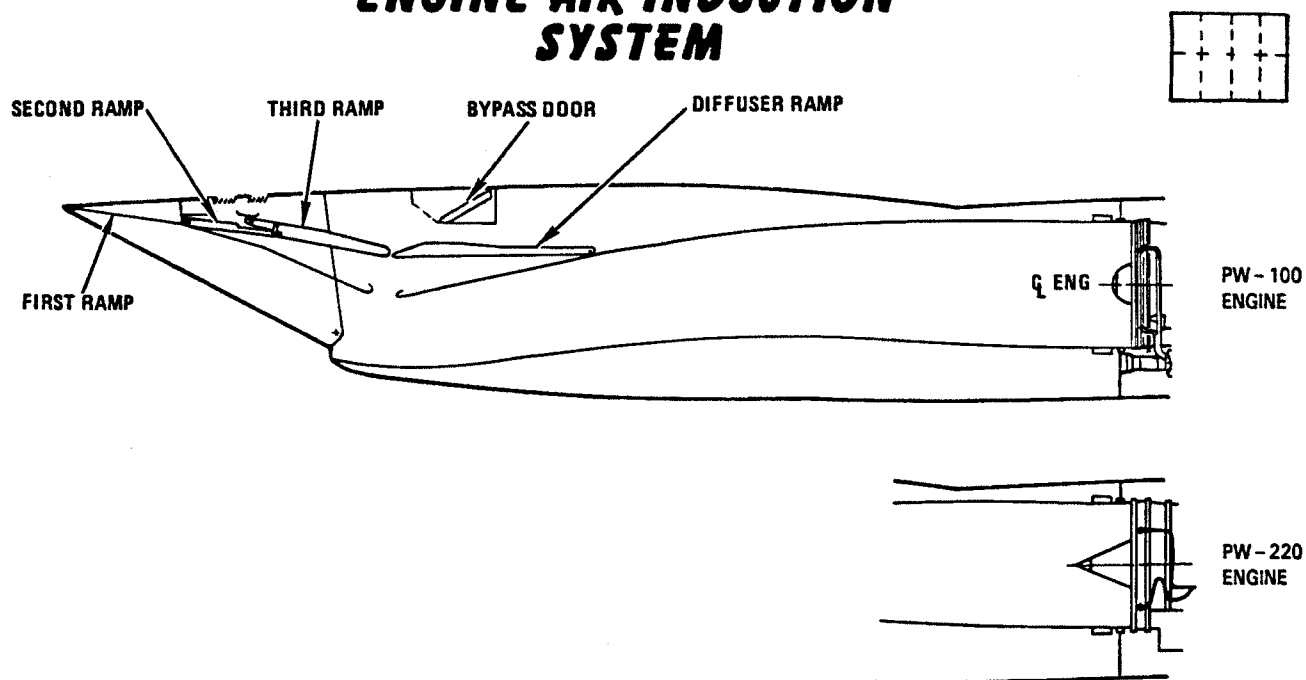


Figure 1-1

15A-1-(120)B

EMERG

Removes electrical power from the ramp and bypass door actuators, causing them to move hydraulically to the emergency (ramps locked up and bypass door closed) positions. If hydraulic pressure fails, air loads will force the ramps and bypass door to the emergency position.

ENGINE OIL SYSTEM

Each engine is equipped with a completely self-contained oil system. Oil is supplied to the main pump element by gravity feed. Refer to Servicing Diagram, this section, for oil specifications.

ENGINE FUEL SYSTEM

Refer to foldout section for airplane and engine fuel system illustration.

ENGINE CONTROL SYSTEM

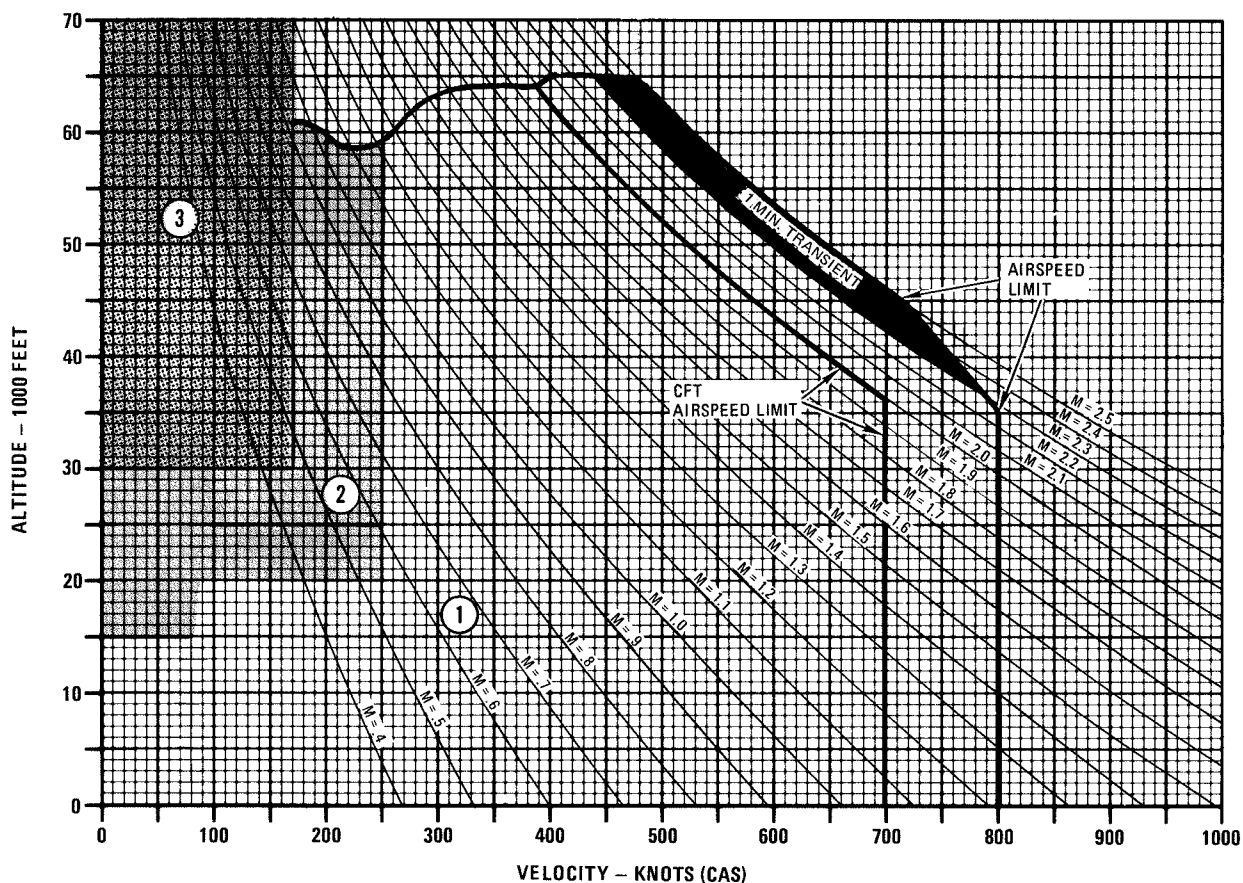
The F100-PW-100 engine control consists primarily of a hydromechanical unified control (UC) for main engine and afterburner operation with a supervisory engine electronic control (EEC). The F100-PW-220 engine control consists primarily of a hydromechanical main fuel control (MFC), afterburner fuel control (AFC) and a full authority digital electronic engine control (DEEC).

Unified Control (F100-PW-100)

The unified control (UC) performs the following functions: provides engine speed control, schedules rear compressor variable vanes, initiates engine and afterburner fuel flow, controls the exhaust nozzles, and provides a positive fuel cutoff at engine shutdown. The unified control is scheduled mechanically from IDLE to MIL but is scheduled by the engine electronic control at MIL and above.

AIRSPEED LIMITATION AND AFTERBURNER OPERATING ENVELOPE

F100-PW-100 ENGINE



NOTES

- REGION 1 - UNLIMITED AFTERBURNER OPERATION. FAILURE TO LIGHT, RUMBLE (LIGHT VIBRATIONS), AFTERBURNER INDUCED FAN STALL, AND BLOWOUTS SHOULD NOT OCCUR.
- REGION 2 - AFTERBURNER FAILURE TO LIGHT, RUMBLE (LIGHT VIBRATIONS), AFTERBURNER INDUCED FAN STALL, OR BLOWOUTS MAY OCCUR DURING RAPID TRANSIENTS FROM LOW POWER SETTINGS BUT SHOULD NOT OCCUR DURING STEADY-STATE AFTERBURNER OPERATION, TRANSIENTS FROM MILITARY OR DURING MODULATION WITHIN AFTERBURNER.
- REGION 3 - AFTERBURNER FAILURE TO LIGHT, RUMBLE (LIGHT VIBRATIONS), AFTERBURNER INDUCED FAN STALL, AND BLOWOUTS ARE PROBABLE DURING TRANSIENTS FROM ALL POWER SETTINGS AS WELL AS DURING STEADY-STATE OPERATION.

Figure 5-3 (Sheet 1 of 2)

SUSTAINED LEVEL TURNS

GROSS WEIGHT - 35,000 POUNDS

MAXIMUM THRUST

AIRPLANE CONFIGURATION
 F-15A/C
 CLEAN

DATE: 1 OCTOBER 1985
 DATA BASIS: FLIGHT TEST

REMARKS
 ENGINE(S): (2) F100-PW-100,
 ENGINE TRIM 97.7%,
 U.S. STANDARD DAY, 1966

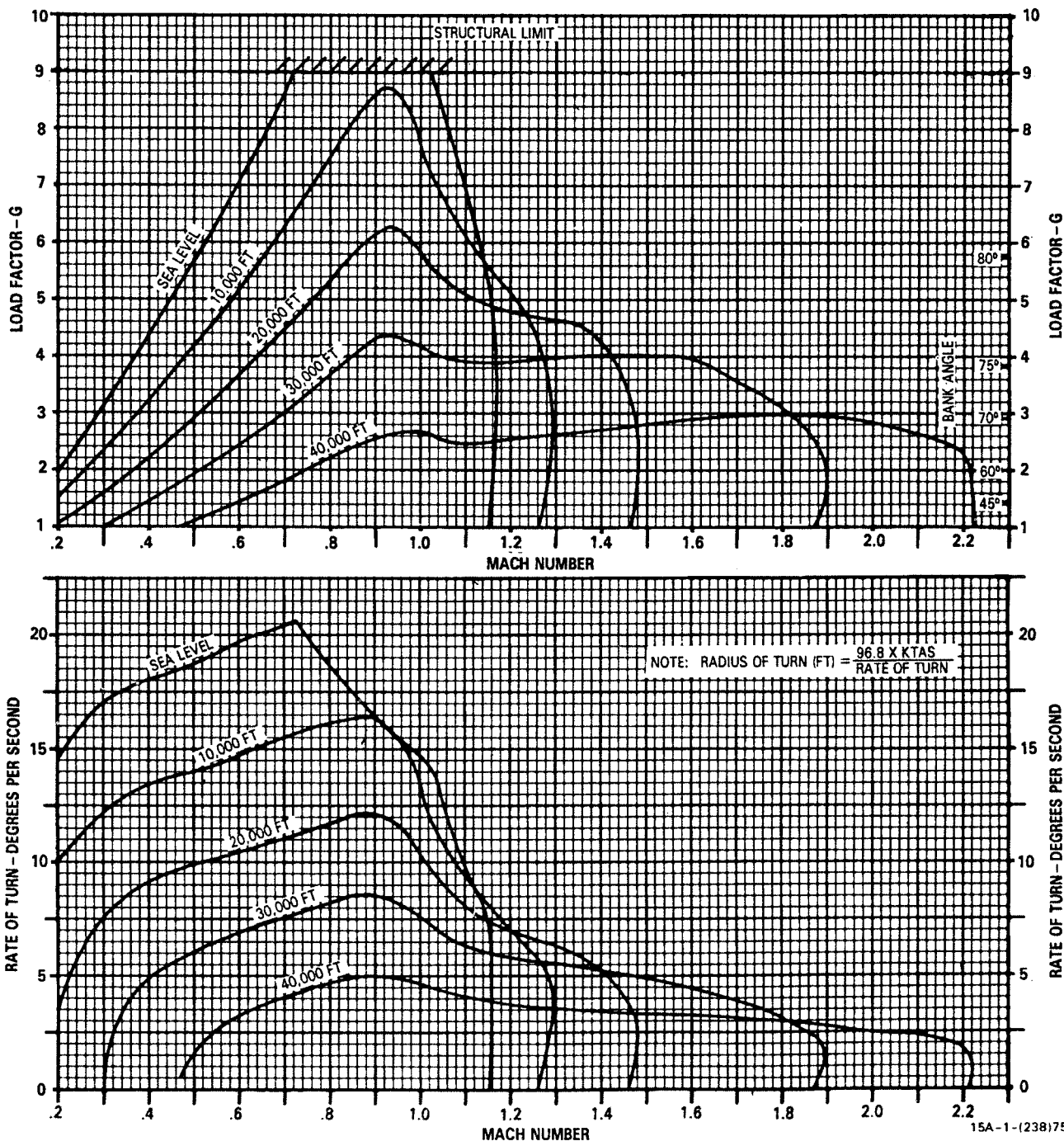
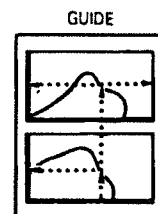


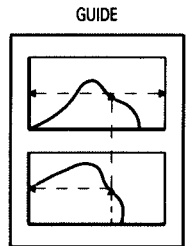
Figure A9-39

SUSTAINED LEVEL TURNS

GROSS WEIGHT - 37,000 POUNDS

AIRPLANE CONFIGURATION
F-15C CLEAN

REMARKS
ENGINE(S): (2) F100-PW-220
U.S. STANDARD DAY, 1966



DATE: 15 JUNE 1989
DATA BASIS: FLIGHT TEST

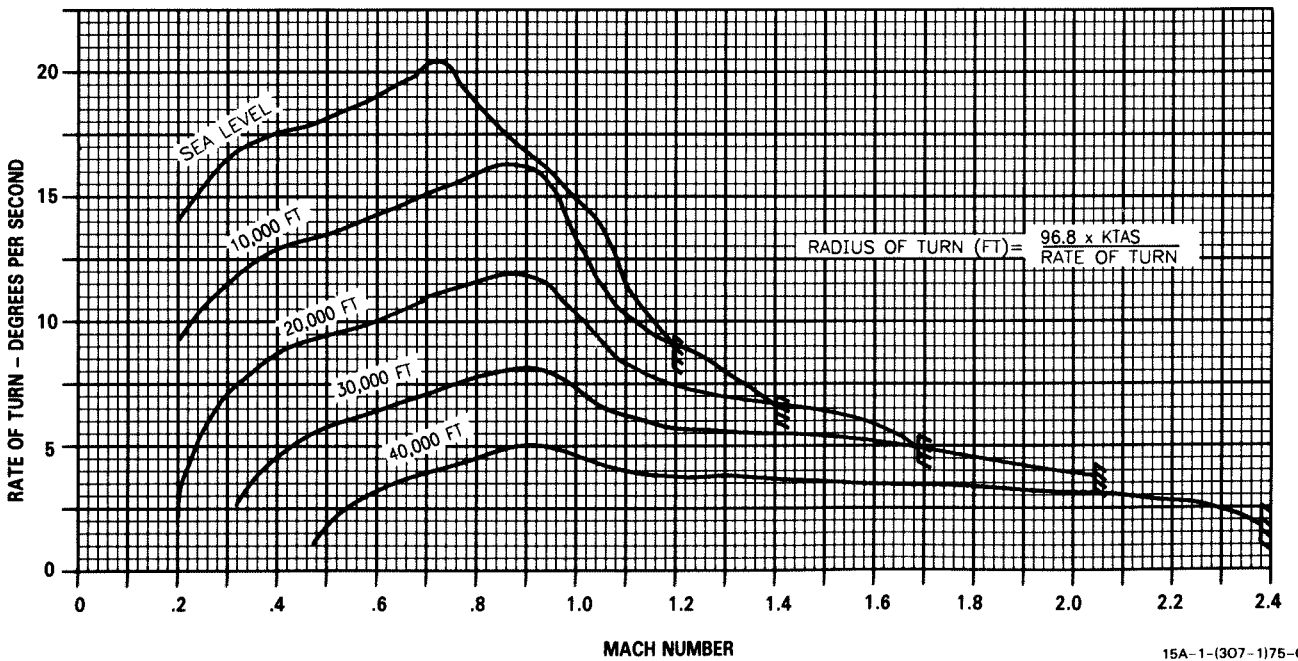
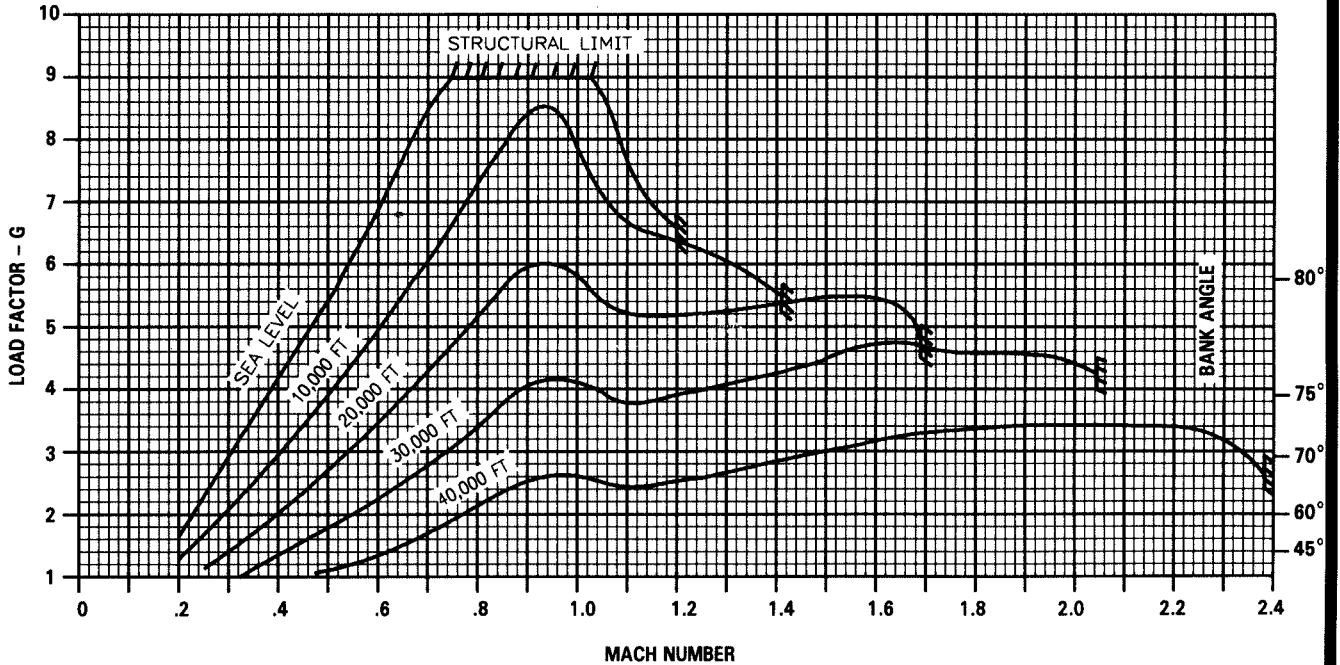


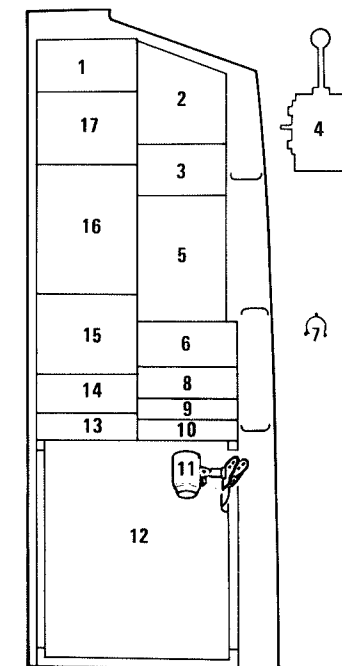
Figure B9-28

15A-1-(307-1)75-CATI

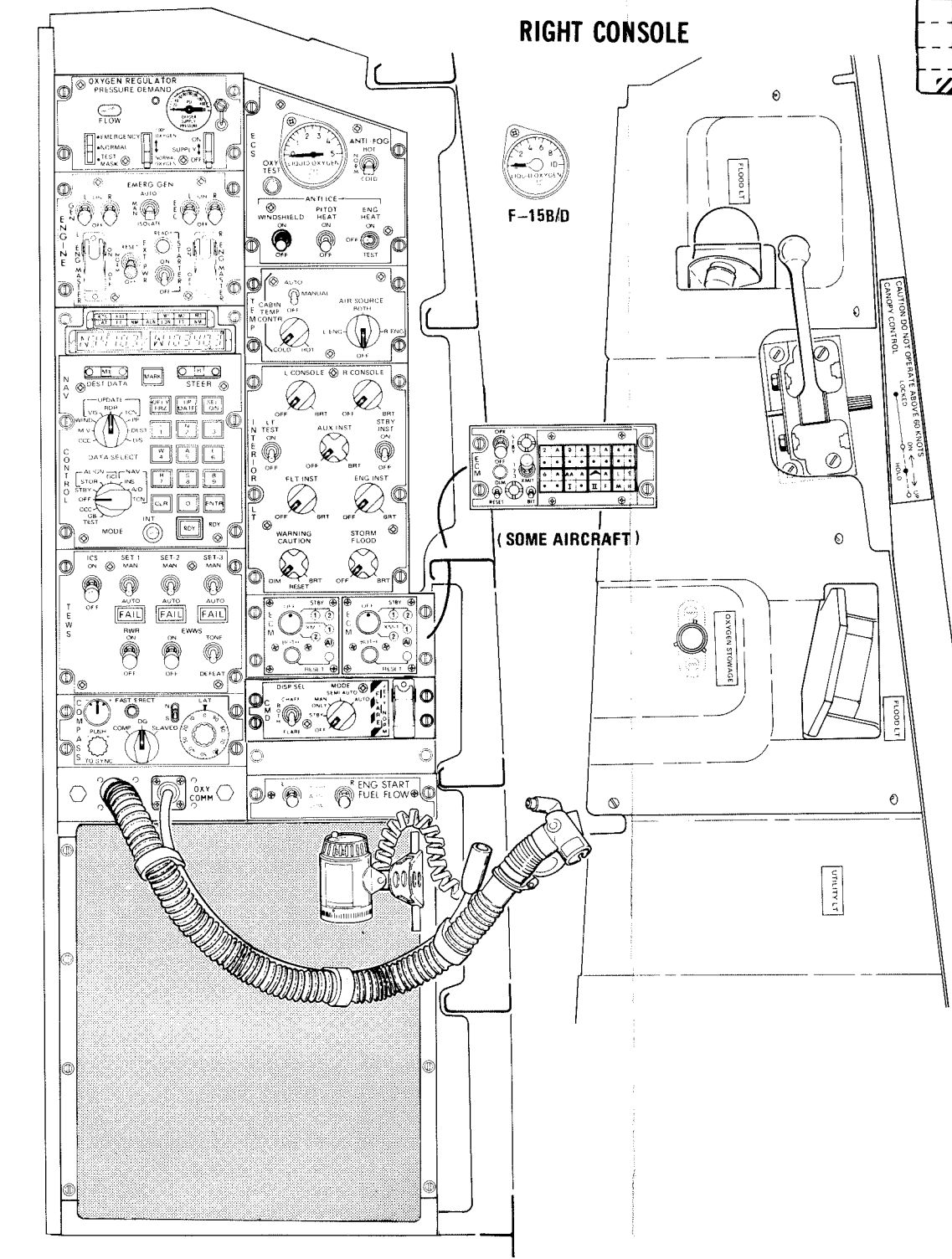
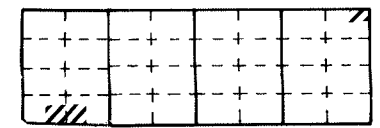
COCKPIT

TYPICAL

1. OXYGEN REGULATOR
2. ECS PANEL
3. TEMPERATURE PANEL
4. CANOPY CONTROL HANDLE
5. INTERIOR LIGHTS CONTROL PANEL
6. TEWS POD CONTROL PANEL
7. OXYGEN HOSE STOWAGE FITTING
8. COUNTERMEASURES DISPENSER (CMD) CONTROL PANEL (F-15C 83-0028 THRU 83-0043 AND F-15D 83-0048 THRU 83-0050)
9. BLANK
10. ENGINE START FUEL SWITCHES
11. UTILITY LIGHT
12. STOWAGE COMPARTMENT OXYGEN/COMMUNICATION
13. OUTLET PANEL
14. COMPASS CONTROL PANEL
15. TEWS POWER CONTROL PANEL
16. NAVIGATION CONTROL PANEL
- ENGINE CONTROL PANEL

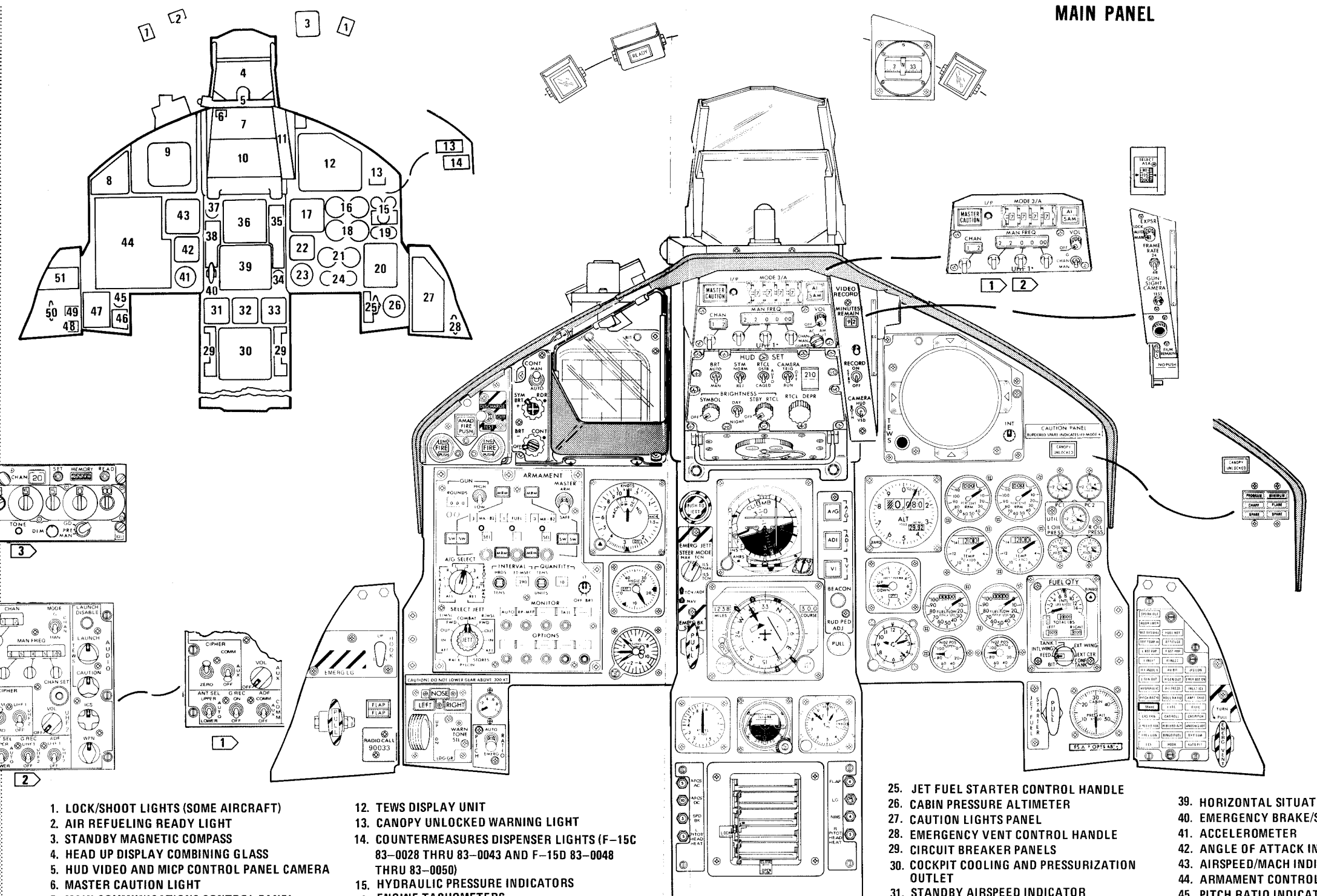


COCKPIT



RIGHT CONSOLE

MAIN PANEL

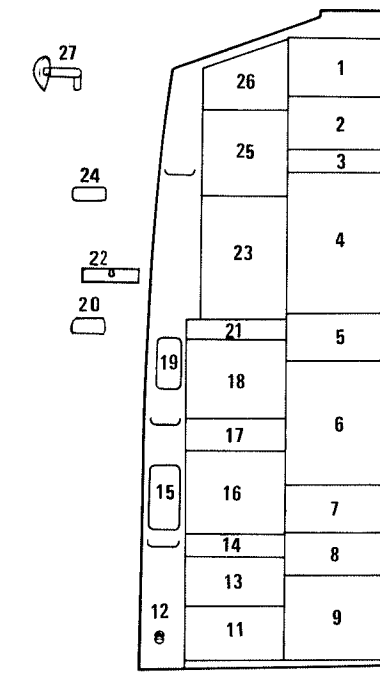


25. JET FUEL STARTER CONTROL HANDLE
26. CABIN PRESSURE ALTIMETER
27. CAUTION LIGHTS PANEL
28. EMERGENCY VENT CONTROL HANDLE
29. CIRCUIT BREAKER PANELS
30. COCKPIT COOLING AND PRESSURIZATION OUTLET
31. STANDBY AIRSPEED INDICATOR
32. STANDBY ATTITUDE INDICATOR
33. STANDBY ALTIMETER
34. RUDDER PEDAL ADJUST RELEASE KNOB
35. MASTER MODE CONTROLS/MARKER BEACON PANEL
36. ATTITUDE DIRECTOR INDICATOR
37. EMERGENCY JETTISON BUTTON
38. STEERING MODE PANEL
39. HORIZONTAL SITUATION INDICATOR
40. EMERGENCY BRAKE/STEERING CONTROL HANDLE
41. ACCELEROMETER
42. ANGLE OF ATTACK INDICATOR
43. AIRSPEED/MACH INDICATOR
44. ARMAMENT CONTROL PANEL
45. PITCH RATIO INDICATOR
46. PITCH RATIO SELECT SWITCH
47. LANDING GEAR CONTROL HANDLE
48. RADIO CALL PANEL
49. FLAP POSITION INDICATOR
50. EMERGENCY LANDING GEAR HANDLE
51. ARRESTING HOOK CONTROL SWITCH

1. LOCK/SHOOT LIGHTS (SOME AIRCRAFT)
2. AIR REFUELING READY LIGHT
3. STANDBY MAGNETIC COMPASS
4. HEAD UP DISPLAY COMBINING GLASS
5. HUD VIDEO AND MICP CONTROL PANEL CAMERA
6. MASTER CAUTION LIGHT
7. MAIN COMMUNICATIONS CONTROL PANEL
8. FIRE WARNING/EXTINGUISHING PANEL
9. VERTICAL SITUATION DISPLAY (VSD)
10. HEAD UP DISPLAY CONTROL PANEL
11. VIDEO TAPE RECORDER CONTROL PANEL, AFTER TO-15-817 GUN SIGHT CAMERA CONTROL PANEL, BEFORE TO-15-817
12. TEWS DISPLAY UNIT
13. CANOPY UNLOCKED WARNING LIGHT
14. COUNTERMEASURES DISPENSER LIGHTS (F-15C 83-0028 THRU 83-0043 AND F-15D 83-0048 THRU 83-0050)
15. HYDRAULIC PRESSURE INDICATORS
16. ENGINE TACHOMETERS
17. ALTIMETER
18. FAN TURBINE INLET TEMPERATURE INDICATORS
19. ENGINE OIL PRESSURE INDICATORS
20. FUEL QUANTITY INDICATOR
21. ENGINE FUEL FLOW INDICATORS
22. VERTICAL VELOCITY INDICATOR
23. EIGHT DAY CLOCK
24. ENGINE EXHAUST NOZZLE POSITION INDICATORS

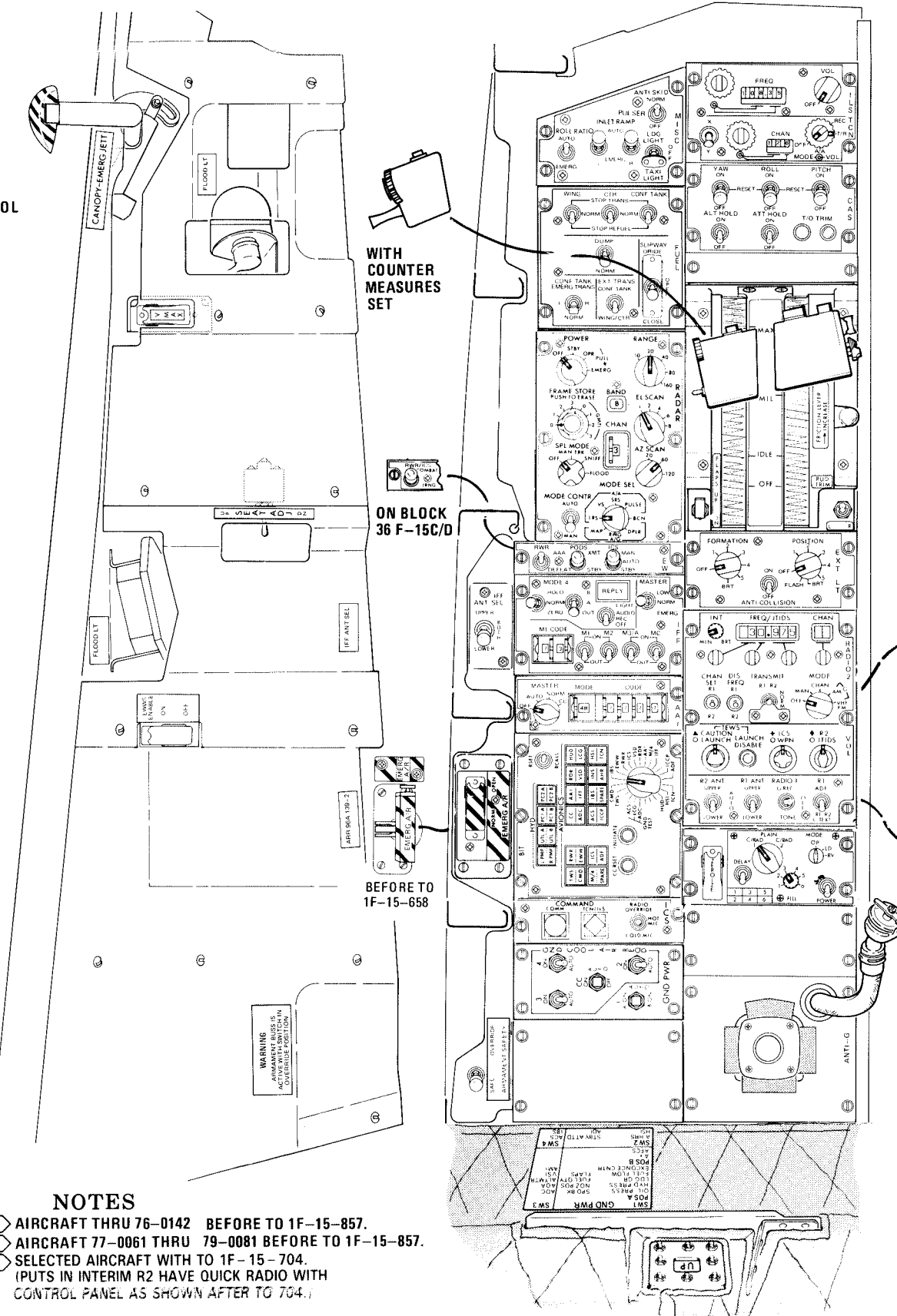
LEFT CONSOLE

1. ILS/TACAN CONTROL PANEL
2. CONTROL AUGMENTATION SYSTEM CONTROL PANEL
3. BLANK
4. THROTTLE QUADRANT
5. EXTERIOR LIGHTS CONTROL PANEL
6. INTEGRATED COMMUNICATIONS CONTROL PANEL
7. BLANK PANEL F-15A/C OR TAKE COMMAND/CS CONTROL PANEL F-15B AND F-15D (THRU 79-0081); KY-58 CONTROL PANEL F-15C/D (80-0002 AND UP)
8. BLANK
9. ANTI-G PANEL
10. BOARDING STEPS POSITION INDICATOR
11. BLANK
12. ARMAMENT SAFETY OVERRIDE SWITCH
13. GROUND POWER PANEL
14. BLANK (F-15A/B/C); TAKE COMMAND/CS CONTROL PANEL (F-15D 80-0054 AND UP)
15. EMERGENCY AIR REFUELING SWITCH/HANDLE
16. BIT PANEL
17. INTERROGATOR CONTROL PANEL
18. IFF CONTROL PANEL
19. IFF ANTENNA SELECT SWITCH
20. EWWS ENABLE SWITCH (SOME F-15A/B ALL F-15C/D)
21. TEWS PANEL
22. SEAT ADJUST SWITCH
23. RADAR CONTROL PANEL
24. VMAX SWITCH
25. FUEL CONTROL PANEL
26. MISCELLANEOUS CONTROL PANEL
27. CANOPY JETTISON HANDLE



NOTES

1. AIRCRAFT THRU 76-0142 BEFORE TO 1F-15-857.
2. AIRCRAFT 77-0061 THRU 79-0081 BEFORE TO 1F-15-857.
3. SELECTED AIRCRAFT WITH TO 1F-15-704. (PUTS IN INTERIM R2 HAVE QUICK RADIO WITH CONTROL PANEL AS SHOWN AFTER TO 704.)



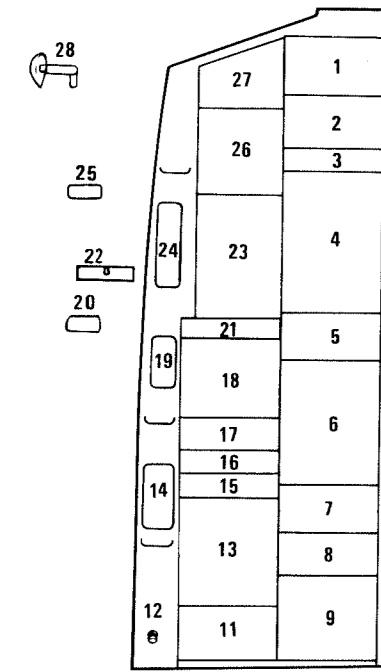
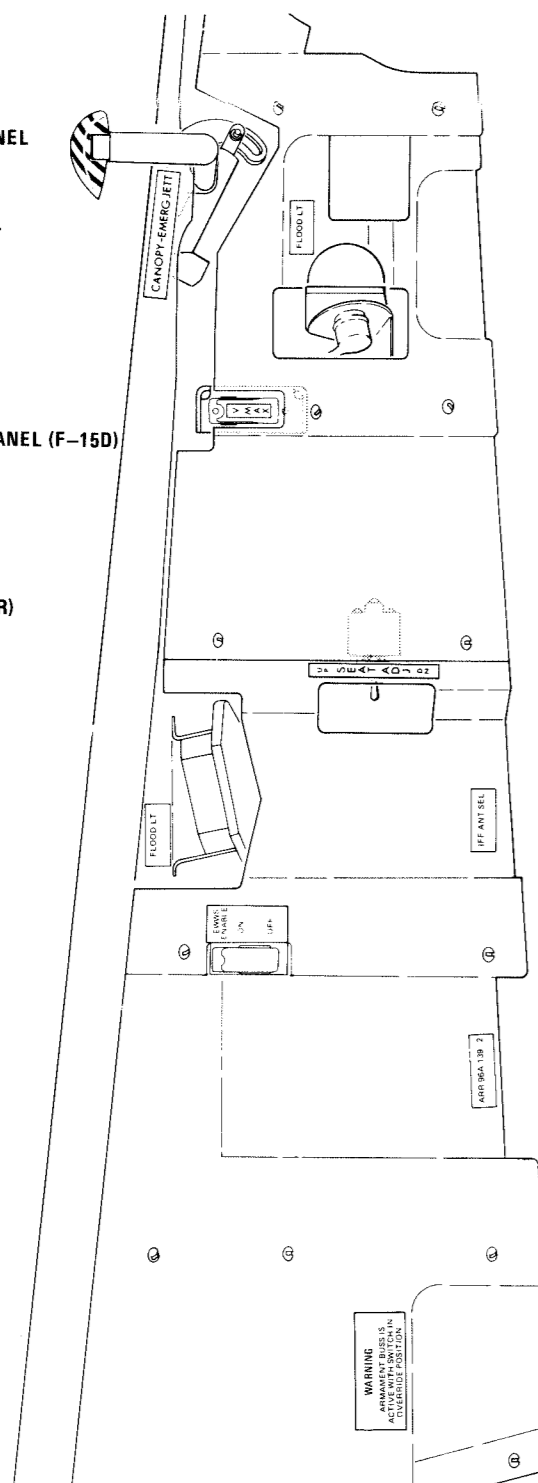
BEFORE TO 1F-15-658

BEFORE TO 1F-15-857

Figure FO-2

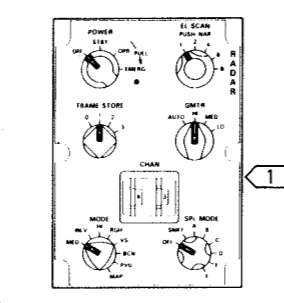
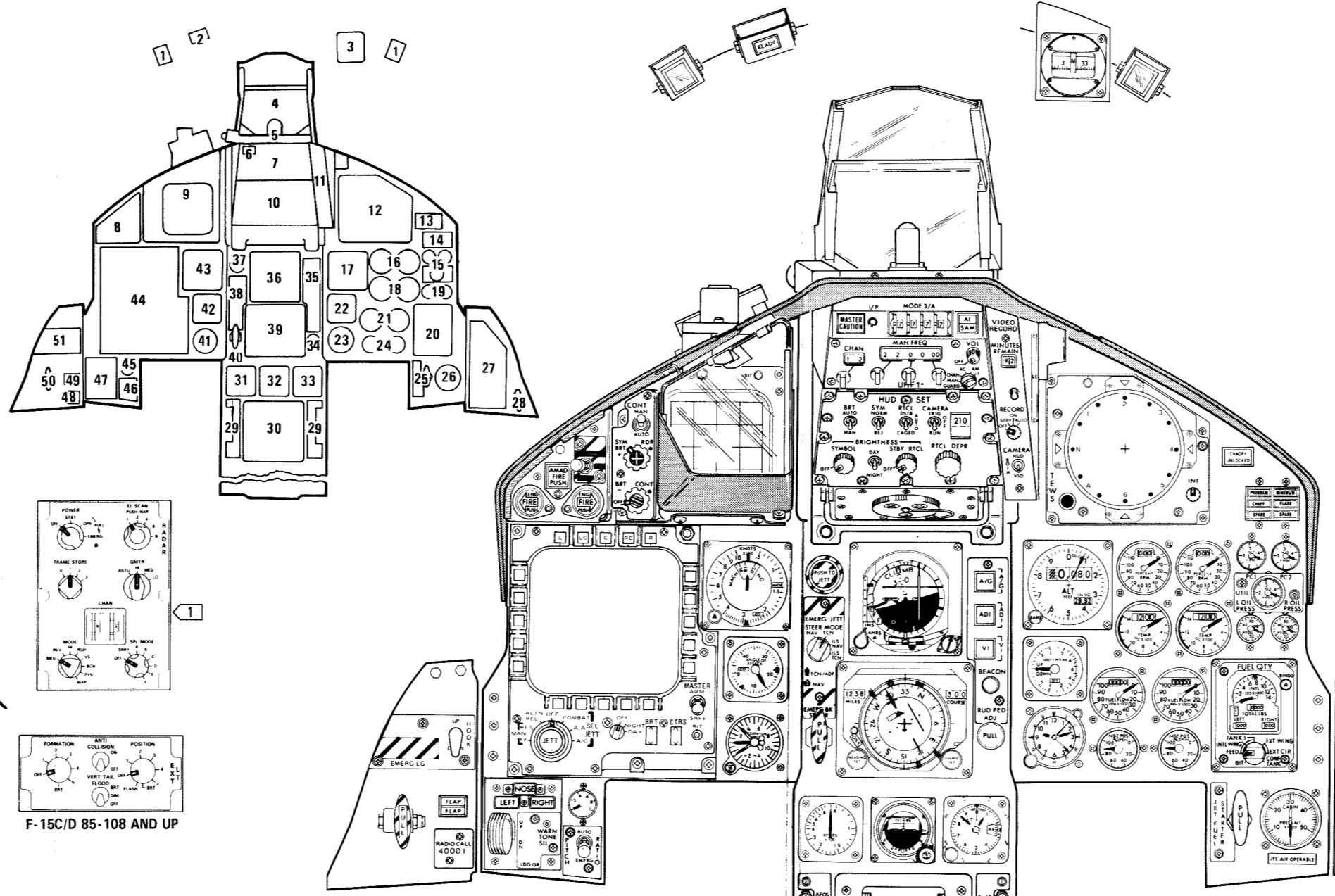
LEFT CONSOLE

1. ILS/TACAN CONTROL PANEL
2. CONTROL AUGMENTATION SYSTEM CONTROL PANEL
3. DATA TRANSFER MODULE RECEPTACLE
4. THROTTLE QUADRANT
5. EXTERIOR LIGHTS CONTROL PANEL
6. INTEGRATED COMMUNICATIONS CONTROL PANEL
7. KY-58 CONTROL PANEL
8. BLANK
9. ANTI-G PANEL
10. BOARDING STEPS POSITION INDICATOR PANEL
11. GROUND POWER PANEL
12. ARMAMENT SAFETY OVERRIDE SWITCH
13. BIT PANEL
14. EMERGENCY AIR REFUELING SWITCH
15. BLANK
16. BLANK (F-15C)-TAKE COMMAND/ICS CONTROL PANEL (F-15D)
17. INTERROGATOR CONTROL PANEL
18. IFF CONTROL PANEL
19. IFF ANTENNA SELECT SWITCH
20. EWWS ENABLE SWITCH
21. TEWS PANEL
22. SEAT ADJUST SWITCH
23. RADAR CONTROL PANEL
24. NON-COOPERATIVE TARGET RECOGNITION (NCTR) ENABLE SWITCH
25. VMAX SWITCH
26. FUEL CONTROL PANEL
27. MISCELLANEOUS CONTROL PANEL
28. CANOPY JETTISON HANDLE

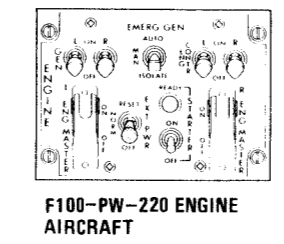


NOTE
1 F-15C 85-0126 AND UP.
F-15D 86-0181 AND UP.

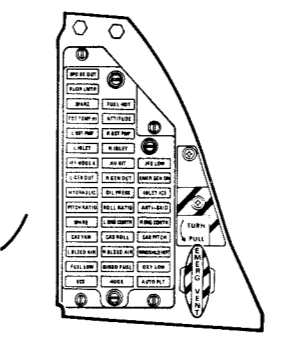
MAIN PANEL



F-15C/D 85-108 AND UP



F100-PW-220 ENGINE AIRCRAFT



F100-PW-220 ENGINE AIRCRAFT

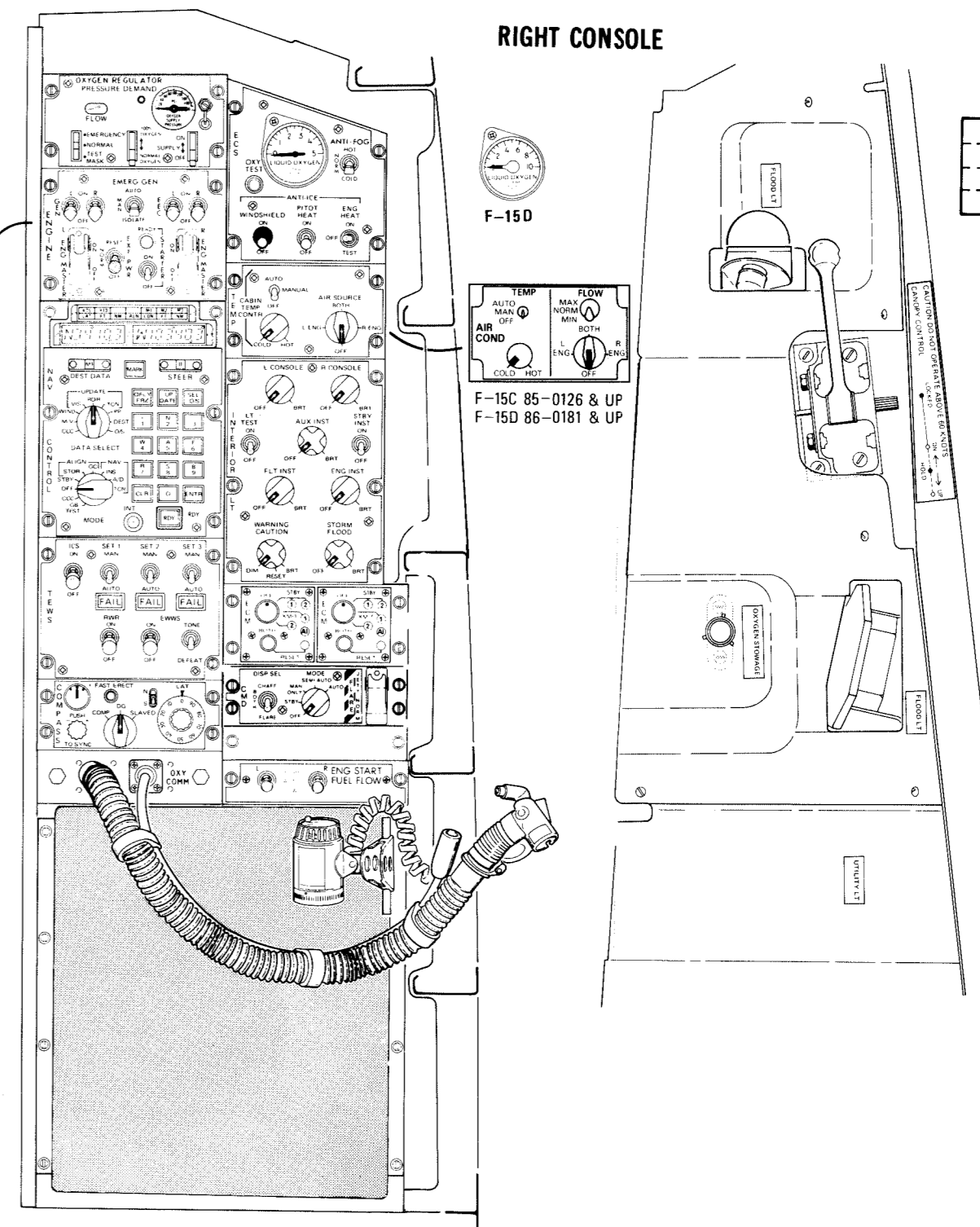
1. LOCK/SHOOT LIGHTS
2. AIR REFUELING READY LIGHT
3. STANDBY MAGNETIC COMPASS
4. HEAD UP DISPLAY COMBINING GLASS
5. HUD VIDEO AND MICP CONTROL PANEL CAMERA
6. MASTER CAUTION LIGHT
7. MAIN COMMUNICATIONS CONTROL PANEL
8. FIRE WARNING/EXTINGUISHING PANEL
9. VERTICAL SITUATION DISPLAY (VSD)
10. HEAD UP DISPLAY CONTROL PANEL
11. VIDEO TAPE RECORDER CONTROL PANEL
12. TEWS DISPLAY UNIT
13. CANOPY UNLOCKED WARNING LIGHT

14. COUNTERMEASURES DISPENSER LIGHTS
15. HYDRAULIC PRESSURE INDICATORS
16. ENGINE TACHOMETERS
17. ALTIMETER
18. FAN TURBINE INLET TEMPERATURE INDICATORS
19. ENGINE OIL PRESSURE INDICATORS
20. FUEL QUANTITY INDICATOR
21. ENGINE FUEL FLOW INDICATORS
22. VERTICAL VELOCITY INDICATOR
23. EIGHT DAY CLOCK
24. ENGINE EXHAUST NOZZLE POSITION INDICATORS
25. JET FUEL STARTER CONTROL HANDLE

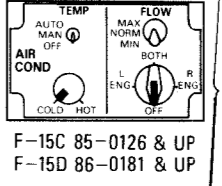
26. CABIN PRESSURE ALTIMETER
27. CAUTION LIGHTS PANEL
28. EMERGENCY VENT CONTROL HANDLE
29. CIRCUIT BREAKER PANELS
30. COCKPIT COOLING AND PRESSURIZATION OUTLET
31. STANDBY AIRSPEED INDICATOR
32. STANDBY ATTITUDE INDICATOR
33. STANDBY ALTIMETER
34. RUDDER PEDAL ADJUST RELEASE KNOB
35. MASTER MODE CONTROLS/MARKER BEACON PANEL
36. ATTITUDE DIRECTOR INDICATOR
37. EMERGENCY JETTISON BUTTON
38. STEERING MODE PANEL

39. HORIZONTAL SITUATION INDICATOR
40. EMERGENCY BRAKE/STEERING CONTROL HANDLE
41. ACCELEROMETER
42. ANGLE OF ATTACK INDICATOR
43. AIRSPEED/MACH INDICATOR
44. MULTI-PURPOSE COLOR DISPLAY (MPCD)
45. PITCH RATIO INDICATOR
46. PITCH RATIO SELECT SWITCH
47. LANDING GEAR CONTROL HANDLE
48. RADIO CALL PANEL
49. FLAP POSITION INDICATOR
50. EMERGENCY LANDING GEAR HANDLE
51. ARRESTING HOOK CONTROL SWITCH

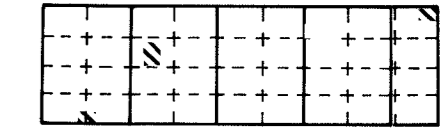
RIGHT CONSOLE



F-15D



F-15C 85-0126 & UP
F-15D 86-0181 & UP



TYPICAL

1. OXYGEN REGULATOR
2. ECS PANEL
3. TEMPERATURE/AIR CONDITIONING PANEL
4. CANOPY CONTROL HANDLE
5. INTERIOR LIGHTS CONTROL PANEL
6. TEWS POD CONTROL PANEL
7. OXYGEN HOSE STOWAGE FITTING
8. COUNTERMEASURES DISPENSER (CMD) CONTROL PANEL
9. BLANK
10. ENGINE START FUEL SWITCHES
11. UTILITY LIGHT
12. STOWAGE COMPARTMENT OXYGEN/COMMUNICATION OUTLET PANEL
13. COMPASS CONTROL PANEL
14. TEWS POWER CONTROL PANEL
15. NAVIGATION CONTROL PANEL
16. ENGINE CONTROL PANEL

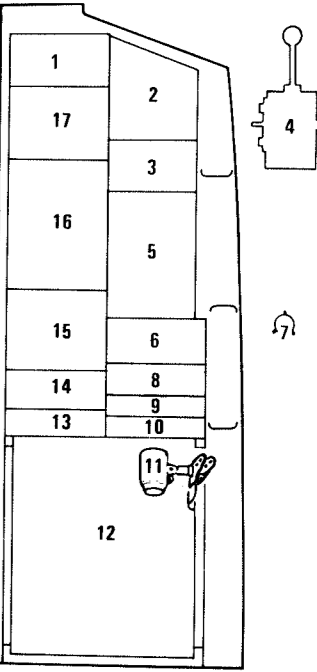
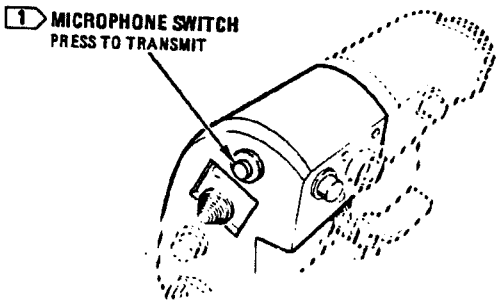
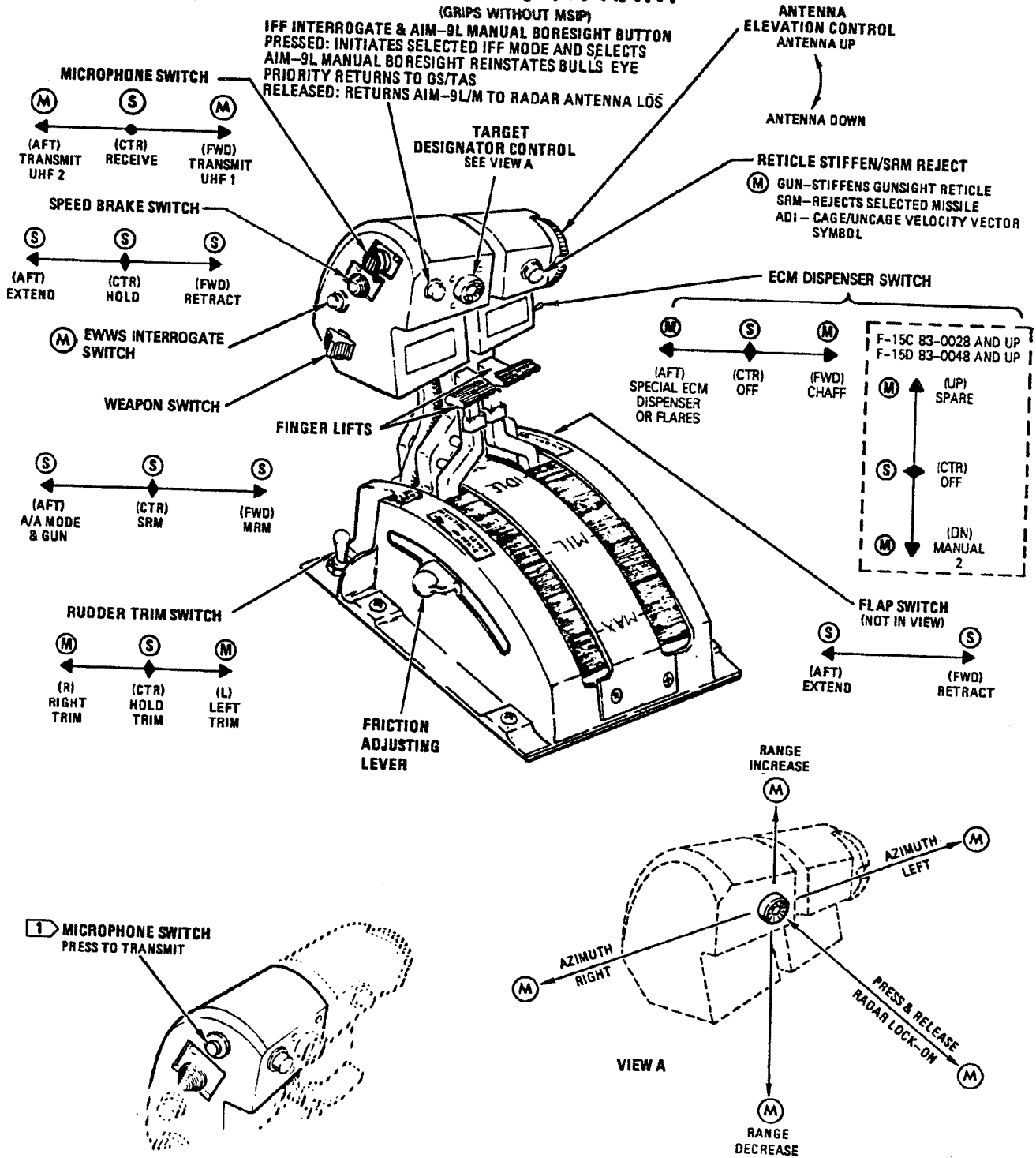


Figure FO-3

COCKPIT

THROTTLE QUADRANT



NOTES

1 F-15A/B AIRPLANES BEFORE TO 1F-15-857

LEGEND

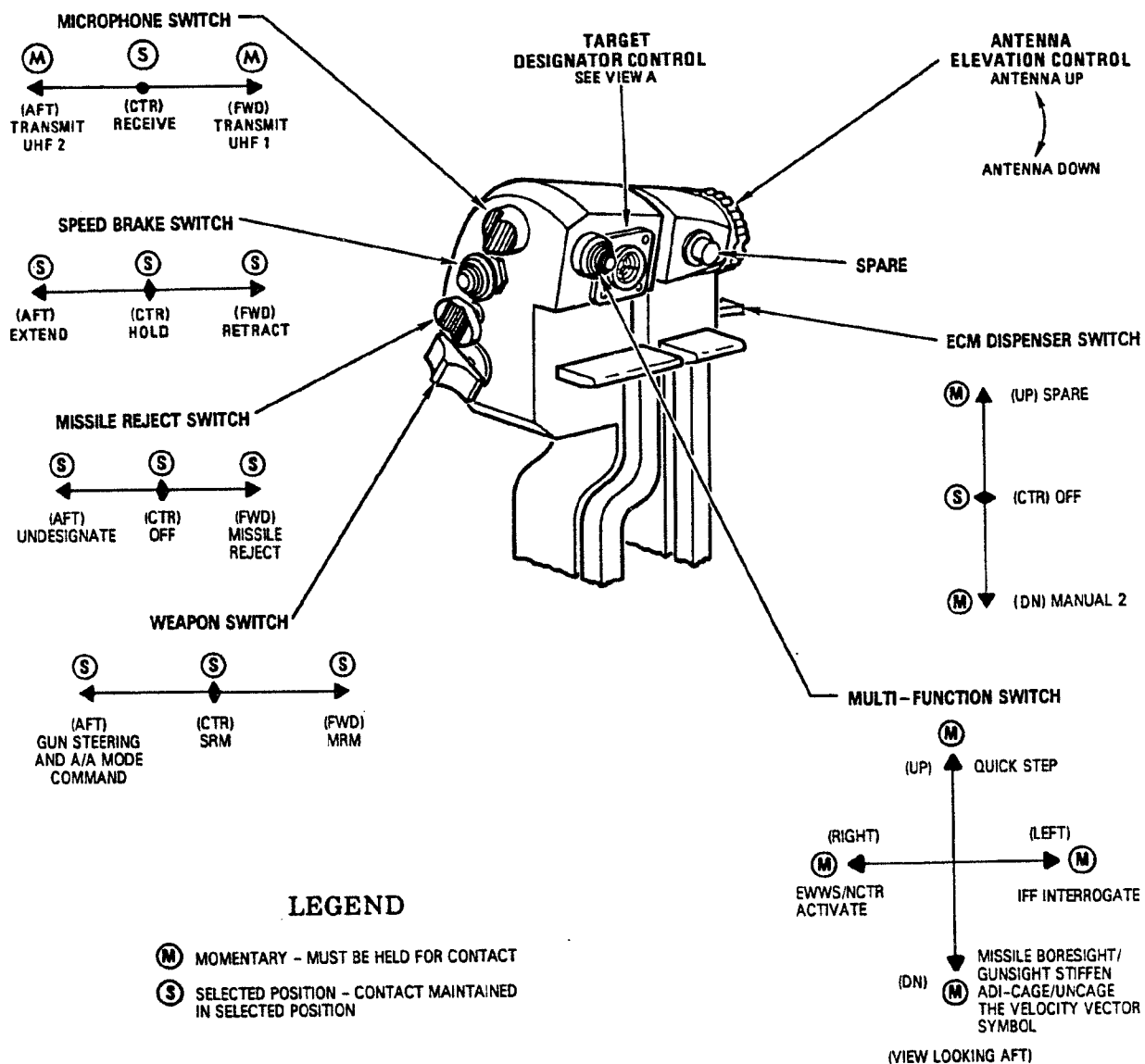
- (M) MOMENTARY-MUST BE HELD FOR CONTACT
- (S) SELECTED POSITION-CONTACT MAINTAINED IN THE SELECTED POSITION

15A-1-(108-1)L

Figure 1-2 (Sheet 1 of 2)

THROTTLE QUADRANT

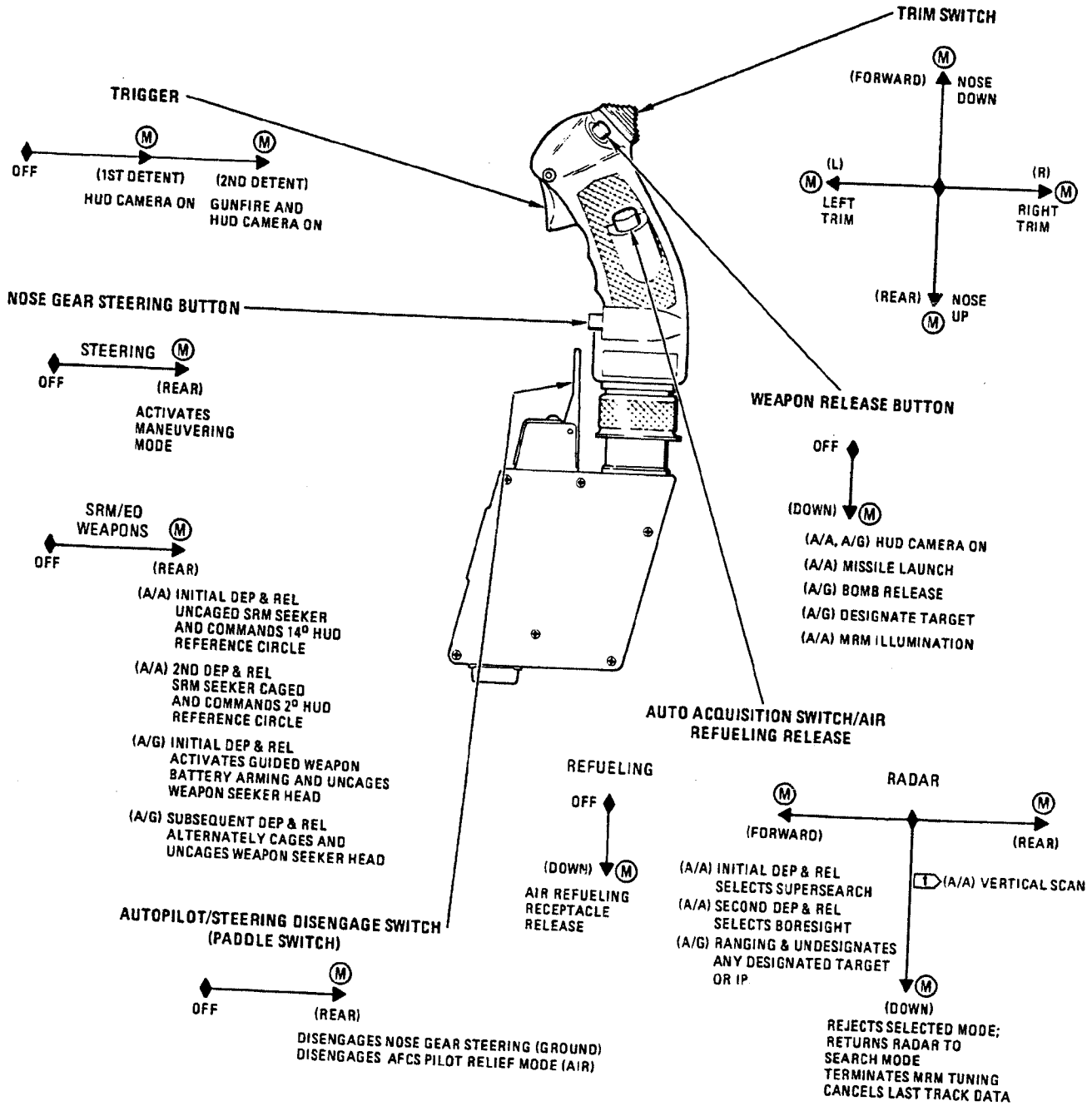
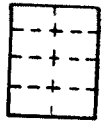
(GRIPS WITH MSIP)



15A-1-1108-2175

Figure 1-2 (Sheet 2)

CONTROL STICK

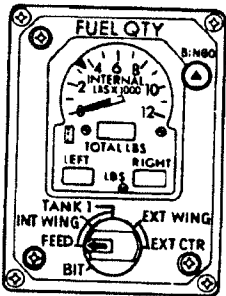


LEGEND

(M) MOMENTARY - MUST BE HELD FOR CONTACT

FUEL QUANTITIES (F-15A/B)

TANK	USABLE FUEL				
	GALLONS	JP-4		JP-8	JP-5
		POUNDS AT 6.5 LB/GAL	POUNDS AT 6.3 LB/GAL	POUNDS AT 6.7 LB/GAL	POUNDS AT 6.8 LB/GAL
TANK 1 1	508	3300 ± 100	3200 ± 100	3400 ± 100	3450 ± 100
RIGHT ENG FEED TANK	234	1500 ± 100	1500 ± 100	1550 ± 100	1590 ± 100
LEFT ENG FEED TANK	184	1200 ± 100	1150 ± 100	1250 ± 100	1250 ± 100
INTERNAL WING TANKS	L	422	2750 ± 200	2650 ± 200	2800 ± 200
	R	422	2750 ± 200	2650 ± 200	2800 ± 200
TOTAL INTERNAL FUEL	1770	11,500 ± 450	11,150 ± 450	11,850 ± 450	12,040 ± 450
EXTERNAL WING TANKS	L	610	3950 ± 250	3840 ± 250	4090 ± 250
	R	610	3950 ± 250	3840 ± 250	4090 ± 250
INTERNAL FUEL PLUS EXTERNAL WING TANKS	2990	19,400 ± 600	18,830 ± 600	20,030 ± 600	20,330 ± 600
EXTERNAL \bar{c} TANK	610	3950 ± 250	3840 ± 250	4090 ± 250	4150 ± 250
INTERNAL FUEL PLUS EXTERNAL \bar{c} TANK	2380	15,450 ± 500	14,990 ± 500	15,940 ± 500	16,180 ± 500
MAXIMUM FUEL LOAD TOTAL INTERNAL PLUS ALL EXTERNAL TANKS	3608	23,350 ± 650	22,670 ± 650	24,120 ± 650	24,480 ± 650

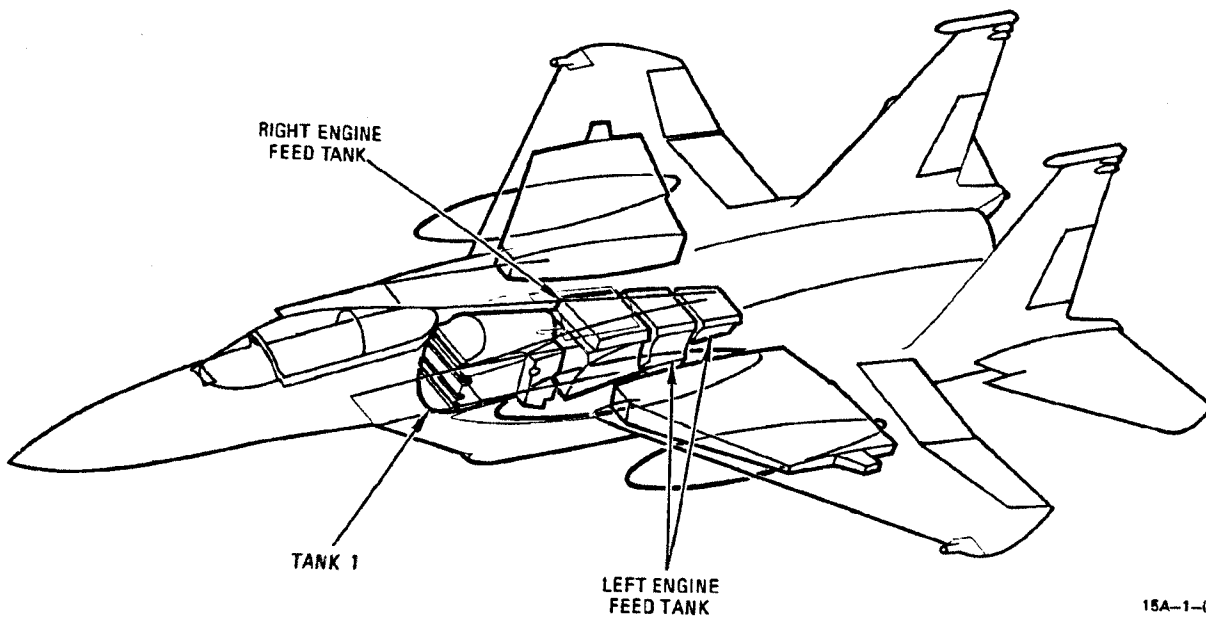


1 ON AIRCRAFT THRU 73-107
SUBTRACT APPROXIMATELY
200 POUNDS FROM THE VALUES
FOR TANK 1.

NOTES

THE FUEL QUANTITIES, IN POUNDS, ARE ROUNDED OFF TO READABLE VALUES OF COUNTER PORTION OF THE FUEL QUANTITY INDICATOR; THEREFORE, THE ACTUAL GALLONS TIME 6.5, 6.3, 6.7 OR 6.8 WILL NOT NECESSARILY AGREE WITH THE POUNDS COLUMN.

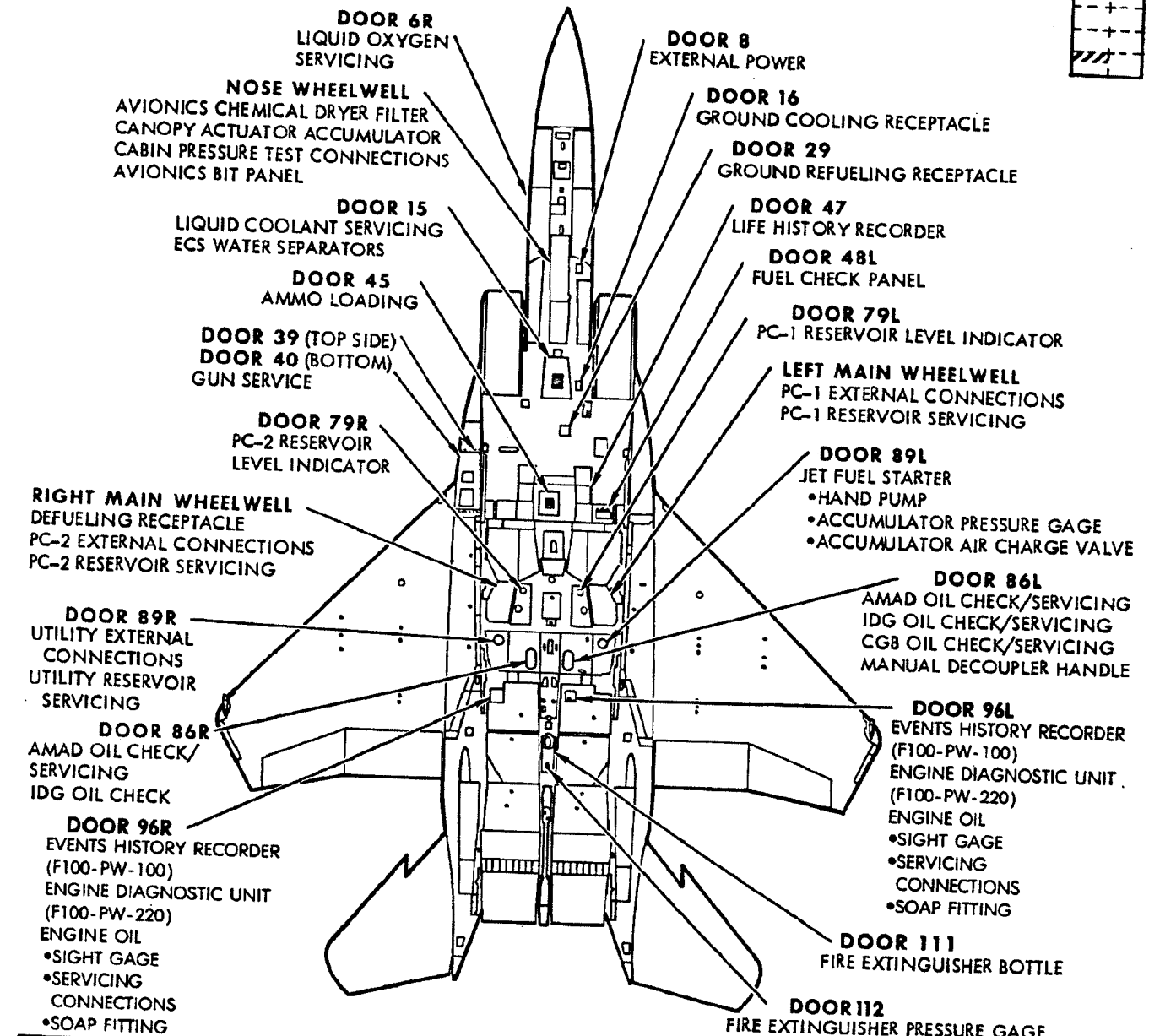
FUEL WEIGHTS ARE BASED ON JP-5 AT 6.8, JP-8 AT 6.7 AND JP-4 AT 6.5 AND 6.3 POUNDS PER GALLON (DIFFERENCES ARE DUE TO MANUFACTURERS ALLOWABLE TOLERANCES) AND 65 DEGREES F



15A-1-(2-1)K

Figure 1-4 (Sheet 1 of 2)

SERVICING DIAGRAM



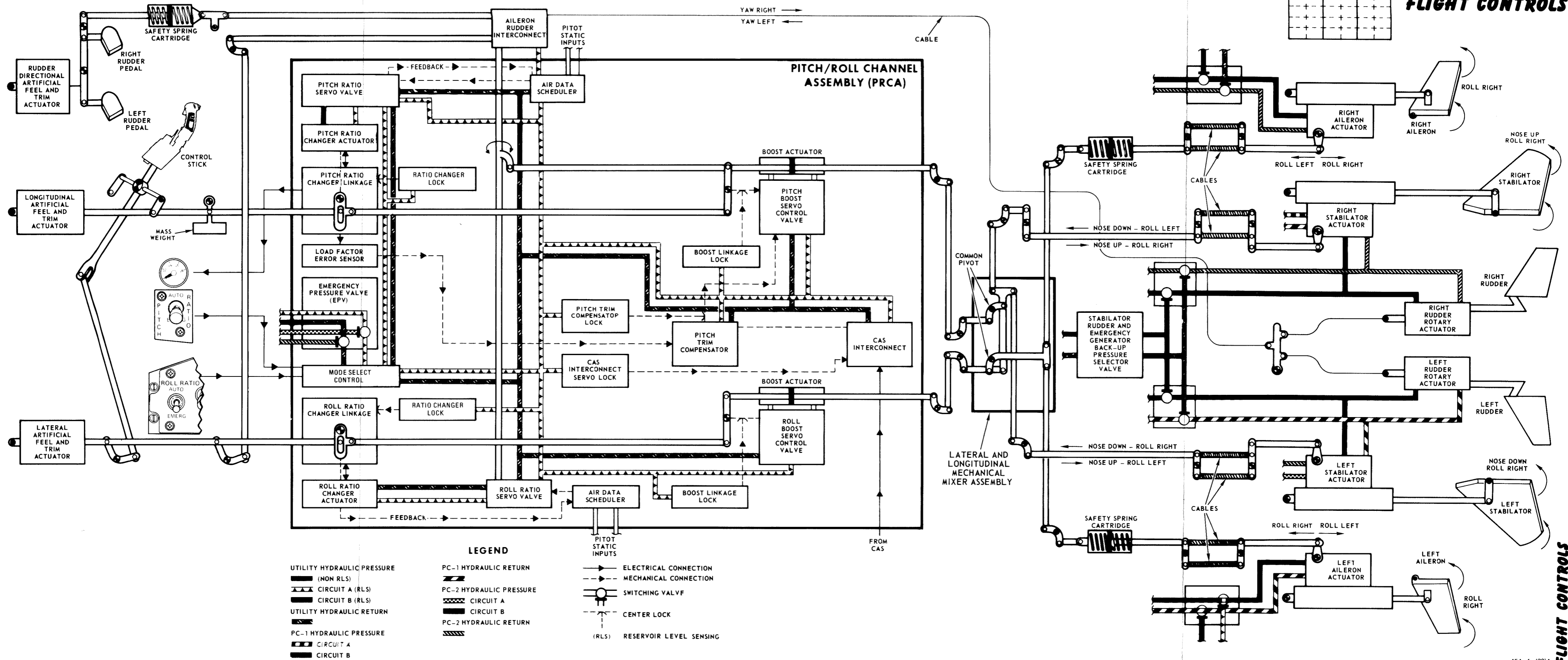
SPECIFICATIONS		USAF	NATO
FUEL	PRIMARY	MIL-T-5624, JP-4	F-40
	ALTERNATE	MIL-T-5624, JP-5	F-43 F-44
		MIL-T-83133, JP-B	F-34
		JET A, JET A-1, JET B	F-35
EXTERNAL ELECTRICAL POWER	115 ± 15 VAC, 400 ± 30 Hz	A/M 32A-60A ONLY	
HYDRAULIC FLUID		MIL-H-5606 MIL-H-38282	H-515 H-537
OXYGEN	LIQUID	MIL-D-27210	

SPECIFICATIONS		USAF	NATO
OIL	TURBINE ENGINE		
	CENTRAL GEAR BOX		
	INTEGRATED DRIVE GENERATOR	MIL-L-7808 (NO ALTERNATE)	D-148
	AMAD		
NITROGEN	GASEOUS	BB-N-411 GRADE A, TYPE I OR II	
OIL	M61A1 GUN	MIL-L-46000	
EXTINGUISHING AGENT	FIRE EXTINGUISHER BOTTLE	HALON-1301	

15A-1-(22175

Figure 1-22

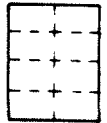
FLIGHT CONTROLS



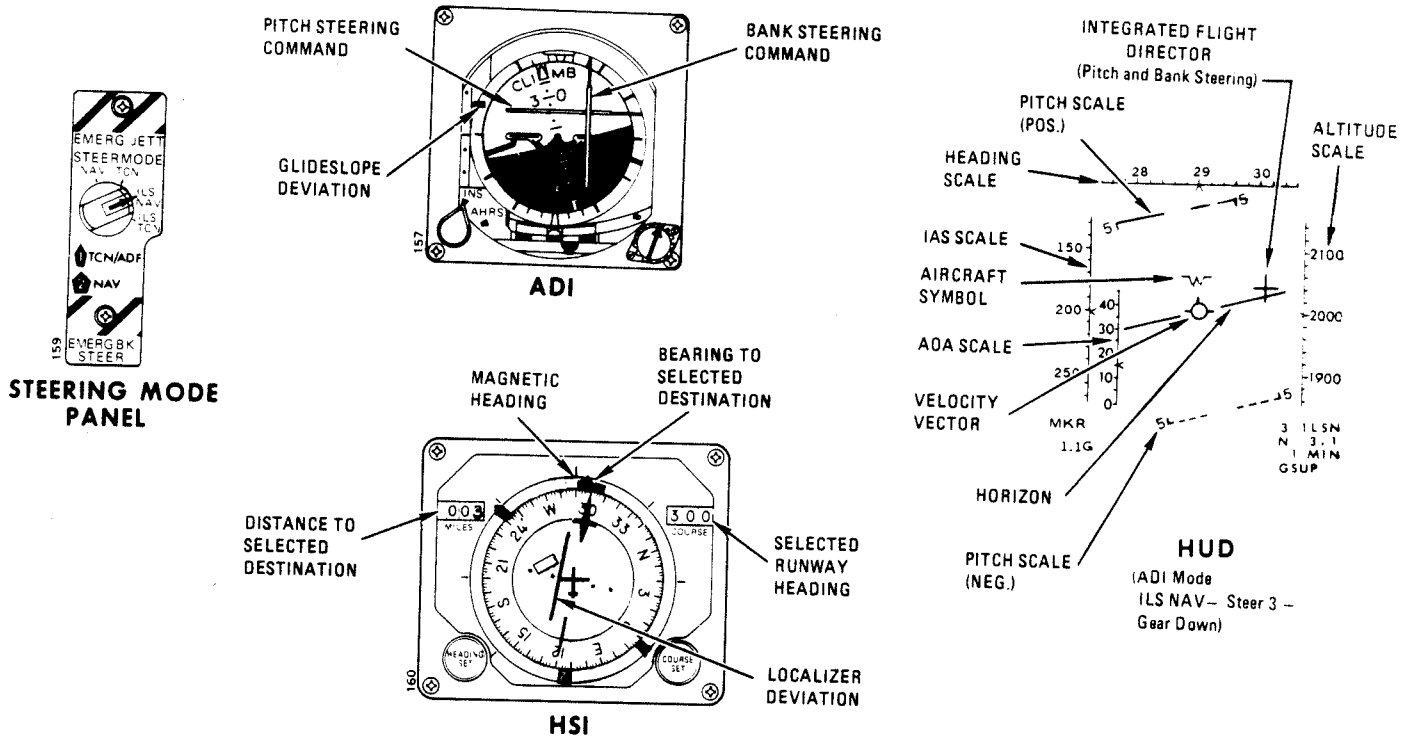
- LEGEND**
- UTILITY HYDRAULIC PRESSURE (NON RLS)
 - CIRCUIT A (RLS)
 - CIRCUIT B (RLS)
 - UTILITY HYDRAULIC RETURN
 - PC-1 HYDRAULIC PRESSURE
 - CIRCUIT A
 - CIRCUIT B
 - PC-2 HYDRAULIC RETURN
 - PC-1 HYDRAULIC RETURN
 - PC-2 HYDRAULIC PRESSURE
 - CIRCUIT A
 - CIRCUIT B
 - PC-2 HYDRAULIC RETURN
 - ELECTRICAL CONNECTION
 - MECHANICAL CONNECTION
 - SWITCHING VALVE
 - CENTER LOCK
 - (RLS) RESERVOIR LEVEL SENSING

Figure FO-8

ILS/NAV AND ILS/TACAN MODE DISPLAYS



ILS/NAV



ILS/TACAN

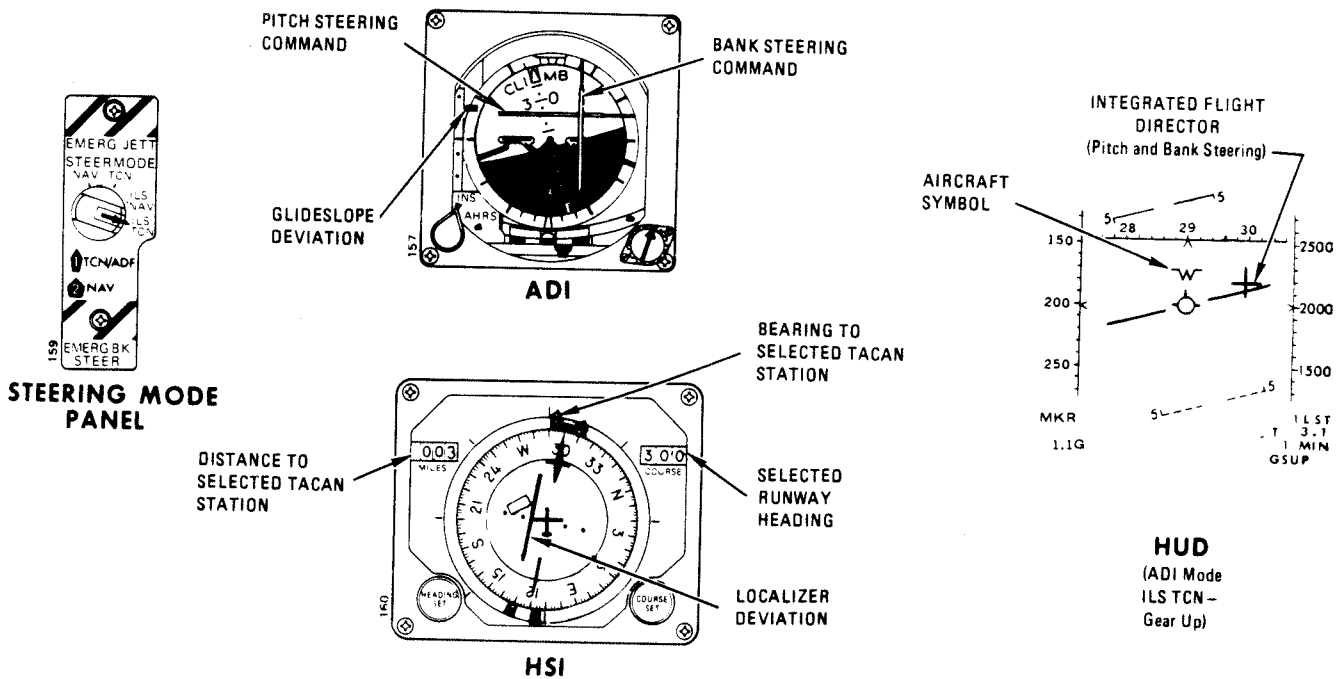


Figure 1-18

MULTI-PURPOSE COLOR DISPLAY (MPCD) CONTROL PANEL

(MENU DISPLAY SELECTED)

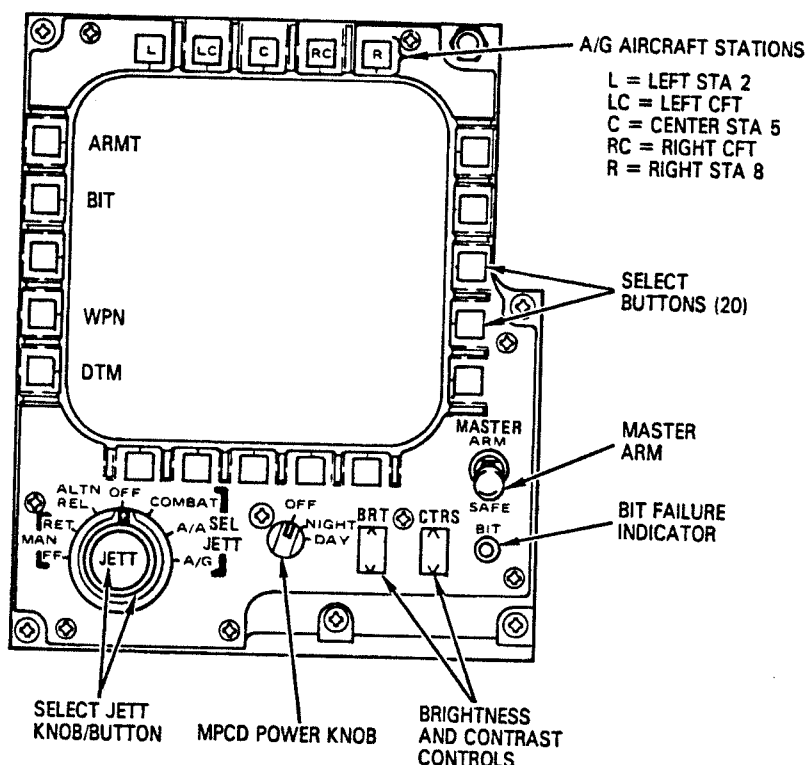


Figure 1-15

15A-1-(232)

the unit is lost, if there is a loss of synchro signal to the pitch or roll servo, if there exists an excessive servo error, or if the ADI is receiving an invalid signal.

HORIZONTAL SITUATION INDICATOR (HSI)

The HSI (figure 1-16) provides a horizontal or plan view of the aircraft with respect to the navigation situation. The aircraft symbol in the center of the HSI is the airplane superimposed on a compass rose. The compass card rotates so that the aircraft heading is always under the top of the lubber line. Index marks are provided every 45° around the perimeter of the compass card. Four modes of navigational operation are displayed on the HSI. These modes are selected by the steering mode knob (see figure 1-17).

Steering Mode Panel

The steering mode panel is on the main instrument panel, adjacent to the ADI. The panel contains a steering mode knob which selects the source of information or mode to be displayed on the HSI, ADI, and HUD (with ADI master mode selected) as shown in figures 1-17 and 1-18.

NAV	Selects navigation computer mode.
TCN	Selects tacan mode.
ILS/NAV	Selects ILS with navigation information displayed.
ILS/TCN	Selects ILS with tacan information displayed.

OVERLOAD WARNING SYSTEM SEVERITY CODE DISPLAY

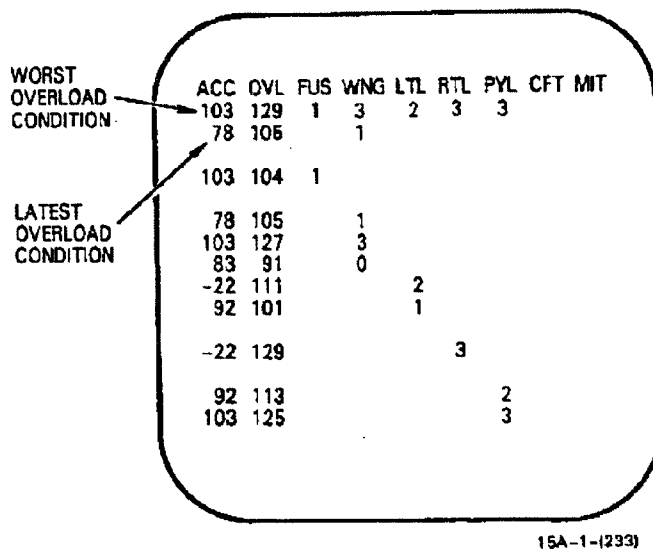


Figure 1-11

- 1. ACC- Normal acceleration load factor. This is a two or three digit number with a decimal before the last digit understood (e.g., 92 is read as 9.2g).
- 2. OVL - Percentage of overload expressed as a whole percentage. The percent overload is related to the component severity code as follows:
 - a. FUS - Fuselage
 - b. WNG - Wing
 - c. LTL - Left tail
 - d. RTL - Right tail
 - e. PYL - Pylon
 - f. CFT - Conformal fuel tanks
 - g. MIT - Mass items

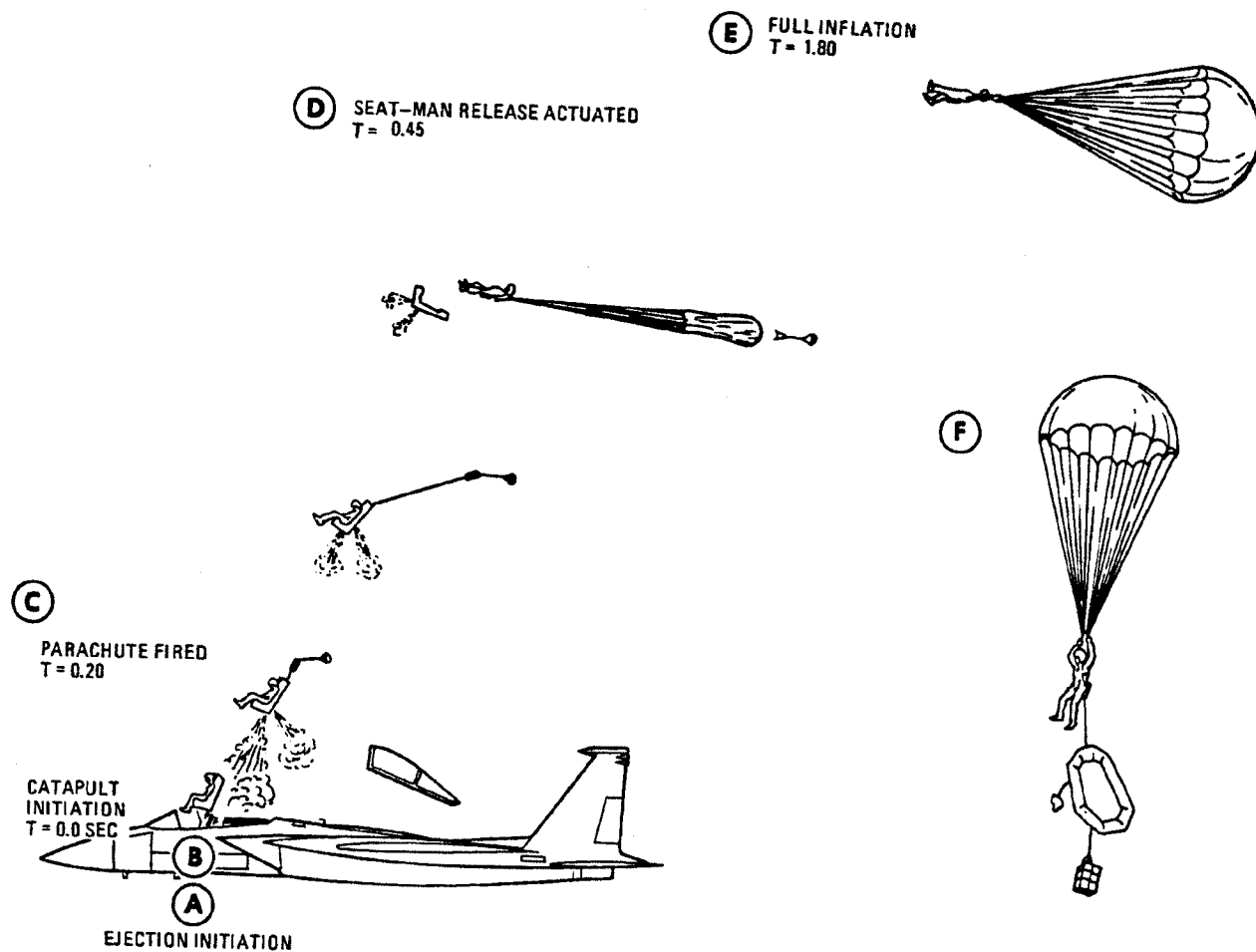
%OVL	SEVERITY CODE LEVEL
0% - 100%	0
101% - 110%	1
111% - 120%	2
121% - 130%	3
131% - 140%	4
141% and above	5

The first line of the display shows the worst (highest) overload condition recorded during the flight. The second line is the latest overload condition encountered. Subsequent lines display overload percentages and severity codes for the listed components. This information is used to determine the required maintenance action. An overload value of exactly 100 will cause a 0 to be displayed, but a value of 100 plus .01 will cause the percent overload value to increase to 101 and cause a 1 to be displayed. All applicable inspections are based on severity codes and not percent overload, which is displayed for information only.

Moving the DATA SELECT knob out of CCC or the DEST DATA out of M2 will return the normal display to the VSD. Stored entries equal to or less than 100% are automatically removed from the CC when the NCI mode switch is moved from ALIGN to NAV. Overloads over 100% latch indicator 72 on the avionics status panel (ASP) and can only be cleared

ACES II EJECTION SEQUENCES

MODE 1 OPERATION 150 KNOTS

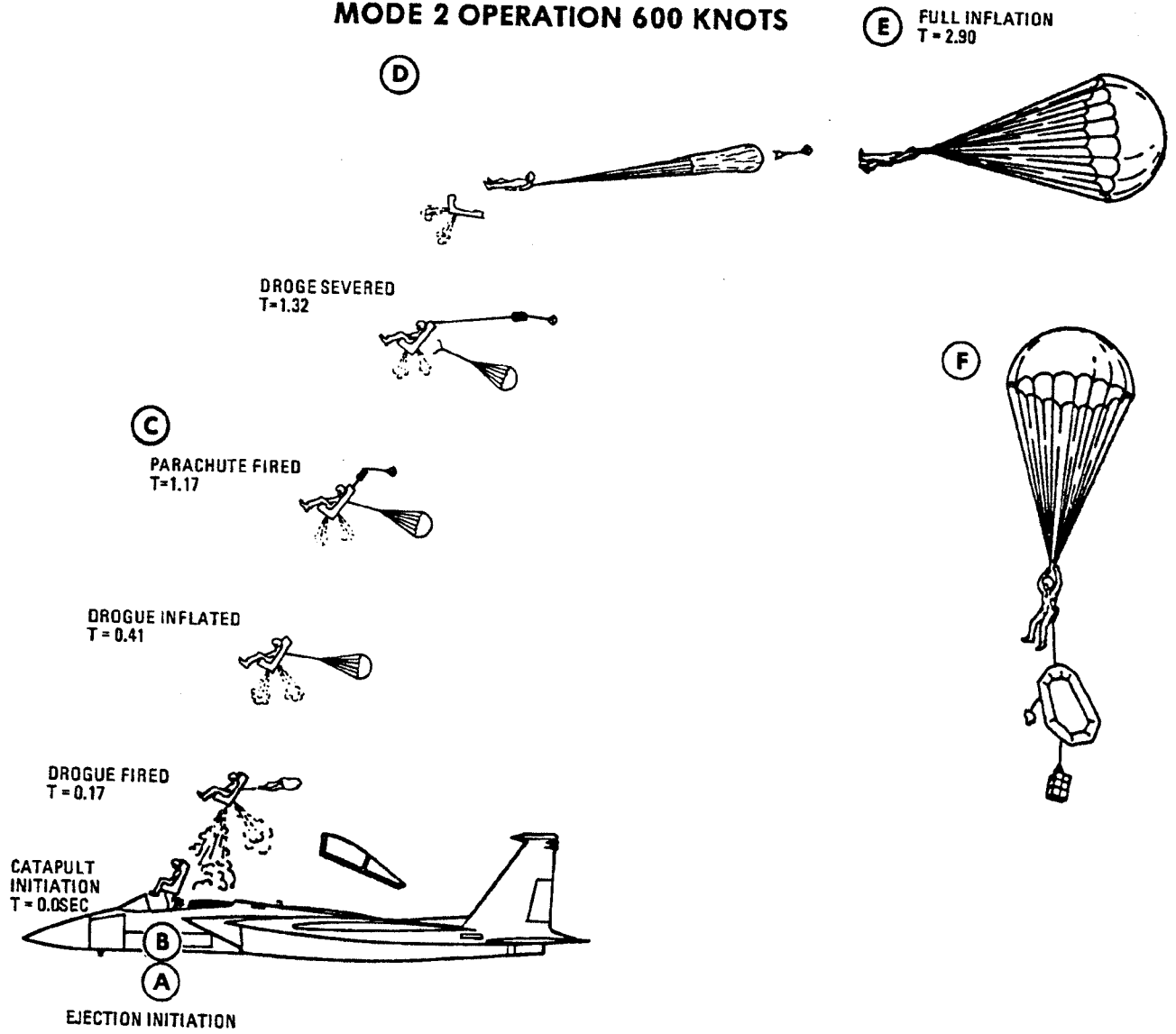


- (A)** EJECTION CONTROL HANDLE PULLED TO ACTUATE SEAT-MOUNTED GAS INITIATOR AND:
- POWERED INERTIA REEL RETRACTS SHOULDER STRAPS
 - CANOPY REMOVER FIRES.
 - CANOPY JETTISONS AND PULLS LANYARD TO FIRE CANOPY ACTUATED INITIATOR.
 - IFF SWITCH ACTUATED.
- (B)** ROCKET CATAPULT FIRES, SEAT MOVES UP RAILS AND:
- RECOVERY SEQUENCER POWER SUPPLY ENERGIZED.
 - COMMUNICATIONS AND SHIPS OXYGEN LINES DISCONNECT.
 - EMERGENCY OXYGEN IS TRIPPED.
 - RECOVERY SEQUENCER SWITCH TRIPPED BY STRIKER PLATE.
 - STAPAC PITCH CONTROL SYSTEM INITIATED.

- (C)** PARACHUTE DEPLOYMENT MORTAR FIRES AS SEAT CLEARS AIRCRAFT.
- (D)** RECOVERY SEQUENCER INITIATES HARNESS RELEASE ACTUATOR AND:
- A. LAP BELT AND SHOULDER HARNESS STRAPS RELEASE FROM SEAT STRUCTURE.
 - B. PILOT IS SEPARATED FROM SEAT.
 - C. RADIO BEACON INITIATED (IF AUTO SELECTED).
- (E)** PARACHUTE FULLY INFLATED
- (F)** SURVIVAL KIT DEPLOYED (PROVIDED AUTO SELECTED ON DEPLOYMENT SELECTOR)

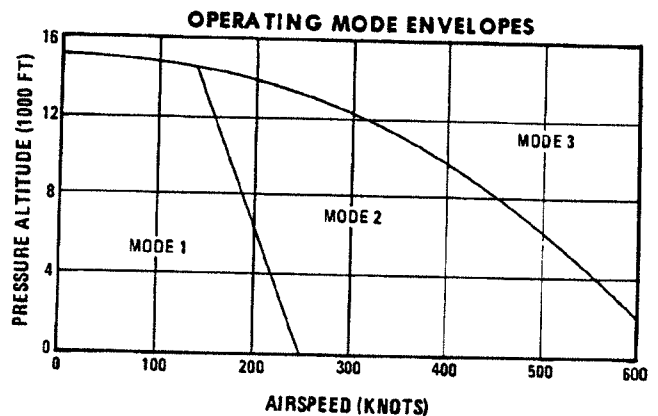
EJECTION SEQUENCES

MODE 2 OPERATION 600 KNOTS



NOTE

- TIMES INDICATED ARE AFTER CATAPULT FIRING. TO DETERMINE TOTAL TIME, A TIME FACTOR FOR THE PERIOD BETWEEN EJECTION HANDLE INITIATION AND CATAPULT FIRING MUST BE ADDED TO THE FIGURES SHOWN. THIS TIME INTERVAL REPRESENTS ESSENTIALLY THE TIME IT TAKES TO REMOVE THE CANOPY AFTER THE EJECTION HANDLE IS PULLED, AND IS APPROXIMATELY 0.3 SECONDS AT ZERO AIRSPEED AND BECOMES SLIGHTLY LESS AS AIRSPEED INCREASES. THERE IS AN ADDITIONAL DELAY OF 0.4 SECONDS BETWEEN REAR AND FRONT SEAT FIRING IN F-15B/D.
- IN MODE 3, WHICH IS DESIGNED FOR HIGH ALTITUDE CONDITIONS, THE DROGUE IS DEPLOYED AS IN MODE 2, BUT MAN-SEAT SEPARATION AND DEPLOYMENT OF THE PARACHUTE ARE DELAYED UNTIL THE PROPER ALTITUDE IS ENCOUNTERED.



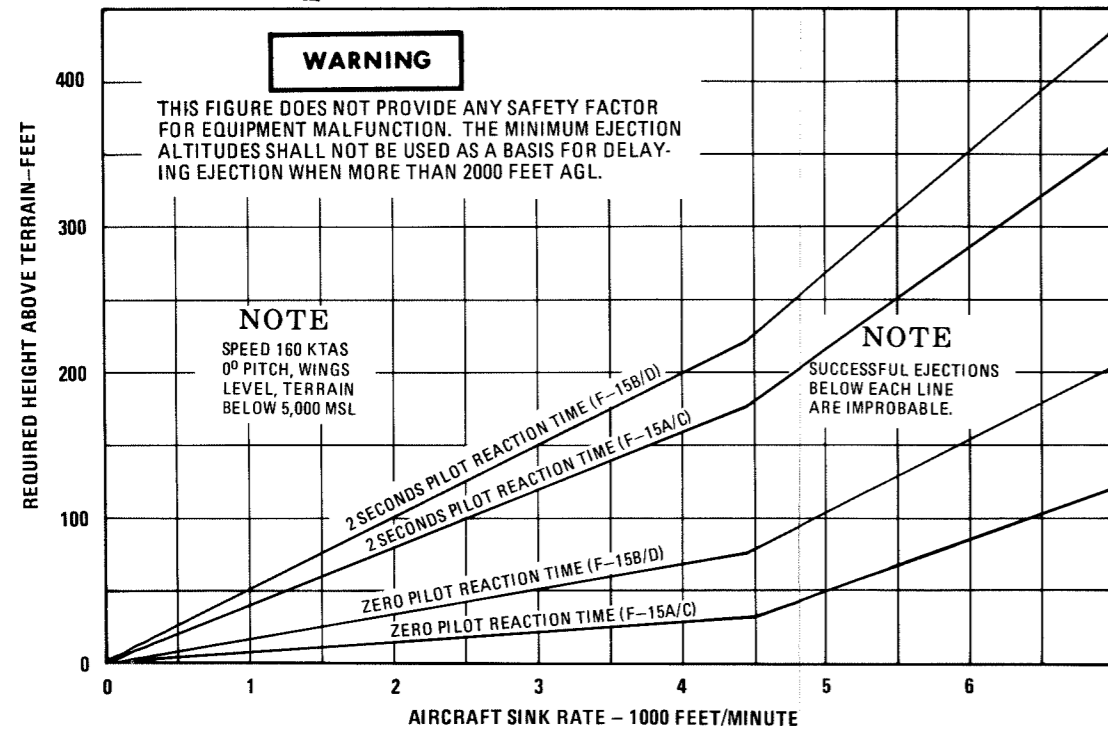
15A-1-(1134-2)B

Figure 1-9 (Sheet 2)

EJECTION SEAT PERFORMANCE CHARTS

MINIMUM EJECTION ALTITUDE VS. SINK RATE

F-15A/C AND F-15B/D EJECTION SEATS



MINIMUM EJECTION ALTITUDE FOR SELECTED FLIGHT CONDITIONS

FLIGHT CONDITIONS	F-15A/C MINIMUM EJECTION ALT (FEET)	F-15B/D MINIMUM EJECTION ALT (FEET)
ZERO SPEED, ZERO ALTITUDE - (CANOPY MUST BE CLOSED AND LOCKED OR COMPLETELY SEPARATED)	0	0
120 KNOTS, 0° PITCH, 60° BANK ¹	0	0 ²
600 KNOTS, 0° PITCH, 0° BANK	0	0
150 KNOTS, 0° PITCH, 180° BANK	280	280
150 KNOTS, 0° PITCH, 0° BANK, 10,000 FPM SINK RATE	240	360
200 KNOTS, -60° PITCH, 0° BANK	600	810
450 KNOTS, -30° PITCH, 0° BANK	570	880
200 KNOTS, -60° PITCH, 60° BANK	650	860 ²
250 KNOTS, -45° PITCH, 180° BANK	780	1000

¹ FOR THIS CASE, IMPACT OCCURS AT THE INSTANT OF SEAT/AIRCRAFT SEPARATION. IN ALL OTHER CASES, CONDITIONS ARE AT SYSTEM INITIATION.

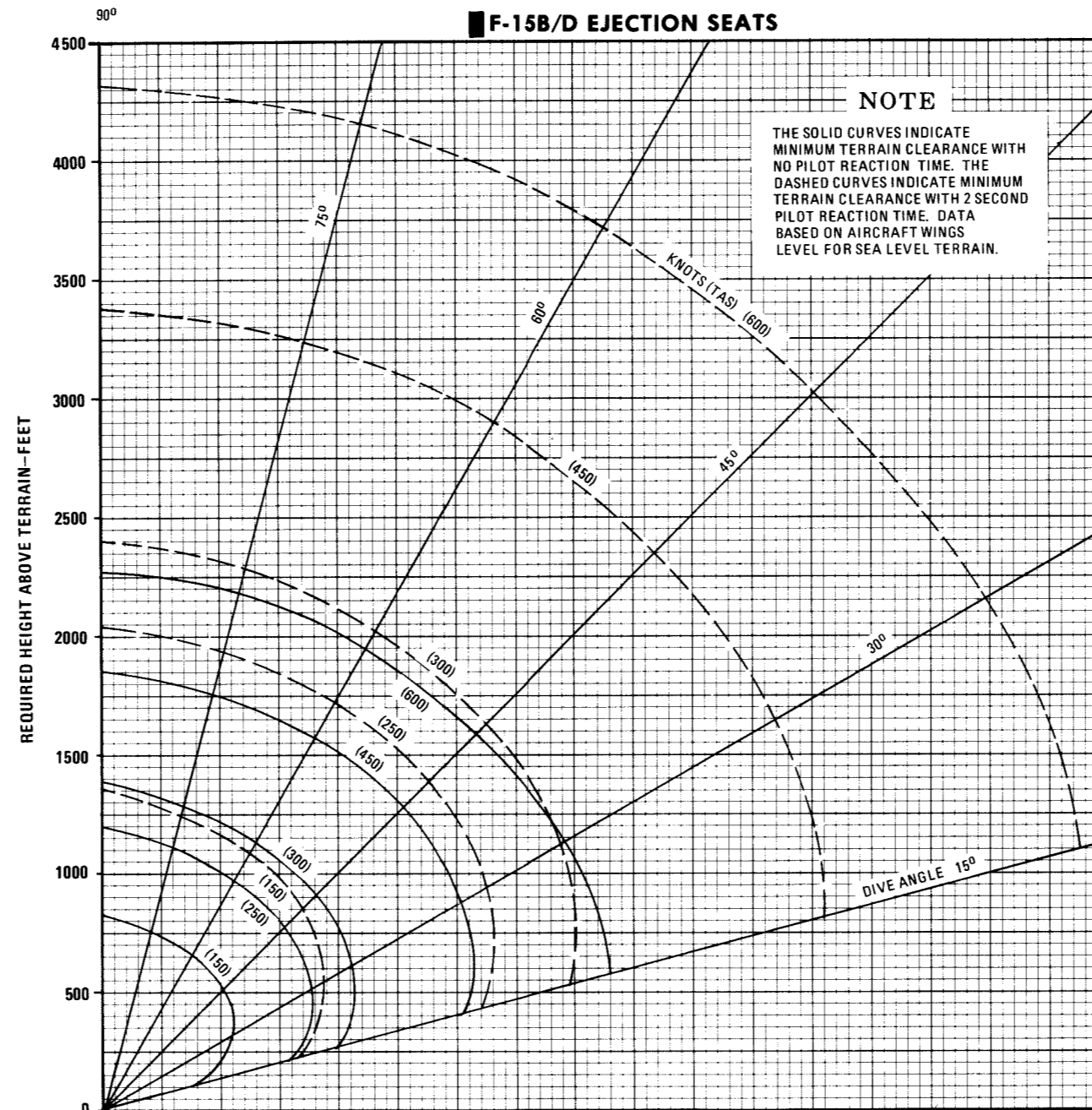
² FOR THESE CASES, RECOVERY PERFORMANCE IS BASED ON THE MOST CRITICAL (FRONT SEAT) ROLL/SEAT TRAJECTORY COMBINATION.

WARNING

THE FIGURE DOES NOT PROVIDE ANY SAFETY FACTOR FOR EQUIPMENT MALFUNCTION OR PILOT REACTION TIME. THE ABOVE MINIMUM EJECTION ALTITUDES SHALL NOT BE USED AS THE BASIS FOR DELAYING EJECTION MORE THAN 2000 FEET AGL.

MINIMUM EJECTION ALTITUDE VS. AIRSPEED AND DIVE ANGLE

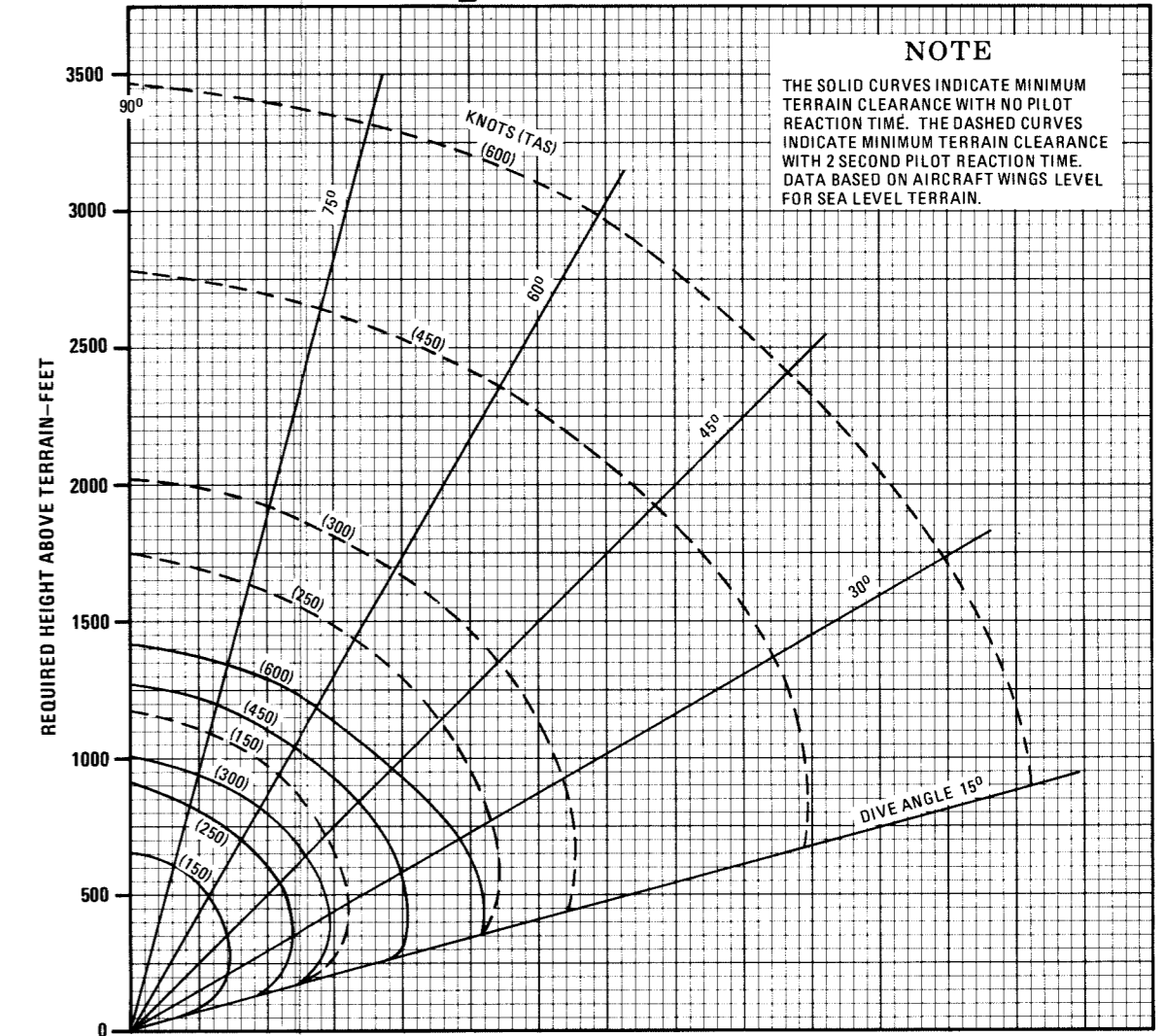
F-15B/D EJECTION SEATS



WARNING

THE FIGURE DOES NOT PROVIDE ANY SAFETY FACTOR FOR EQUIPMENT MALFUNCTION. THE ABOVE MINIMUM EJECTION ALTITUDES SHALL NOT BE USED AS THE BASIS FOR DELAYING EJECTION WHEN MORE THAN 2000 FEET AGL.

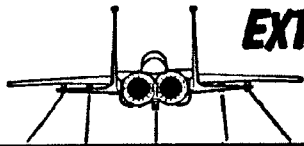
F-15A/C EJECTION SEAT



WARNING

THE FIGURE DOES NOT PROVIDE ANY SAFETY FACTOR FOR EQUIPMENT MALFUNCTION. THE ABOVE MINIMUM EJECTION ALTITUDES SHALL NOT BE USED AS THE BASIS FOR DELAYING EJECTION WHEN MORE THAN 2000 FEET AGL.

Figure FO-10



EXTERNAL STORES LIMITATIONS WITHOUT CFT

WEIGHTS INCLUDE
SUSPENSION EQUIPMENT

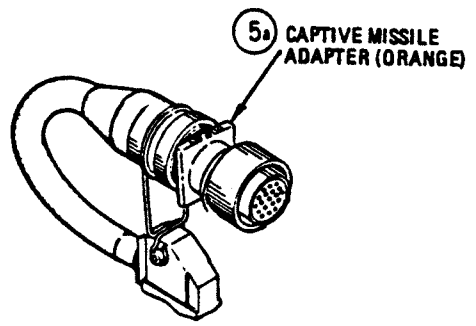
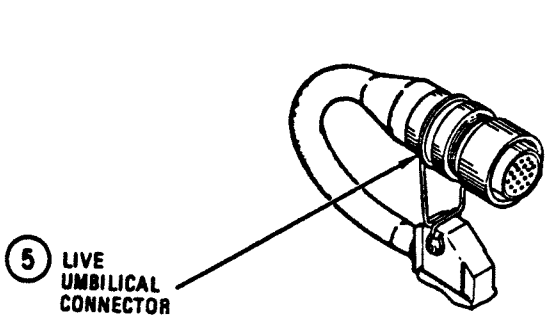
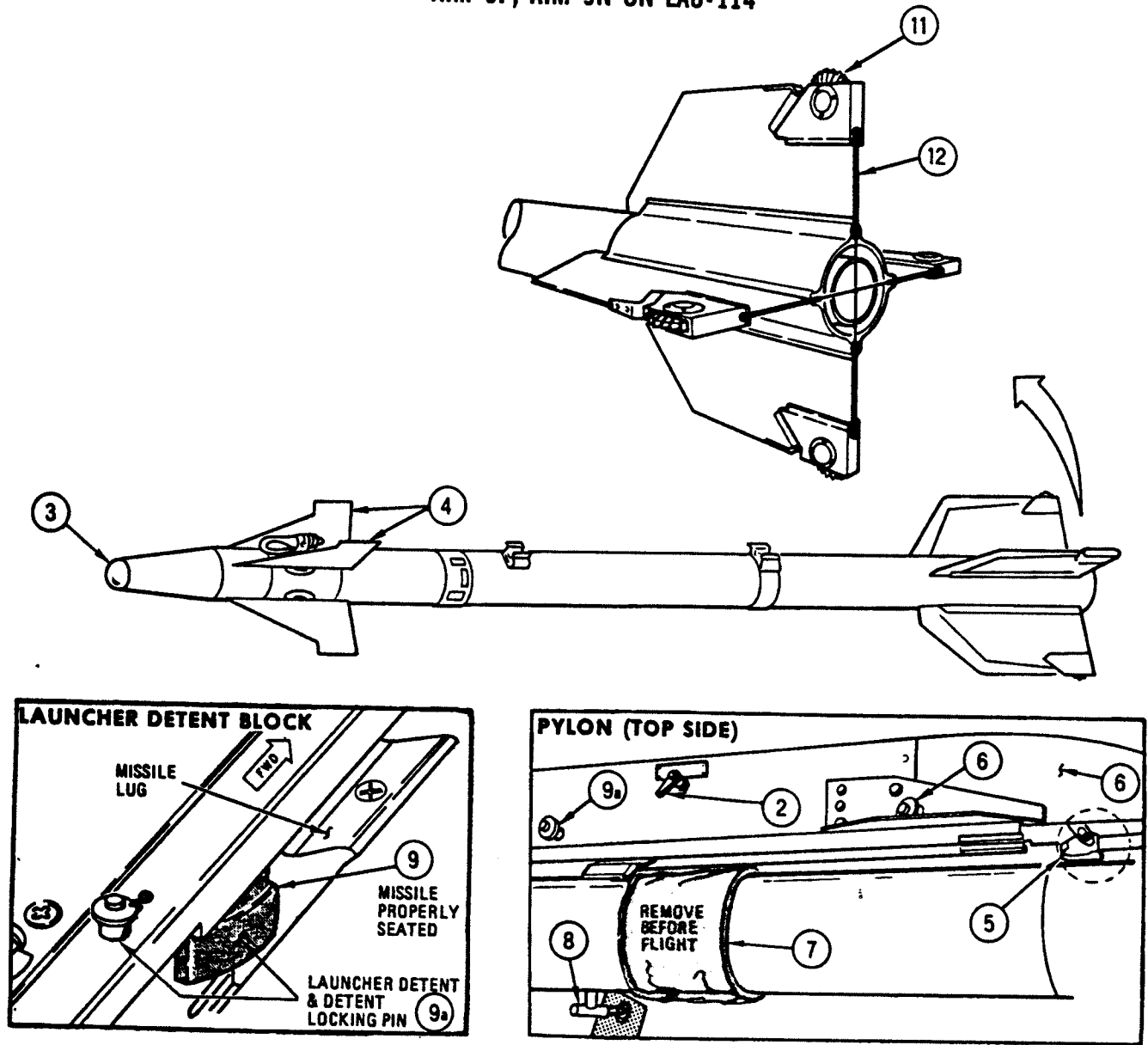
NA - NOT APPLICABLE
NE - NOT ESTABLISHED
BAL - BASIC AIRCRAFT LIMITS

STORE	LINE NUMBER	STATION LOADING AND SUSPENSION					MAXIMUM KCAS OR IMN WHICHEVER IS LESS			ACCELERATION-G				MAX DIVE FOR DEL	STORES CONFIGURATION WEIGHT LBS	REMARKS																		
							CARRIAGE	EMPLOY - MENT	JETTISON	CARRIAGE		EMPLOY - MENT	JETTISON																					
										SYM	UNSYM																							
1	2	5	8	9																														
AIM-9P AIM-9P-1 Missiles	1		✖ ① ② ③ ④		✖ ① ② ③ ④				BAL	BAL	600 2.3 ⑤	BAL	BAL	-0.5 to +7.33	+0.5 to +2.0 ⑤	NA	1686 ⑥	① Combined carriage between line numbers 1, 2, & 3 is prohibited. ② Adapters without launchers authorized if covers installed. ③ USAF approved dacron cord fix to prevent rolleron uncaging is mandatory on AIM-9P series missiles. ④ Wings without rollerons, guide vanes dampers, and cager assemblies may be used on the CATM-9L/M training missile if all four wings have these parts removed. ⑤ Jettison limit is for pylon jettison only. ⑥ Subtract 690 pounds from stores configuration weight and 6.6 from total drag index if other inboard pylon mounted stores are loaded.																
AIM-9P-2 AIM-9P-4 Missiles	2															1726 ⑥																		
AIM-9L CATM-9L/M-1 CATM-9L/M-2 AIM-9M Missiles	3															1786 ⑥																		
		NOTE: AIM-9 series missiles may be carried with any combination loading on stations 2, 5, & 8.																																
AIM-7F AIM-7M Missiles	4	MISSILE STATIONS <table border="1" style="width:100%; text-align:center;"> <tr> <td></td> <td>3</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>FWD</td> <td>✖</td> <td></td> <td></td> <td>✖</td> </tr> <tr> <td>AFT</td> <td></td> <td>✖</td> <td>✖</td> <td></td> </tr> </table>						3	4	6	7	FWD	✖			✖	AFT		✖	✖		BAL ⑦	150 TO 800 2.3	1.0 ⑧	BAL	BAL		BAL	BAL	-0.5 to +7.33	+0.5 to +3.0 ⑧	NA	2040	⑦ Carriage of dummy training missile prohibited ⑧ Jettison between 250-350 knots, 1g, when tanks or AG weapons on stations 2 & 8. <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">CAUTION</div> <ul style="list-style-type: none"> ● With tanks or AG weapons on stations 2 or 8 employment of aft AIM-7 missiles is prohibited within the following parameters: <ul style="list-style-type: none"> a. At or below 1g. b. At or below 2g below 18,000 feet and above 465 knots. ● An aft missile will not be free of possible wing store interference until about 1 1/2 seconds after pressing the weapon release button.
	3	4	6	7																														
FWD	✖			✖																														
AFT		✖	✖																															
NOTE: AIM-7 series missiles may be carried with any combination loading on stations 2, 5, & 8.																																		
SUU-60/A C _L Pylon	5								BAL	NA	700 1.4	BAL	BAL	NA	+0.5 to +2.0	NA	296																	
SUU-59/A Inboard Pylon	6								BAL	NA	1.0	BAL	BAL	NA	+0.5 to +2.0	NA	690																	
SUU-60A SUU-59A	7								BAL	NA	1.0	BAL	BAL	NA	+0.5 to +2.0	NA	886																	

Figure 5-7(Sheet 1 of 36)

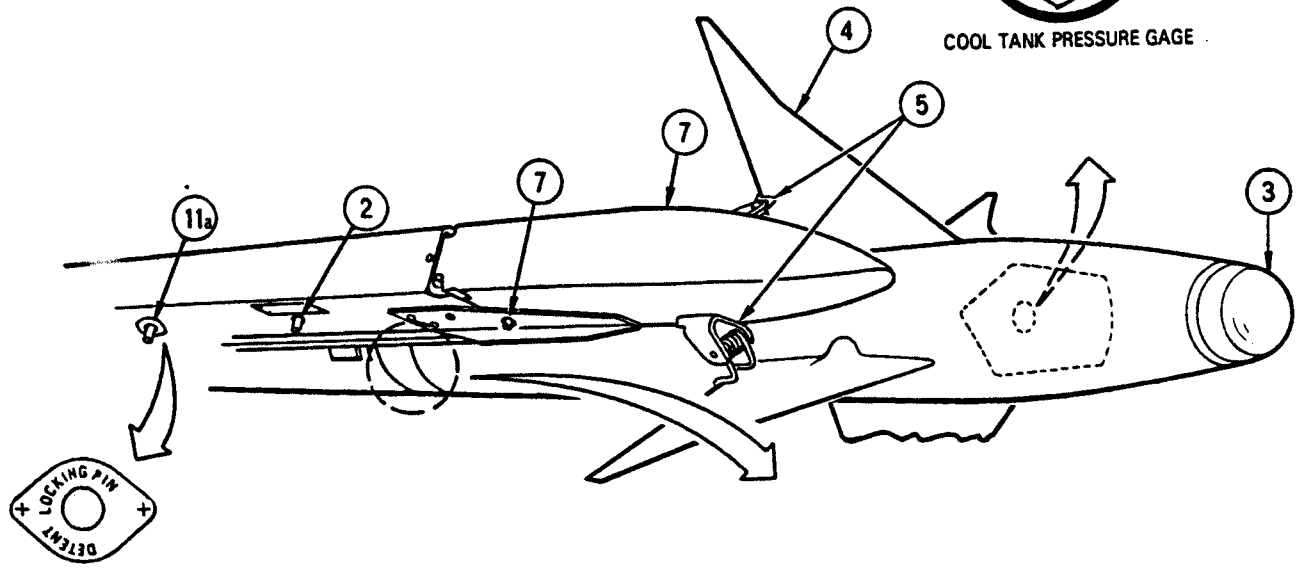
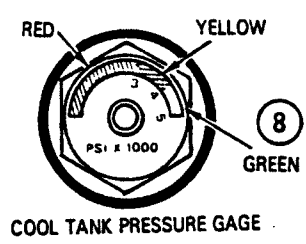
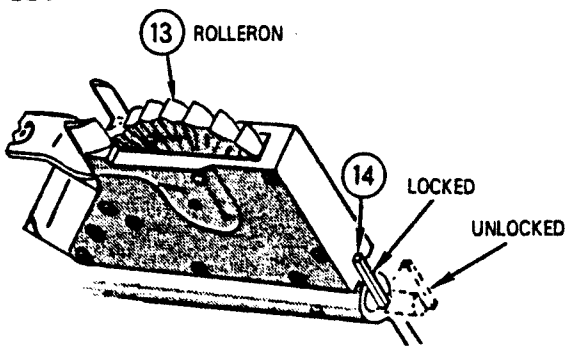
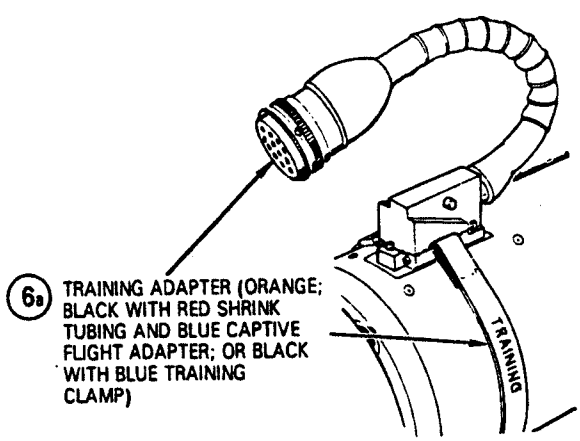
15A-1-117-1/75

EXTERIOR INSPECTION (Continued)
AIM-9P, AIM-9N ON LAU-114

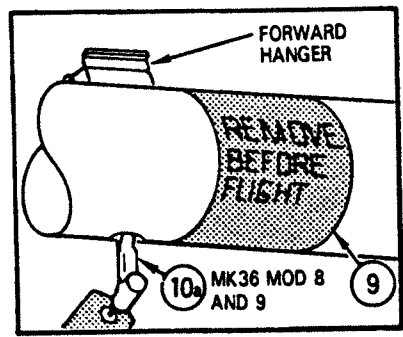
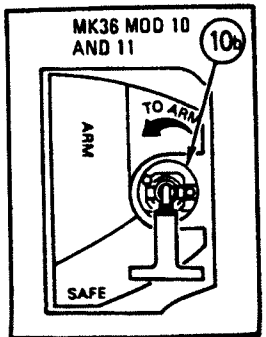
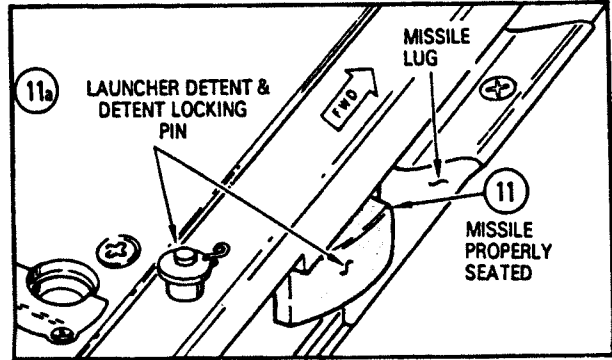


EXTERIOR INSPECTION (Continued)

AIM-9L/M ON LAU-114

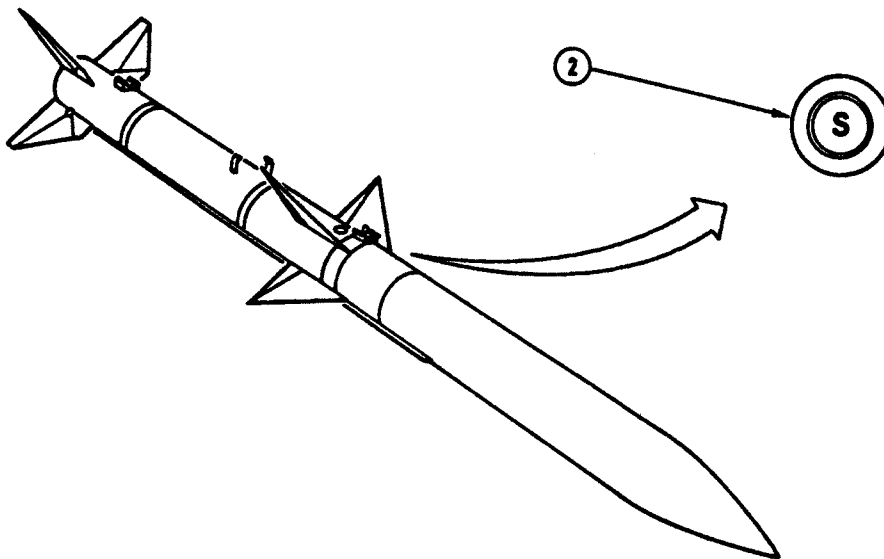


LAUNCHER DETENT BLOCK



**EXTERIOR INSPECTION
AIM-120 ON LAU-106A/A (MSIP)**

1. Radome, wings, fins - CLEAN AND UNDAMAGED
2. Propulsion arm/fire device - S (Safe)
3. Rack safety pin - INSTALLED
4. Ejector cartridges - INSTALLED
5. Ejector feet - POSITIONED
6. Forward ejector missile pad - INSTALLED
7. Umbilical (buffer) connector - INSTALLED, NO PINS SHOWING



15C-34-1-1-(210-1)31

STATION DIAGRAM

A/A WEAPONS

- AIM-120 STATIONS:
3, 4, 6, 7 OR 3C, 4C,
6C, 7C AND 2A, 2B, 8A, 8B
- AIM-7 STATIONS:
3, 4, 6, 7 OR 3C, 4C,
6C, 7C
- AIM-9 STATIONS:
2A, 2B, 8A, 8B

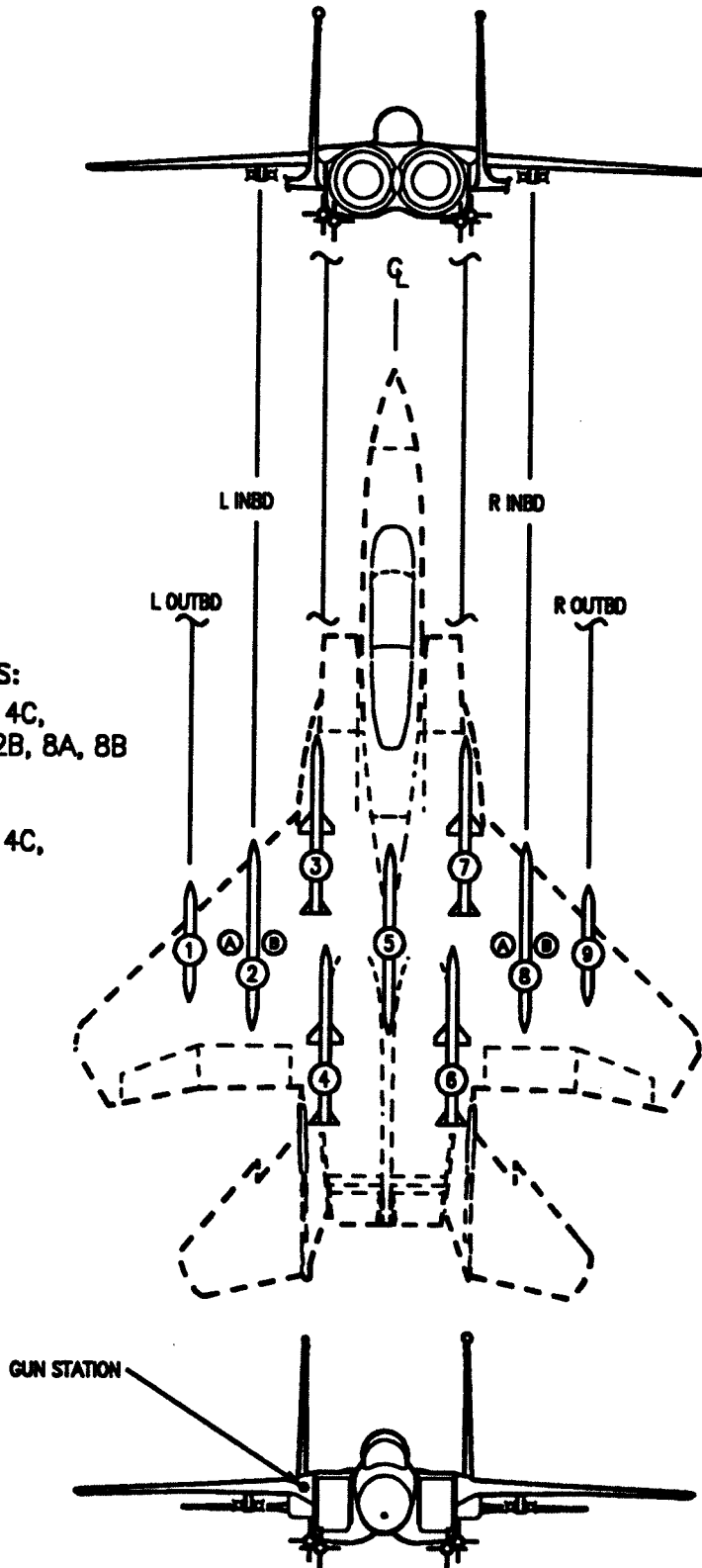
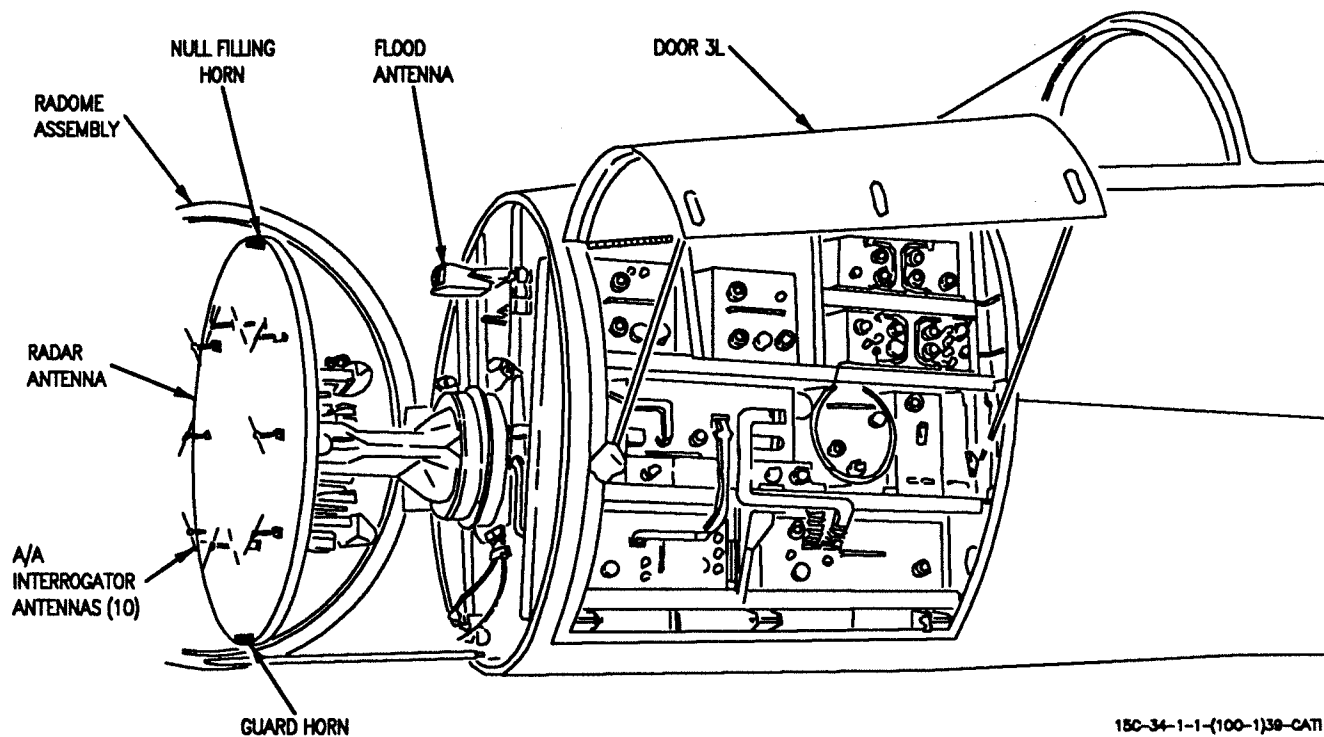


Figure 1-1

RADAR SET INSTALLATION



15C-34-1-1-(100-1)38-CATI

Figure 1-25

FIRE CONTROL & DISPLAY SYSTEMS

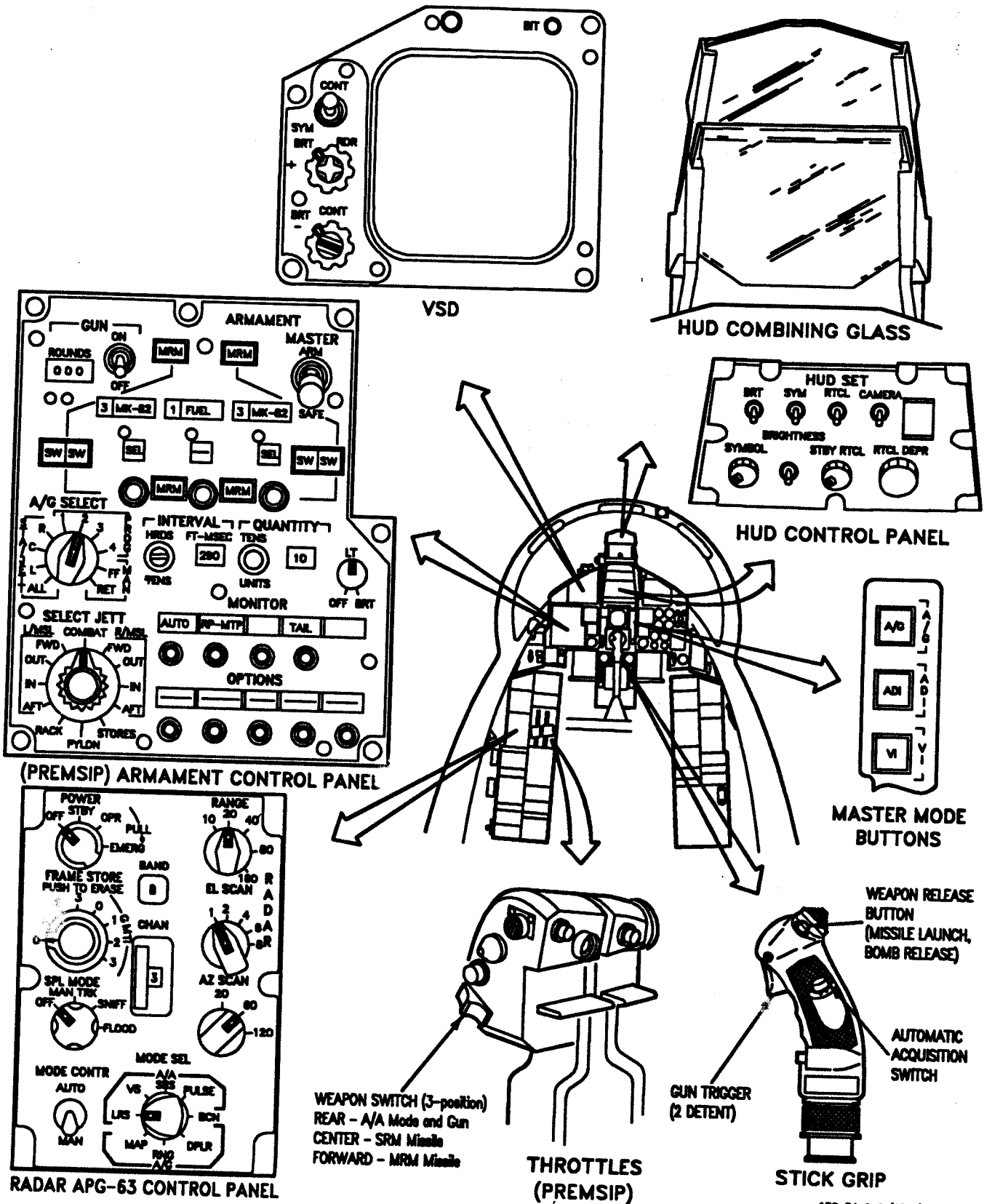


Figure 1-2 (Sheet 1 of 2)

150-34-1-1-(17-1)30-CAT1

LONG RANGE SEARCH

INTERLEAVED PRF

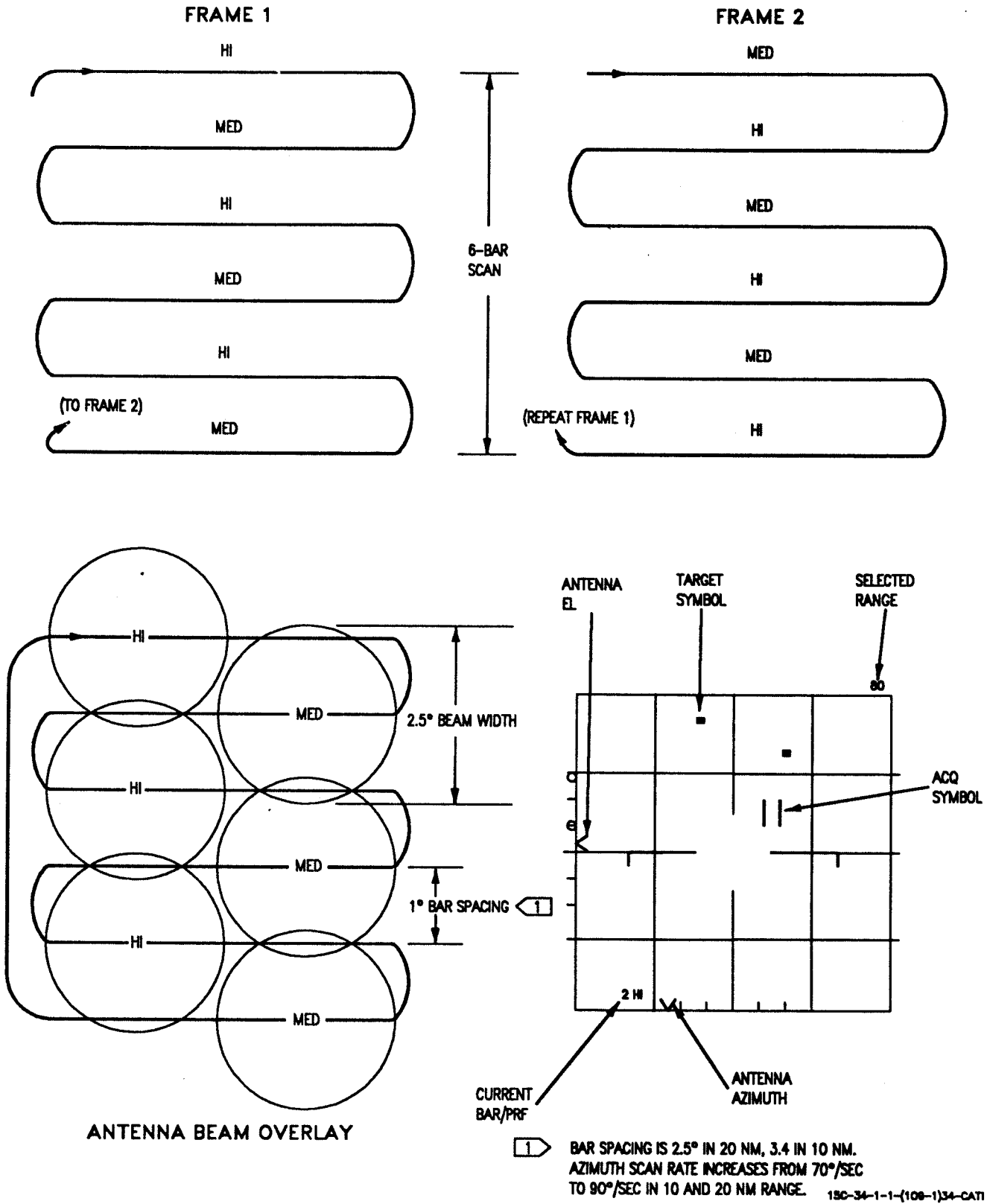


Figure 1-30

A/A INTERROGATOR CONTROLS

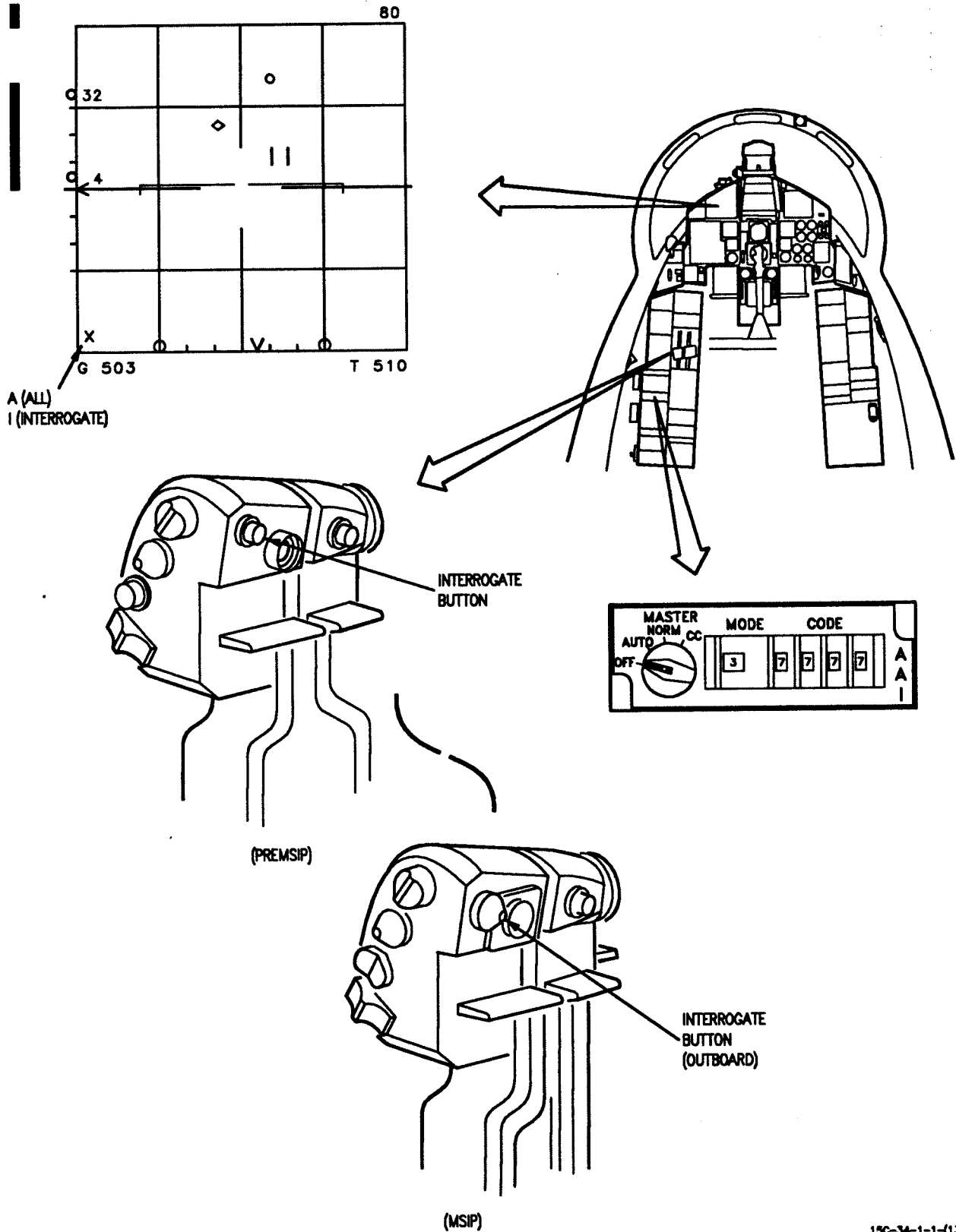
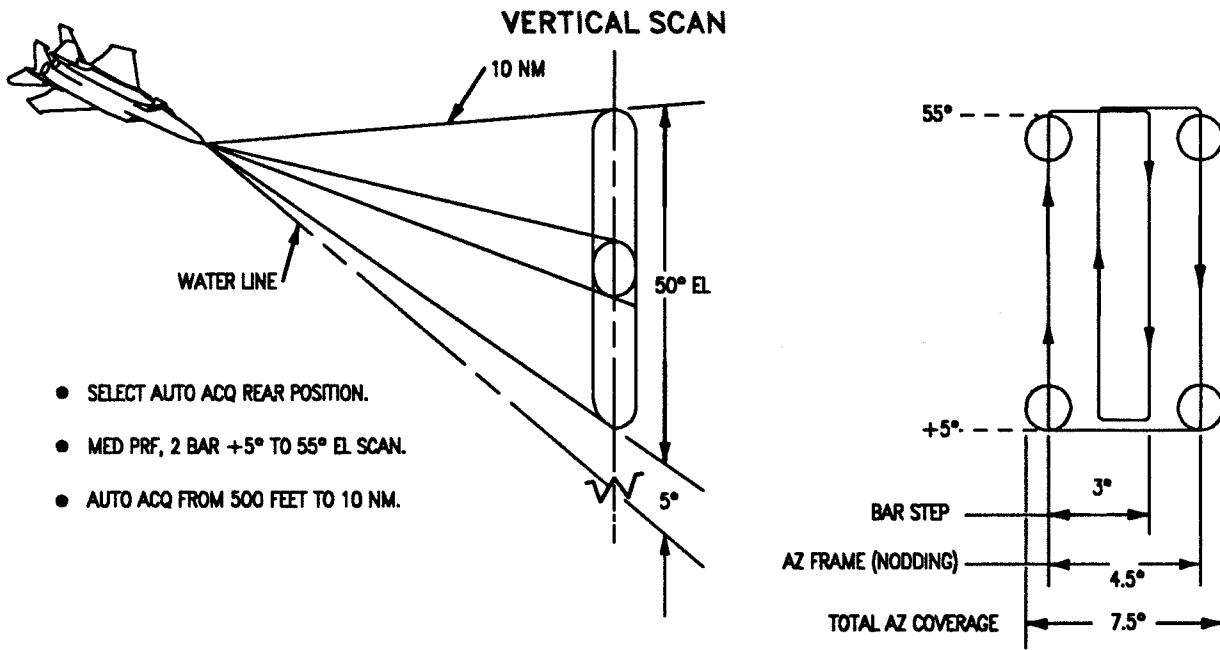


Figure 1-23

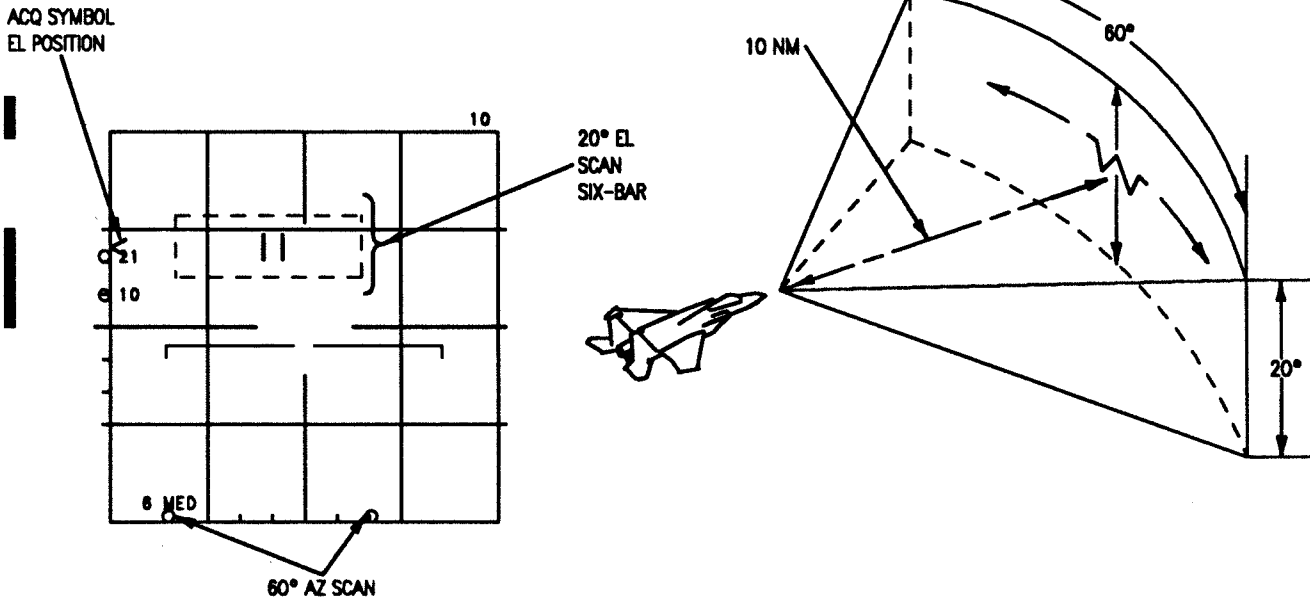
15C-34-1-1-(131-1)30-CAT

AUTO ACQ SCAN PATTERNS (Continued)



GUNS

- SELECT GUN MODE
- 6 BAR, 20° EL/60° AZ SCAN, MED PRF.
- SCAN CENTER AZ/EL CONTROLLED BY TDC.
- AUTO ACQ FROM 0.5 TO 10 NM.
- BUMP AUTO ACQ BY SELECTING REJECT.

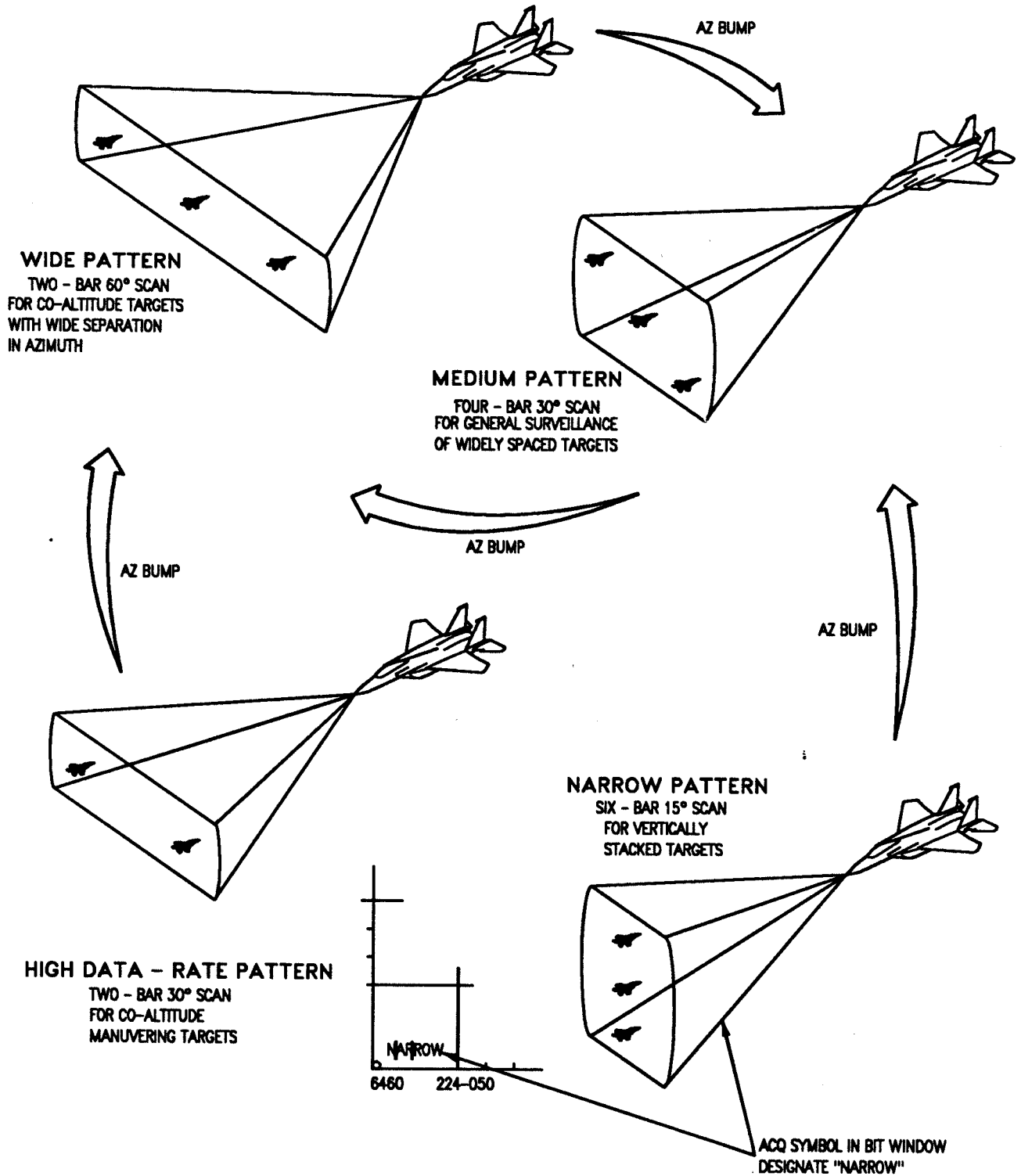


15C-34-1-1-(172-2)38-CAT1

Figure 1-33 (Sheet 2)

TWS PATTERNS

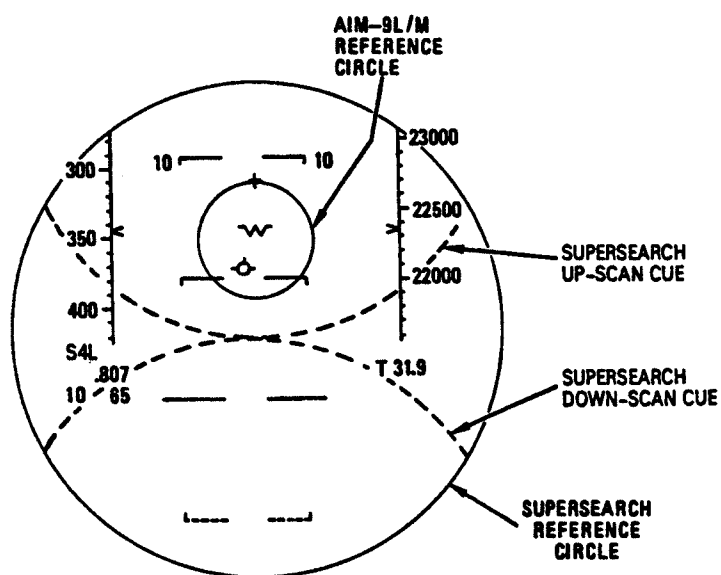
APG-70



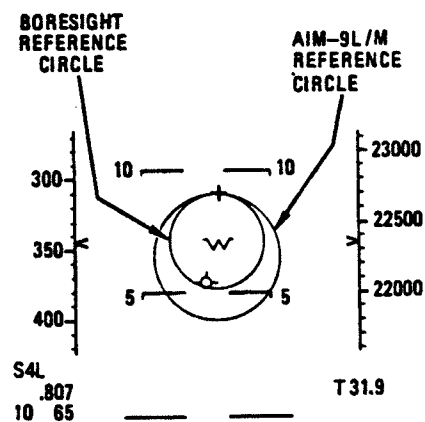
15C-34-1-1-(182-2)38-CAT1

Figure 1-36 (Sheet 2)

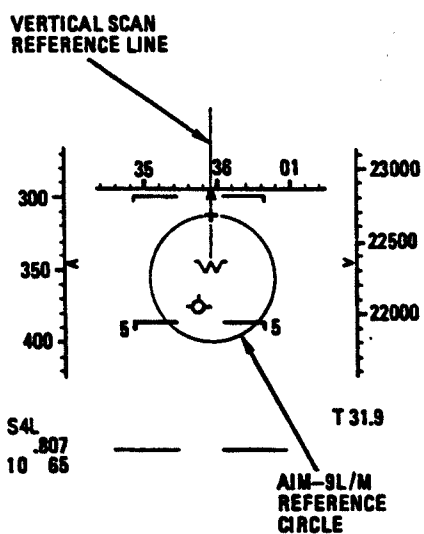
AUTO ACQ MODES, HUD DISPLAYS



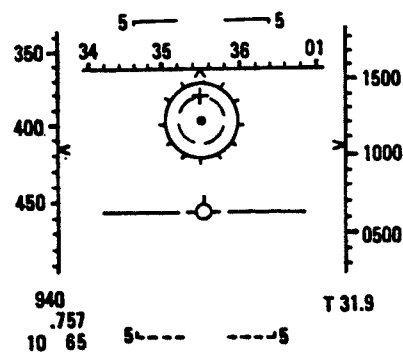
1. SUPERSEARCH (SS).
SRM SELECTED.



2. BORESIGHT (BST).
SRM SELECTED.



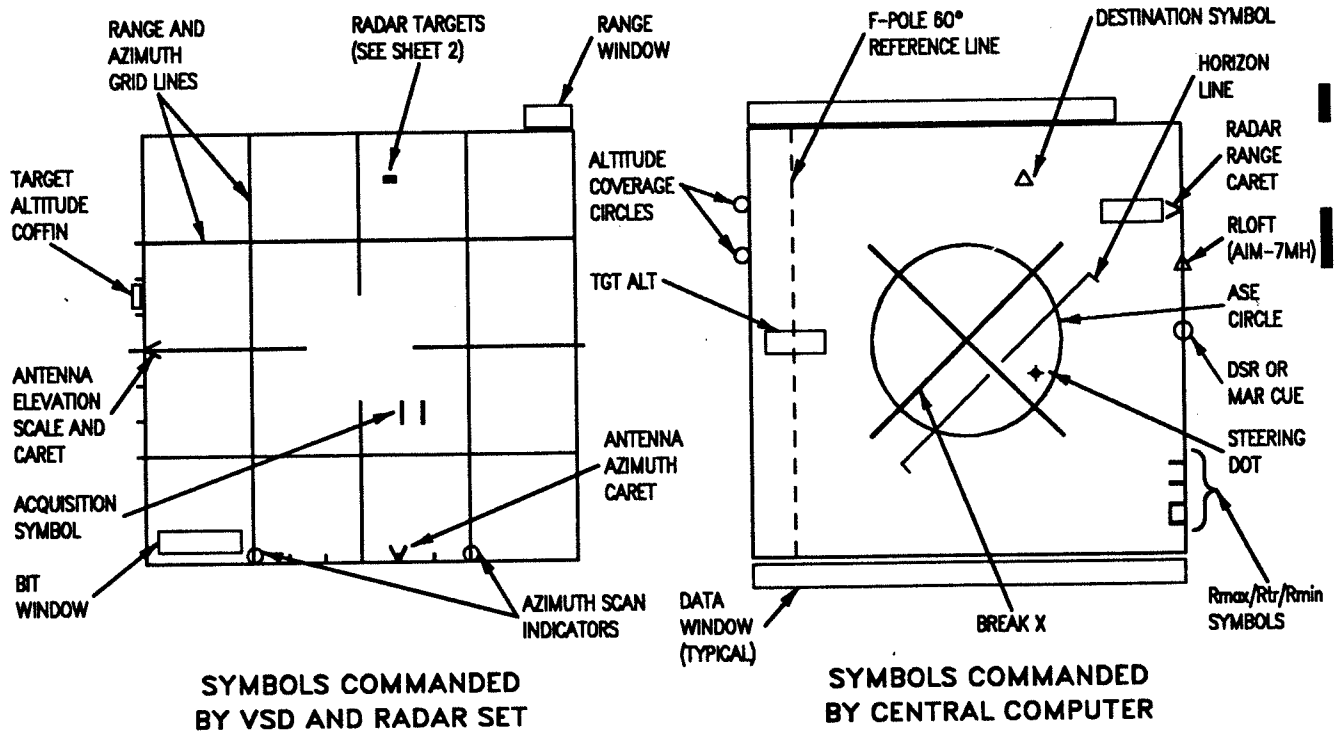
3. VERTICAL SCAN.
SRM SELECTED.



4. GUN.

Figure 1-34

VSD SYMBOLS, A/A



TYPICAL DISPLAYS

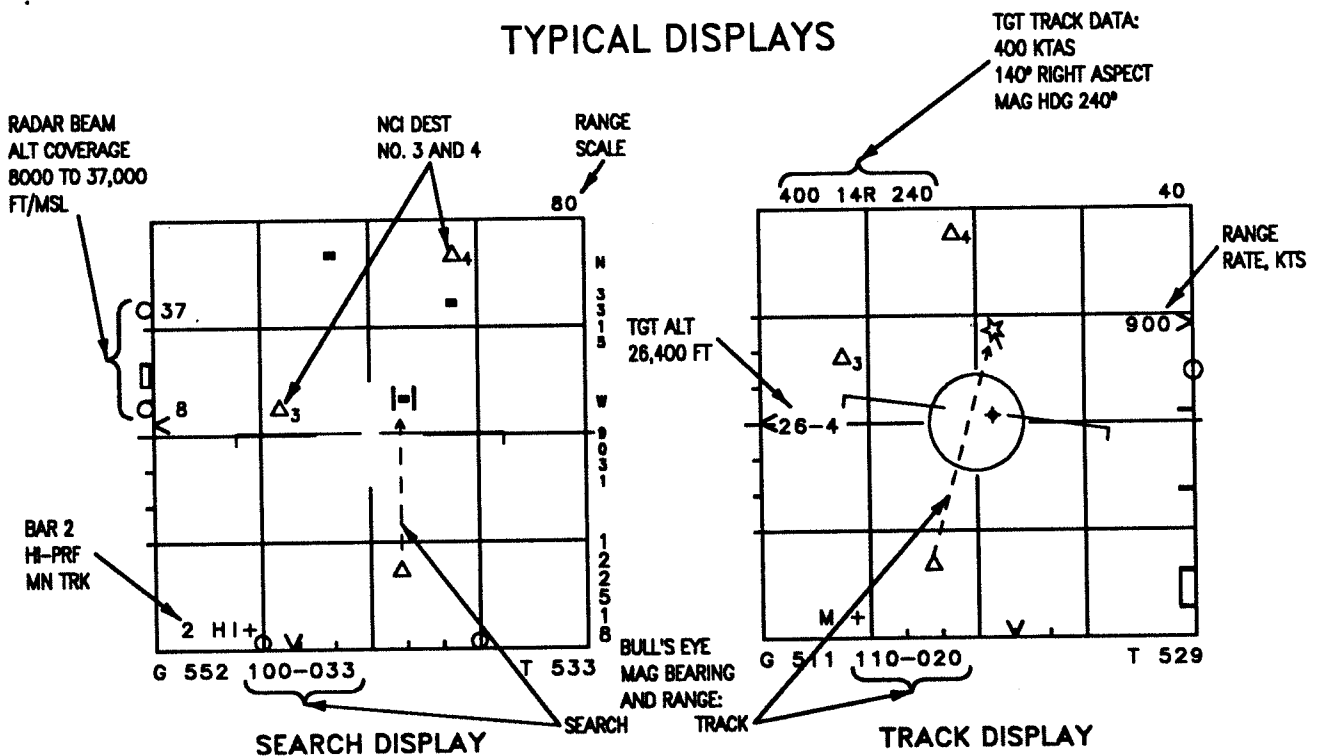
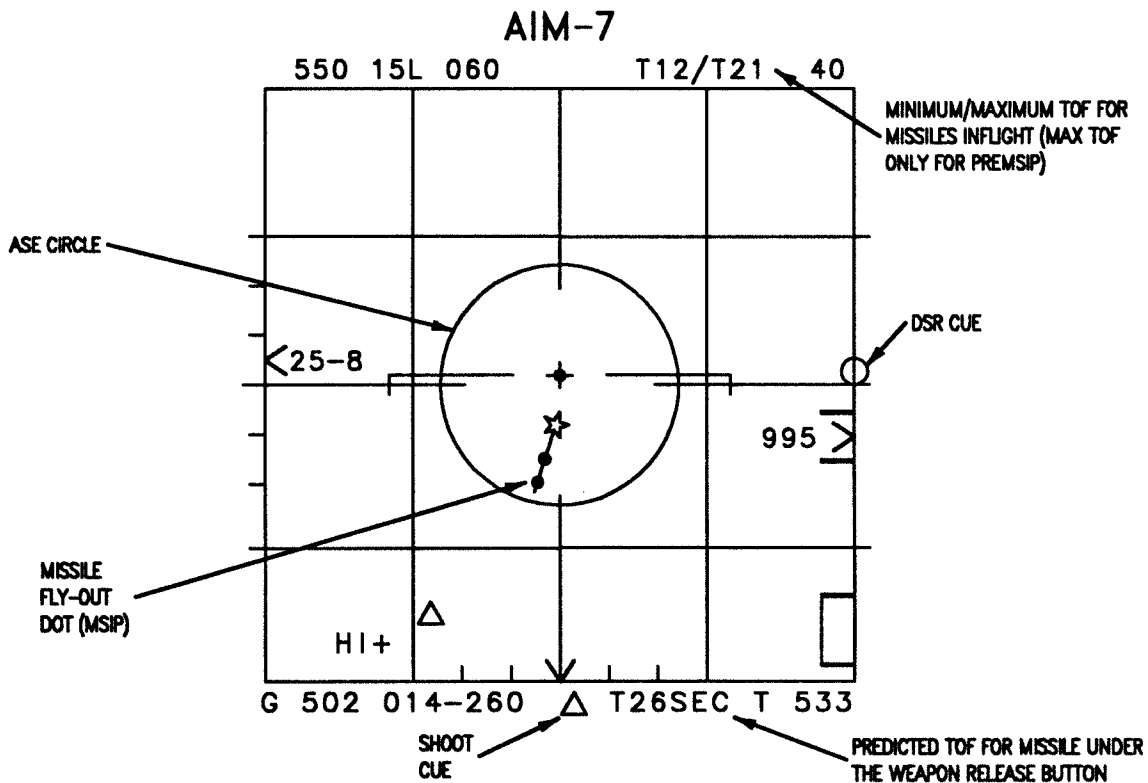
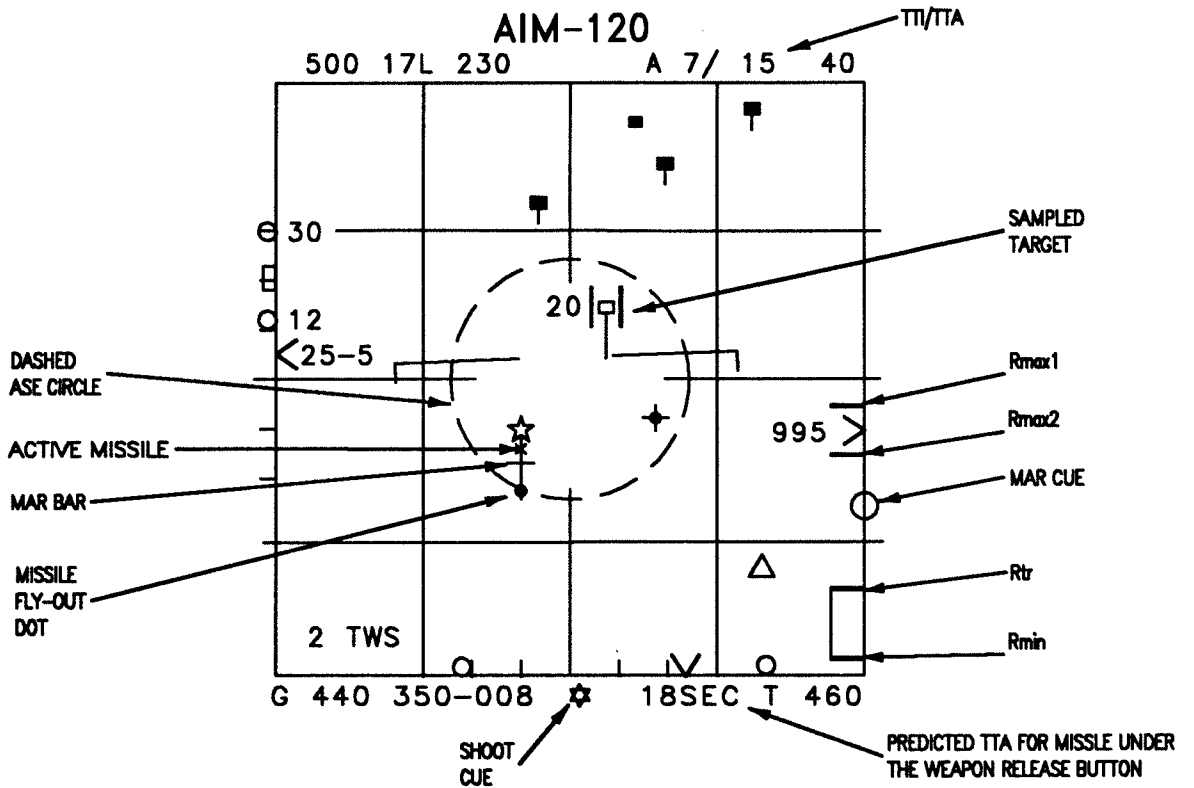


Figure 1-22 (Sheet 1 of 3)

A/A RADAR SYMBOLS (Continued)



15C-34-1-1-(88-3)38-CAT1

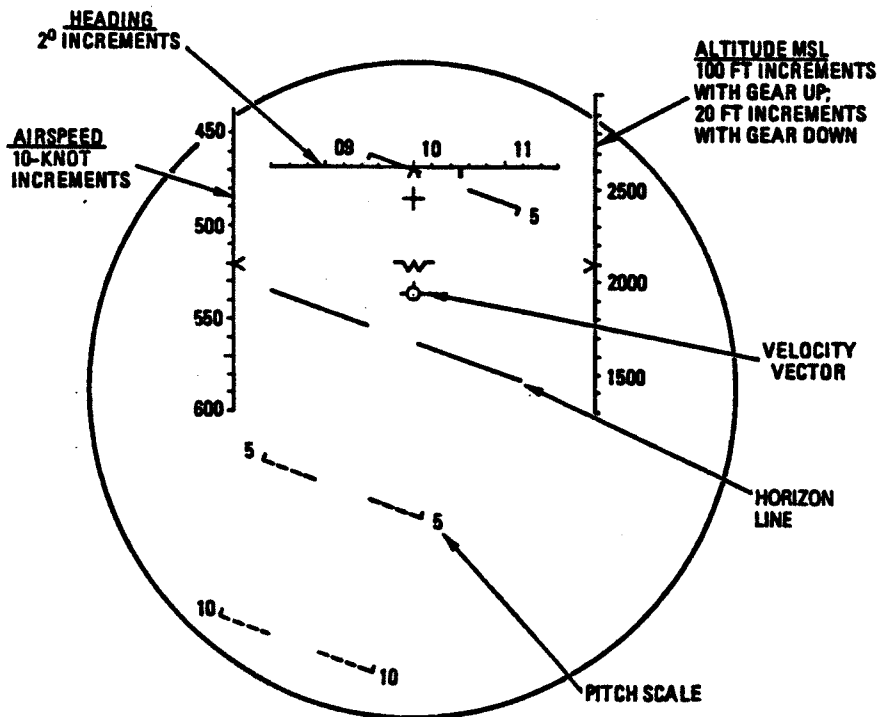
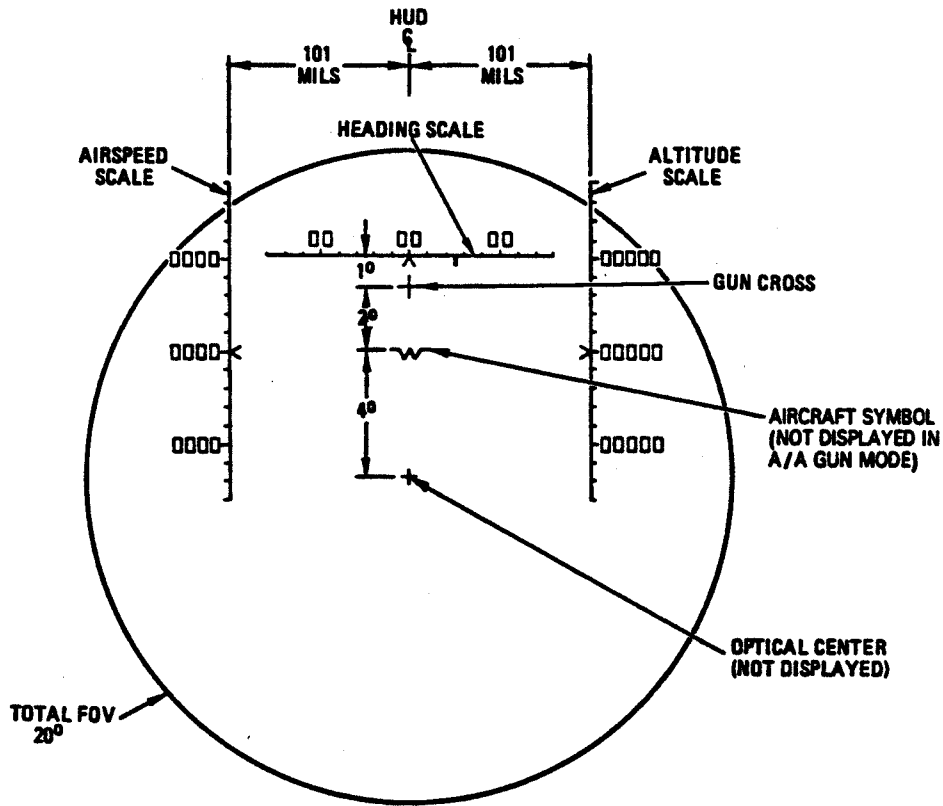
Figure 1-22 (Sheet 3)

Change 3

1-64G/(1-64H blank)

HUD SYMBOLS

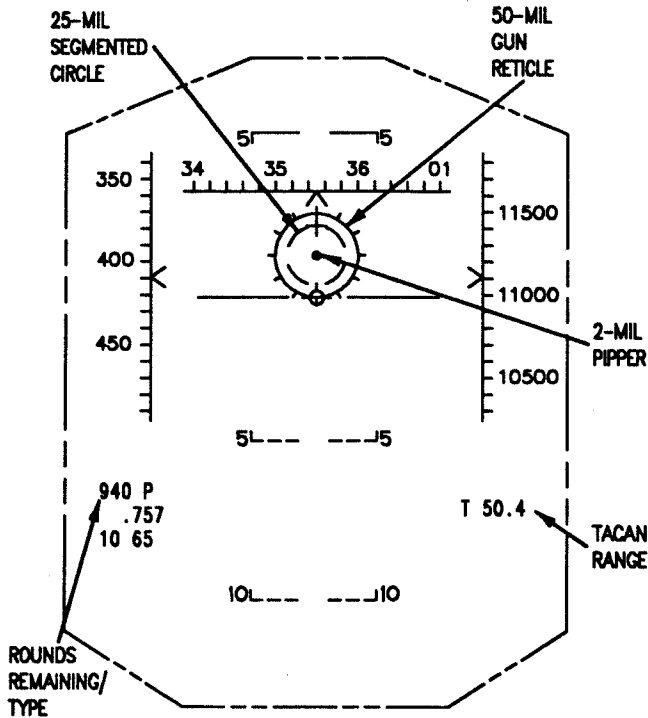
ALL MODES



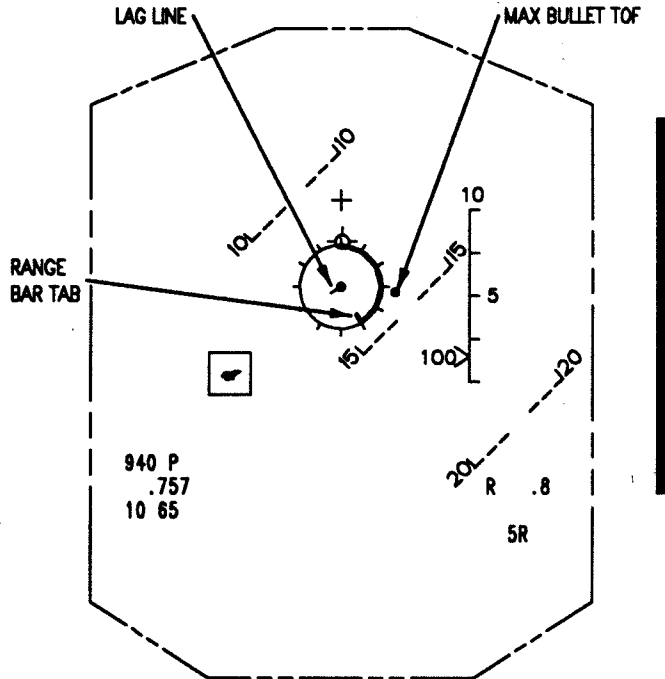
15C-34-1-1-1128A

Figure 1-16

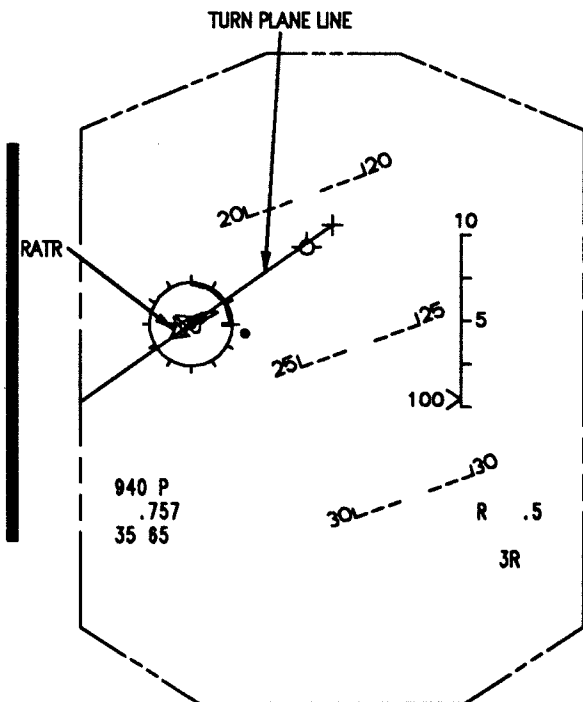
GUN STEERING



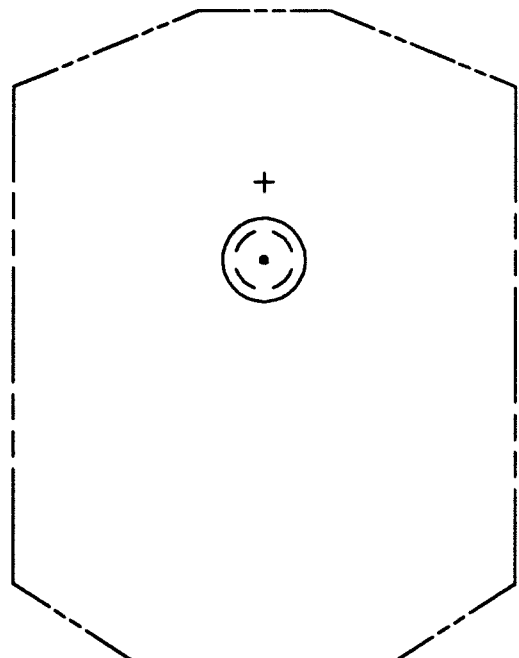
1. GUN MODE, RADAR SEARCH, SYMBOLS NORM



2. LCOS, RADAR TRACK, SYMBOLS REJ



3. GDS MODE, SYMBOLS REJ

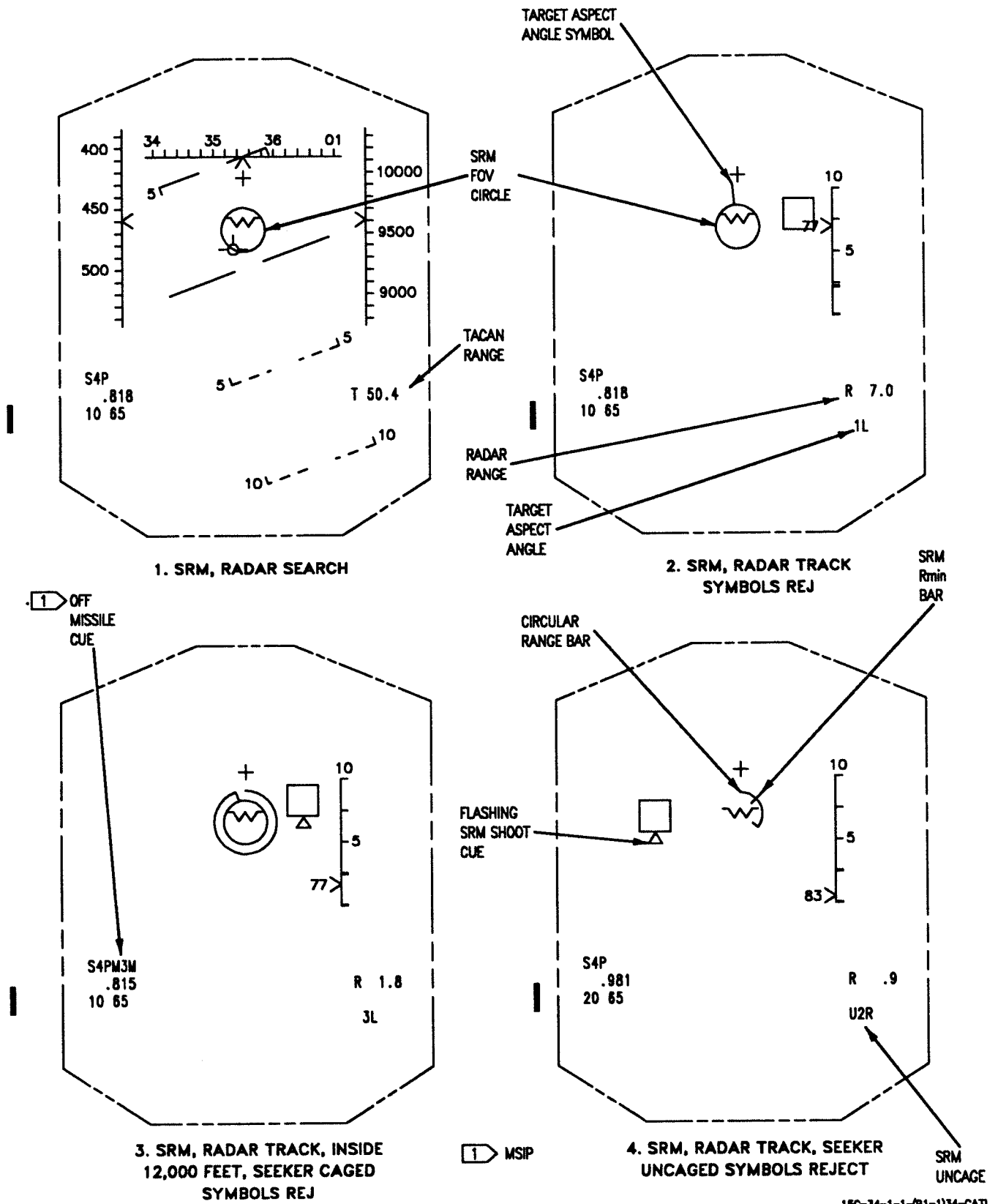


4. STANDBY RETICLE, DEPRESSED
46 MILS

Figure 1-56

15C 34 1 1 753 1130 0471

AIM-9P STEERING, HUD



15C-34-1-1-(01-1)34-CAT1

Figure 1-50

VI STEERING, HUD

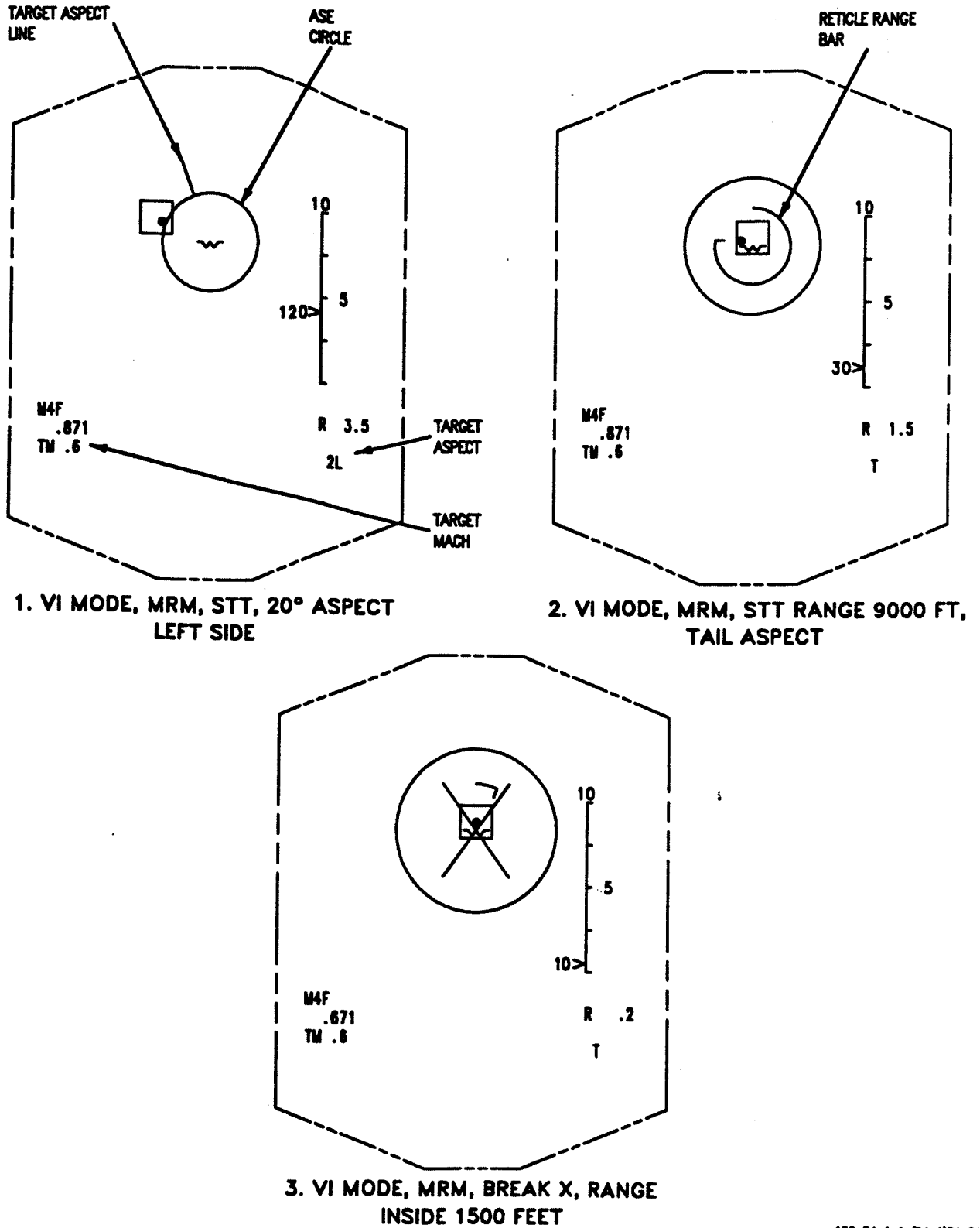
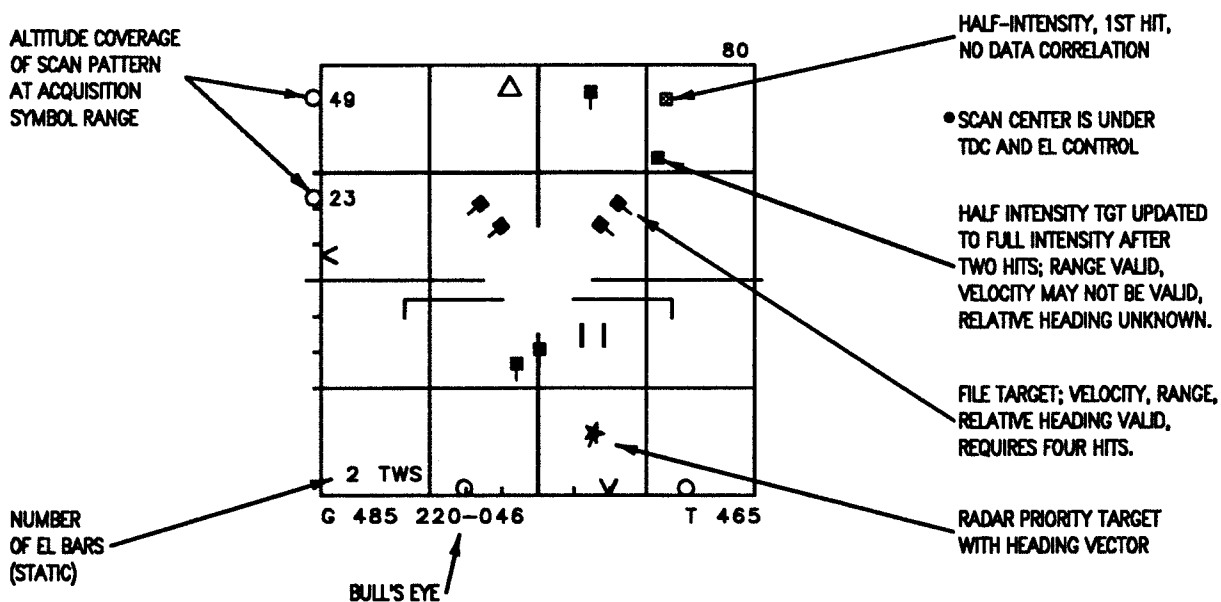


Figure 1-18

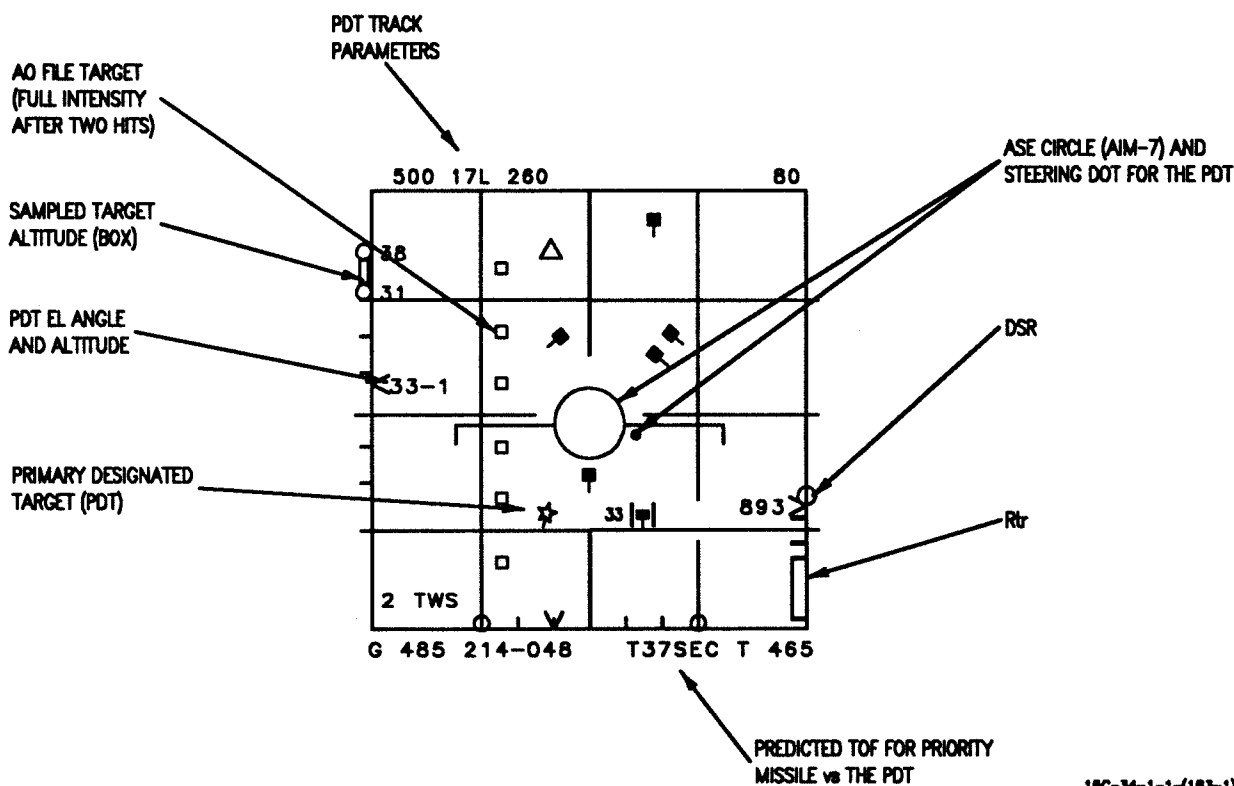
15C-34-1-1-(24-1)34-CAT1

TWS DISPLAY

NDTWS (ALL AIRCRAFT)



DTWS (AIM-7, PREMSIP)

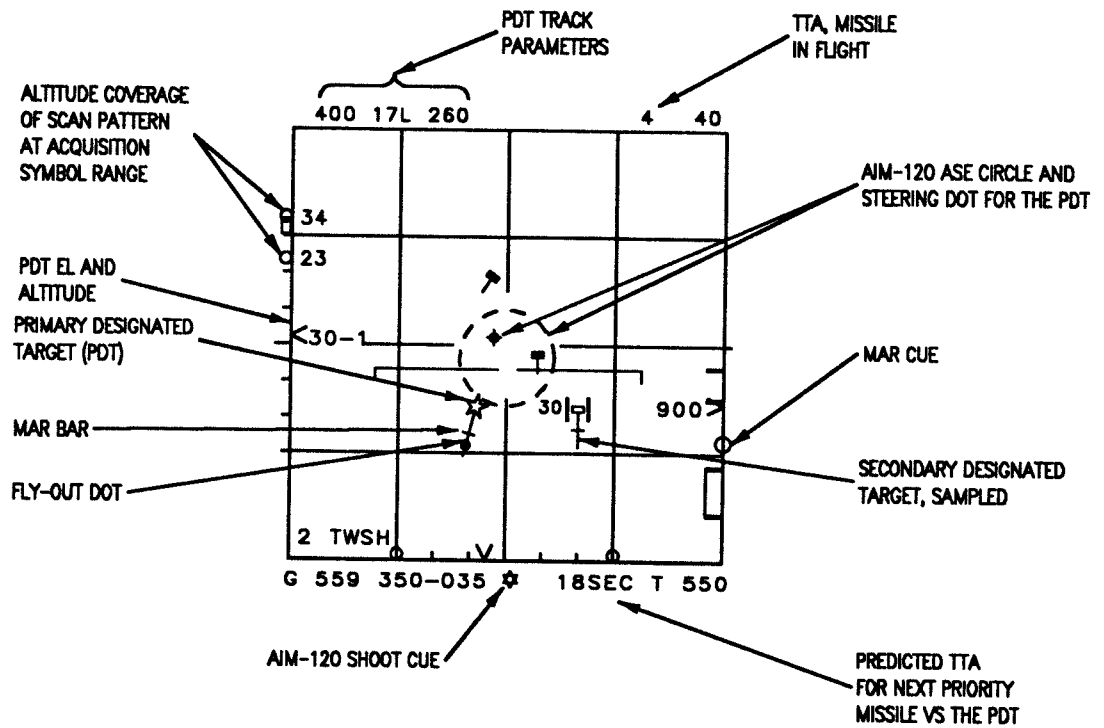


18C-34-1-1-(183-1)38-CAT1

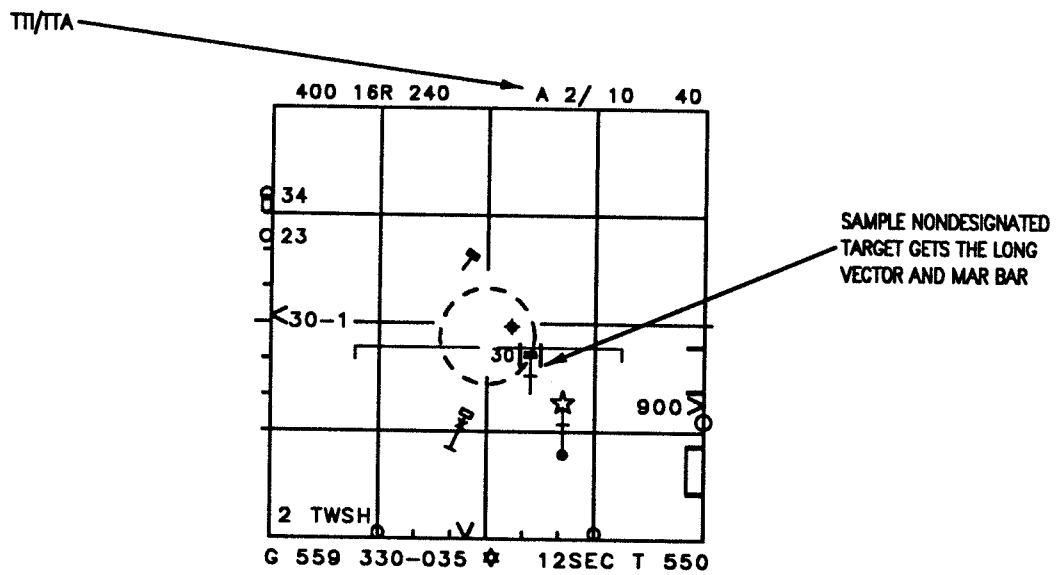
Figure 1-37 (Sheet 1 of 2)

TWS DISPLAY

DTWS (AIM-120)



AIM-120 LAUNCH ON PDT

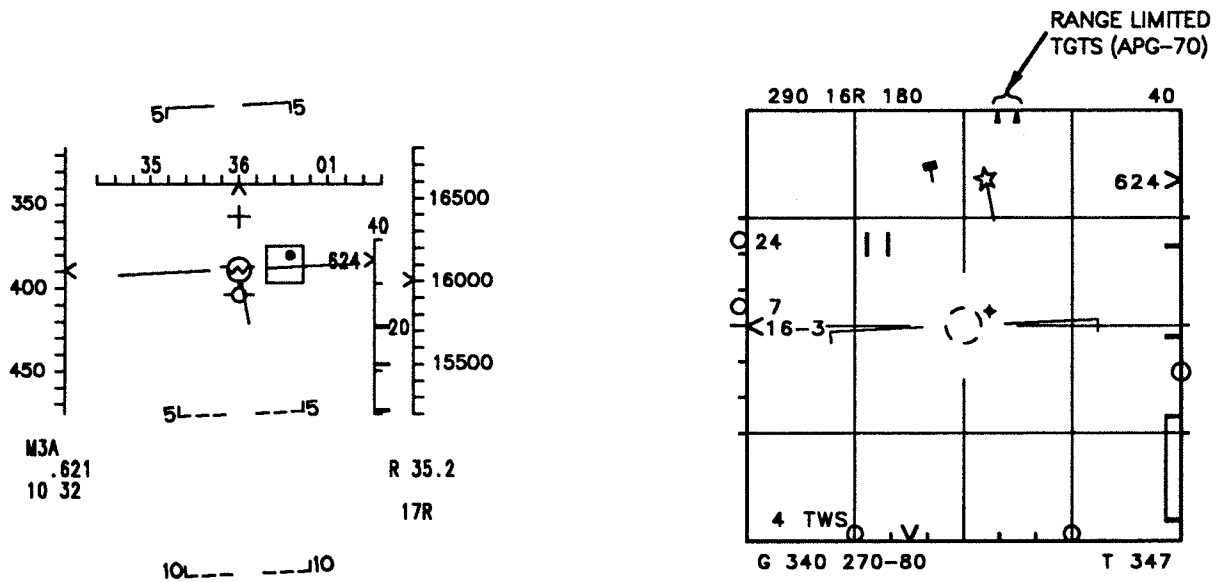


QUICK STEP PRIORITY, LAUNCH

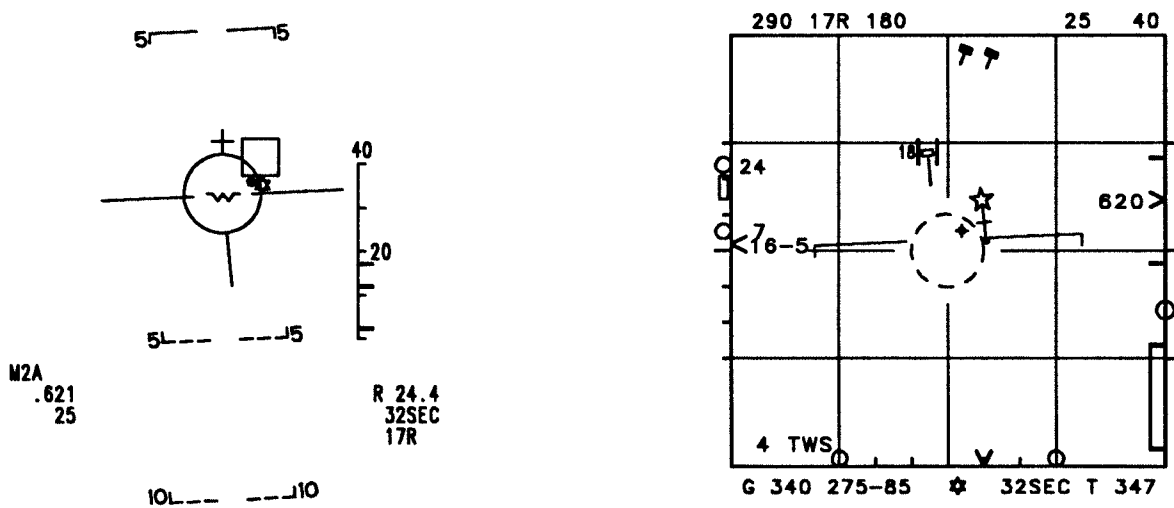
Figure 1-37 (Sheet 2)

AIM-120 STEERING, HUD AND VSD

(MSIP)



1. MRM (AIM-120), DTWS, OUTSIDE RMAX 1



2. LAUNCH 1, MAR CUE, 25-SECOND TTA, SECONDARY TGT DESIGNATED