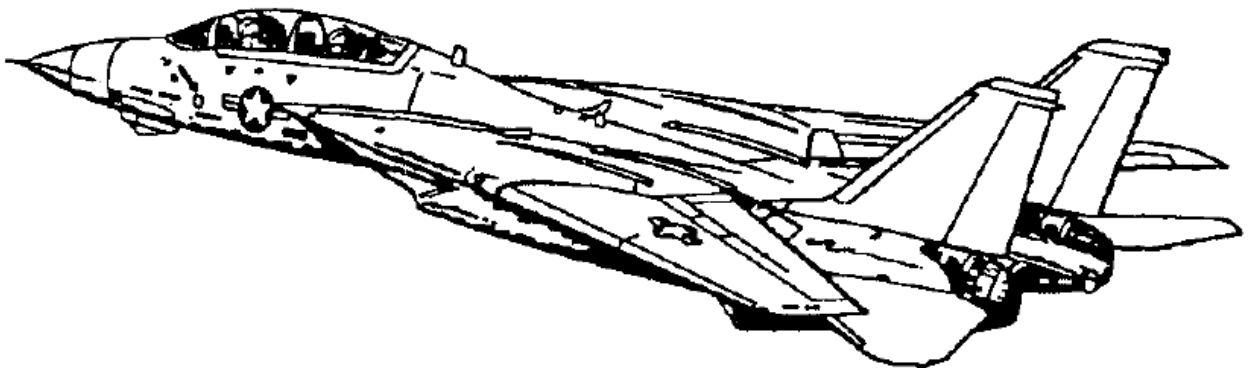




REFERENCE INFORMATION

F-14D AIRCRAFT

FOR FLIGHT SIMULATOR X:ACCELERATION



NOTE: MOST OF THE DATA PROVIDED IN THIS DOCUMENT REFER TO THE REAL AIRCRAFT AND ARE GIVEN FOR GENERAL REFERENCE ONLY – ACTUAL IN GAME BEHAVIOUR MAY DIFFER. SEE FOOTNOTES ON EACH PAGE FOR MAJOR DIFFERENCES BETWEEN IN-GAME AND REAL AIRCRAFT.

F-14D AIRCRAFT CHARACTERISTICS AND LIMITATIONS

Aircraft Dimensions			Starter Cranking Limits	
Length	62'	8.5"	Cross bleed	2 min continuous then 10 min off
Height (Tail)	16'	0"	Start Cart	5 min continuous then 10 min off
Wingspan @ 20° wingsweep	64'	1.5"	Idle	
Wingspan @ 68° wingsweep	38'	2.5"		
Wingspan in oversweep	33'	3.5"		
Wing Area	565 sq/ft			
Gross Weights			RPM = 62 - 78%	OIL PRESS = 15 - 45 psi
Empty A/C (w/crew & trapped fuel)	43,735 lbs		EGT = 350 - 650°C	NOZ POS = 100%
Catapult	76,000 lbs		FF = 950 - 1400 PPH	HYD PRESS = 3000 psi
Field takeoff	72,000 lbs		MIL (and above)	
Min descent rate landing (350 fpm)	72,000 lbs			
Field landing (max 500 fpm ROD)	60,000 lbs			
Carrier/FCLP land	54,000 lbs			
T/O & Land Flap/Slat Transition Limits			RPM = 95 - 104%	OIL PRESS = 25 - 65 psi
AOB < 45°			EGT = 780 - 935°C	NOZ POS INFLIGHT:
Roll SAS on				MIL = 3 - 10%
Min 200' AGL for flaps/slats up on takeoff				Min AB = 5 - 12%
Min 800' AGL for dirty-up				Max AB = A/B 60 - 90%
Min 180 kts for retraction of flaps			Ground Start Malfunctions	
12 units AOA for all transitions				
225 kts max flap/slat speed				
280 kts max landing gear speed				
Landing & Braking			INST Test	
15 kts min speed for antiskid operation				
165 kts max wheel braking (51.0 k A/C)				
190 kts max tire speed				
145 kts max E-5 engagement speed (69.8 k A/C)			RPM = 96%	
175 kts max E-28 engagement speed			EGT = 950 ± 10°C	(initiates engine overtemp alarm)
20 kts max 90° crosswind component			FF = 10,500 pph	
60 kts max canopy open			AOA = 18 ± 0.5 UNITS	
Engine Speeds (RPM)			W/S = 45 ± 2.5°C	
10% Ignition system become operative			FUEL = 2,000 ± 200# (all tapes and windows)	
30 - 46% Engine crank switch will not engage			LIGHTS: L and R FUEL LOW	
20% Min RPM with throttle at idle			Oil System	
30% Max RPM with pneumatic starter				
30% RPM must fall below for generator auto-reset				
50% Engine crank switch automatically shuts off				
60% Generator comes on line			Normal Range	25 - 65 psi
50% Generator light illuminates (if RPM falling)			Min (stabilized idle)	15 psi
60% Ensure engine crank off (ovsp/valve)			Oil pressure light	on @ 11 psi decreasing off @ 14 psi increasing
62 - 78% Normal idle			Pneumatic Pressure	
75 - 90% Auto throttle range				
95 - 104% MIL & above				
107.7% Overspeed (chevrons flash)				
110.0% Engine secures (fuel shutoff)			Min auxiliary canopy (3000 psi)	800 psi
			Min normal canopy (3000 psi)	1200 psi
			CHS accumulator	1800 psi
			FHS accumulator	1800 psi
			Min emergency gear preflight	3000 psi
			Min emergency gear extension	1800 psi
			Wheel brake accumulator (2 gages)	1900 ± 50 psi
			Arresting hook dashpot	800 ± 10 psi

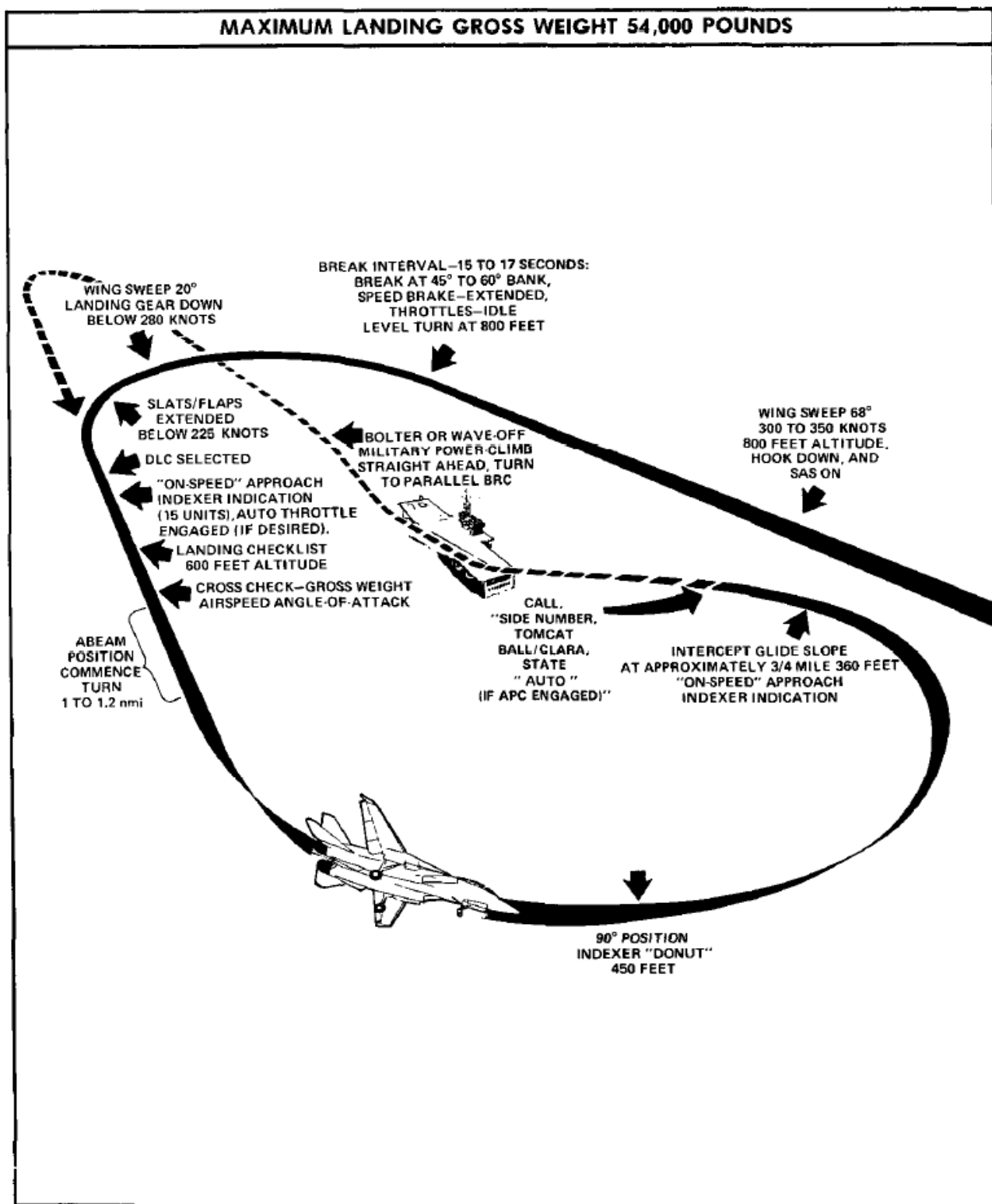
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NOTE FOR FSX: DEFAULT IN-GAME WEIGHT AND BALANCE REFLECTS THE DEFAULT VISUAL LOAD. TO TAKE ACCOUNT OF THE OPTIONAL JDAMs (SHIFT+E 2) 2000lbs SHOULD BE LOADED TO STATION 3 AND 6. IN-GAME ENGINE READINGS MAY DIFFER FROM THE DATA SHOWN ABOVE.

F-14D AIRCRAFT CHARACTERISTICS AND LIMITATIONS *(continued)*

Fuel System		In-Flight Refueling	
Aft-Left Tank Group Capacity	5900 - 6200 lbs	170 - 200	Approach configuration
Fwd-Right Tank Group Capacity	6300 - 6600 lbs	200 - 300/0.8 TMN	Cruise configuration
Max split between cockpit totals	300 lbs	400/0.8 TMN	Max IFR probe speed
Fuel dump rate	1500 lbs/min	SAS Stability Augmentation System	
Fuel dump auto shutoff with	4000 lbs remaining		
Ground refuel rate @ 50 psi	450 gal/min	CRUISE:	Pitch SAS off ... None
In-flight refuel rate @ 57 psi	475 gal/min		Yaw SAS off 1.0 TMN
Hydraulic System		Roll SAS off 1.0 TMN (wing mounted AIM-54)	1.52 TMN (EX tank, fuselage AIM-54, A/G stores)
Normal Hyd. system operating press	3000 ± 100 psi	APPROACH:	Pitch SAS off ... None
BIDI activates when one system is	<2100 psi		Yaw SAS off None
BIDI output w/3000 psi on good side	2400 - 2600 psi	Roll SAS off not permitted during T/O & Land flap transitions	1.6 TMN (all other configurations)
BIDI shuts off when failed system is	<500 psi for 10 sec		
Emer. Fit. Hyd. on if both systems	<2100 psi		
Outb'd Spoiler Module electrically inhibited @	62° W/S		
Outb'd Spoiler Module depressurized @	65° W/S		
Miscellaneous		Prohibited Maneuvers	
450	Windmill airstart airspeed required	1. Intentional Spins	
300	Spooldown airstart airspeed required	2. During AB operations; sustained 0 to -0.5 g flight; flight from -0.5 g to -2.4 g's for more than 10 seconds.	
250	Rudder authority limits inputs to <10°	3. At MIL power or less; zero or negative g flight for more than 20 seconds.	
400	Rudder authority limits inputs to <9.5°	4. AIM-9 launch with flaps/slats extended.	
400/0.9 TMN	Lateral stick inputs limited to 1/4	5. Fuel dump while in A/B or with S/Bs extended.	
400	Speedbrake blowback	6. Dual eng AB takeoff, waveoffs, bolters or cat launches	
300	Hook blowback in transit	7. Single eng MAX AB takeoff, waveoff, or cat launches	
300/0.8 TMN	Max speed w/ airtsource off-o'wing fair	8. ACLS mode 1/1A approaches	
350/1.5 TMN	Max ramdoor airspeed - heat from friction	9. Rolling maneuvers with bank angle changes in excess of 360	
>0.7 TMN	Coordinate stick and rudder input		
>0.5 TMN	No cross controls above		
2.4 TMN	Reduce speed light (airframe limit)		
Ejection		G Limits	
<350	Ejection Safe	Gear Down Symmetric Limit 0 - 2.0	
350 - 450	Ejection Hazardous	Gear Down Rolling (coordinated turns only 225 - 280 KTS) 0 - 2.0	
>450/0.9 TMN	Ejection Extremely Hazardous	Flaps/Slats Down 0 - 2.0	
External Tank Limits		Rolling Limit w/ maneuvering flaps/slats extended (50,000 lb aircraft) 5.2	
650	Max below 12,000 ft	68,000 lb aircraft symmetric limit 4.6	
700	Max 12 - 25,000 ft	58,000 lb aircraft symmetric limit 5.5	
650	Max 25 - 34,000 ft	53,000 lb aircraft symmetric limit 6.0	
1.75 TMN	Max above 34,000 ft	50,000 lb aircraft symmetric limit 6.5	
1.52 TMN	Max with roll SAS off		

NOTE FOR FSX: SAS, HYDRAULIC AND PNEUMATIC DATA SECTION ARE NOT APPLICABLE. IF MAXIMUM IN-GAME REALISM IS SELECTED, PAY ATTENTION TO NARROW G LIMITS WHEN FLAPS ARE EXTENDED.



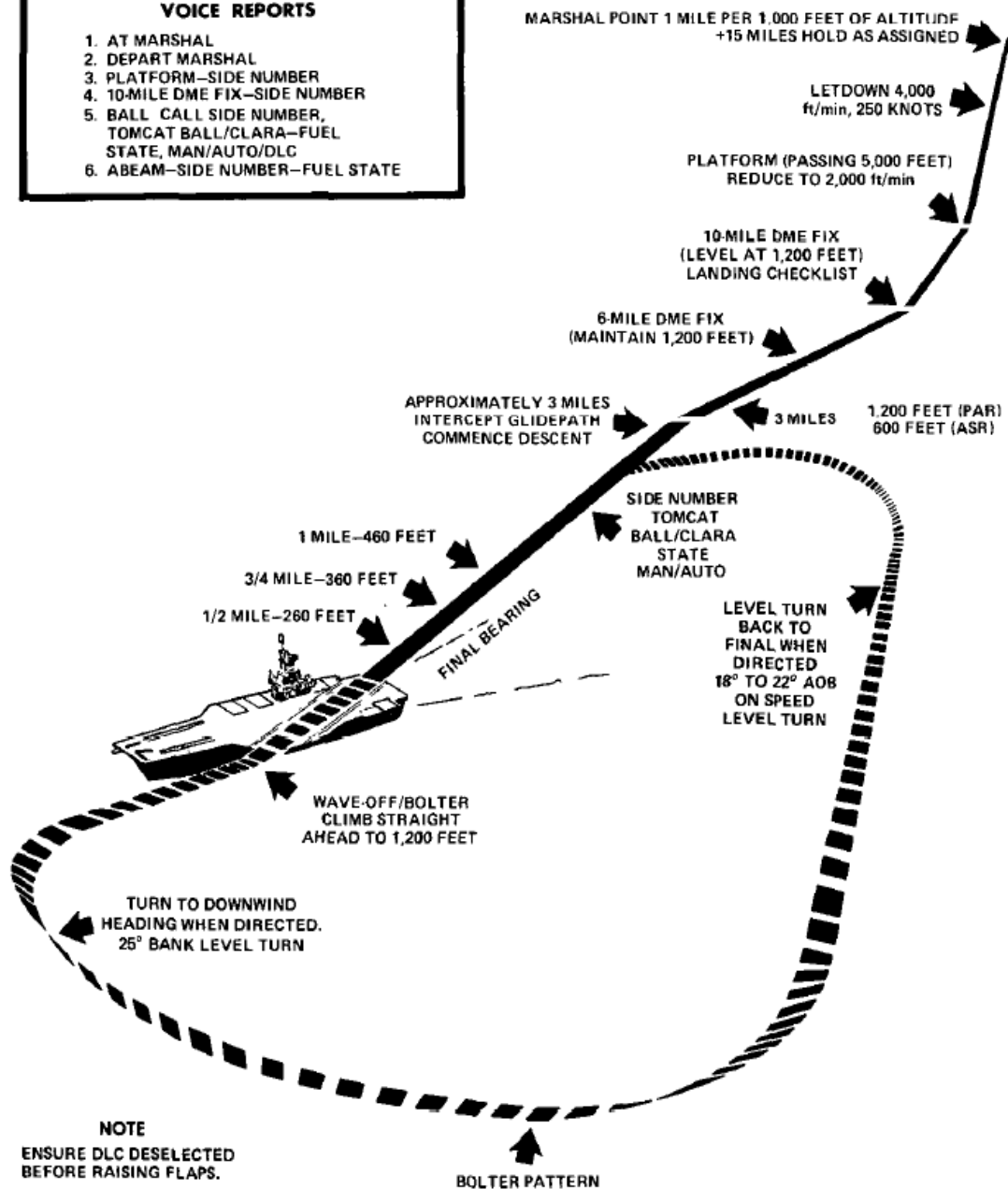
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NOTE FOR FSX: FINAL APPROACH SPEED SHALL BE BETWEEN 122 AND 137 Kts, DEPENDING ON TOTAL AIRCRAFT WEIGHT. DO NOT TRY LANDING IF THE GROSS WEIGHT EXCEEDS 54000lbs (ABOUT 30% FUEL – DUMP FUEL IF NECESSARY). FINAL APPROACH MUST BE CONDUCTED WITH FLAPS IN LANDING CONFIGURATION (FULL FLAPS). REQUIRED A₀A FOR CORRECT APPROACH IN GAME IS SMALLER THAN THE REAL ONE. FOLLOWING THE A₀A INDEXER MAY LEAD TO SLIGHTLY INCORRECT SPEED IN SOME CASES.

MAXIMUM LANDING GROSS WEIGHT 54,000 POUNDS

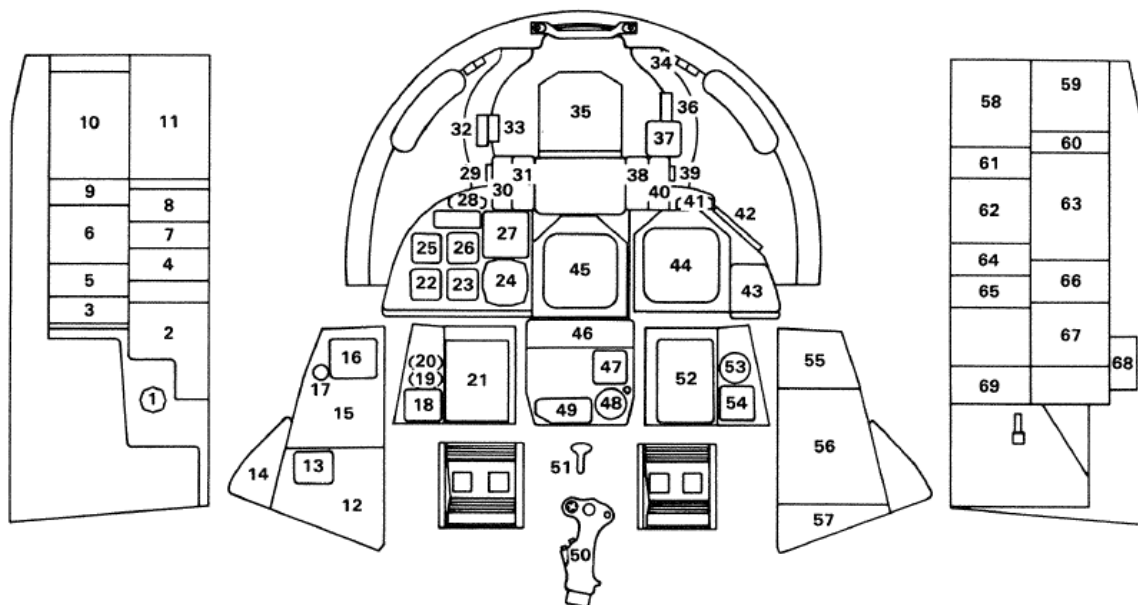
VOICE REPORTS

1. AT MARSHAL
2. DEPART MARSHAL
3. PLATFORM-SIDE NUMBER
4. 10-MILE DME FIX-SIDE NUMBER
5. BALL CALL SIDE NUMBER, TOMCAT BALL/CLARA-FUEL STATE, MAN/AUTO/DLC
6. ABEAM-SIDE NUMBER-FUEL STATE



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LEFT SIDE CONSOLE

1. G VALVE PUSHBUTTON.
2. OXYGEN/VENT AIRFLOW CONTROL PANEL
3. TONE VOLUME/TACAN COMMAND PANEL
4. COMM VOLUME/JTIDS SELECT PANEL
5. ICS CONTROL PANEL
6. AFCS CONTROL PANEL
7. TACAN CONTROL PANEL
8. V/UHF CONTROL PANEL #1
9. ASYM LIMITER/ENGINE MODE SELECT PANEL
10. RAMPS/THROTTLE/RUDDER TRIM PANEL
11. THROTTLE QUADRANT

LEFT VERTICAL CONSOLE

12. FUEL/MASTER RESET/ANTI-SKID/SPOILER BRAKE PANEL
13. CONTROL SURFACE POSITION INDICATOR
14. LAUNCH BAR CONTROL PANEL
15. LANDING GEAR CONTROL PANEL
16. WHEELS/FLAPS/SPEED BRAKE POSITION INDICATOR
17. EMERGENCY STORES JETTISON BUTTON

LEFT KNEE PANEL

18. HYDRAULIC PRESSURE INDICATOR
19. OIL PRESSURE INDICATORS
20. NOZZLE POSITION INDICATORS
21. ENGINE INSTRUMENT GROUP

MAIN INSTRUMENT PANEL/WINDSHIELD FRAME

22. BAROMETRIC ALTIMETER
23. RADAR ALTIMETER
24. BEARING/DISTANCE/HEADING INDICATOR (BDHI)
25. VERTICAL VELOCITY INDICATOR
26. AIRSPEED INDICATOR
27. STANDBY ATTITUDE INDICATOR
28. LEFT FUEL SHUTOFF/FIRE EXTINGUISHER CONTROL
29. LEFT FIRE WARNING LIGHT
30. ANGLE OF ATTACK INDICATOR
31. MASTER CAUTION/MASTER ARM PANEL
32. APPROACH INDEXER
33. LEFT LADDER LIGHTS: WHEELS, BRAKES, ACLS/AP, NWS ENGA, AUTO THROT
34. SHOOT/LOCK LIGHTS
35. HEAD UP DISPLAY (HUD)/COCKPIT TV SENSOR (CTVS)
36. RIGHT LADDER LIGHTS: SAM, AAA, CW, AI
37. STANDBY COMPASS

MAIN INSTRUMENT PANEL/WINDSHIELD FRAME (CONT.)

38. ACM SWITCH/HOT TRIGGER LIGHT
39. RIGHT FIRE WARNING LIGHT
40. WING SWEEP INDICATOR
41. RIGHT FUEL SHUTOFF/FIRE EXTINGUISHER CONTROL
42. CANOPY JETTISON HANDLE
43. RADIO FREQUENCY/CONTROL INDICATOR
44. MULTIFUNCTION DISPLAY #2
45. MULTIFUNCTION DISPLAY #1

CENTER PANEL/CONTROL STICK

46. MULTISTATUS INDICATOR
47. CLOCK
48. BRAKE PRESSURE INDICATOR
49. COURSE/HEADING DISPLAY CONTROL
50. CONTROL STICK
51. RUDDER PEDAL ADJUST HANDLE

RIGHT KNEE PANEL

52. FUEL QUANTITY INDICATOR
53. OBOGS BACKUP OXYGEN PRESSURE INDICATOR
54. CABIN PRESSURE INDICATOR

RIGHT VERTICAL CONSOLE

55. ARRESTING HOOK/GUN ROUNDS PANEL
56. DISPLAYS CONTROL PANEL
57. AUX WEAPONS CONTROL PANEL

RIGHT SIDE CONSOLE

58. CAUTION/ADVISORY INDICATOR
59. OXYGEN MONITOR PANEL
60. ARA-63 CONTROL PANEL
61. MASTER GENERATOR CONTROL PANEL
62. AIR CONDITIONING CONTROL PANEL
63. MASTER LIGHT CONTROL PANEL
64. EXTERNAL ENVIRONMENT CONTROL PANEL
65. HYDRAULIC TRANSFER PUMP SWITCH
66. MASTER TEST CONTROL PANEL
67. HUD-VIDEO CONTROL PANEL
68. CANOPY DEFOG/CABIN AIR LEVER
69. SPOILER FAILURE OVERRIDE PANEL

NOTE FOR FSX: WHILE IN-GAME GENERAL APPEAREANCE AND LAYOUT ARE AUTHENTIC, SINE CHANGES WERE MADE AND SOME PANELS MAY BE PARTIALLY OR TOTALLY INOPERATIVE, WHILE SOME F-14D SPECIFIC FUNCTIONALITIES MAY BE MISSING. HUD AND MFDs ARE ALIASED FROM DEFAULT HORNET AND MAY HAVE INOP BUTTONS DUE TO AN UNIDENTIFIED BUG.