

EMERGENCY PROCEDURE TABS

FIRES

NAVAIR 01-45HHD-1B

J. R. Redmon Sep 4

NATOPS PILOT'S 1967

POCKET CHECKLIST

F-8D, F-8E
AIRCRAFT

This manual, NAVAIR 01-45HHD-1B,
downgraded to unclassified by au-
thority of BUWEPS letter NCS-33;
AWH/JK dated 2 March 1964.

THIS PUBLICATION SUPERSEDES
NAVWEPS 01-45HHD-1B DATED
15 JULY 1966 CHANGED 1 DEC 1966
WHICH SHOULD BE REMOVED
FROM THE FILES AND DESTROYED.

ISSUED BY AUTHORITY OF THE CHIEF OF
NAVAL OPERATIONS AND UNDER THE
DIRECTION OF COMMANDER, NAVAL AIR
SYSTEMS COMMAND

PERFORMANCE DATA INDEX

LIFT TAB

1. T/O-Mil	22,000 lb
2. T/O-Mil	25,000 lb
3. T/O-Mil	28,000 lb
4. T/O-Mil	31,000 lb
5. T/O-Mil	34,000 lb
6. T/O-Max	22,000 lb
7. T/O-Max	25,000 lb
8. T/O-Max	28,000 lb
9. T/O-Max	31,000 lb
11. T/O-Max	34,000 lb

ENGINE
ABFLAMEOUT
AIRSTART

FUEL

ELECTRICAL
FLT CONTROLS

HYDRAULIC

EJECTION
BAILOUTDITCHING
EGRESS

JETTISON

LANDING

VISUAL SIGNALS

AIRSPEED
INDICATOR

1

2

3

4

5

6

7

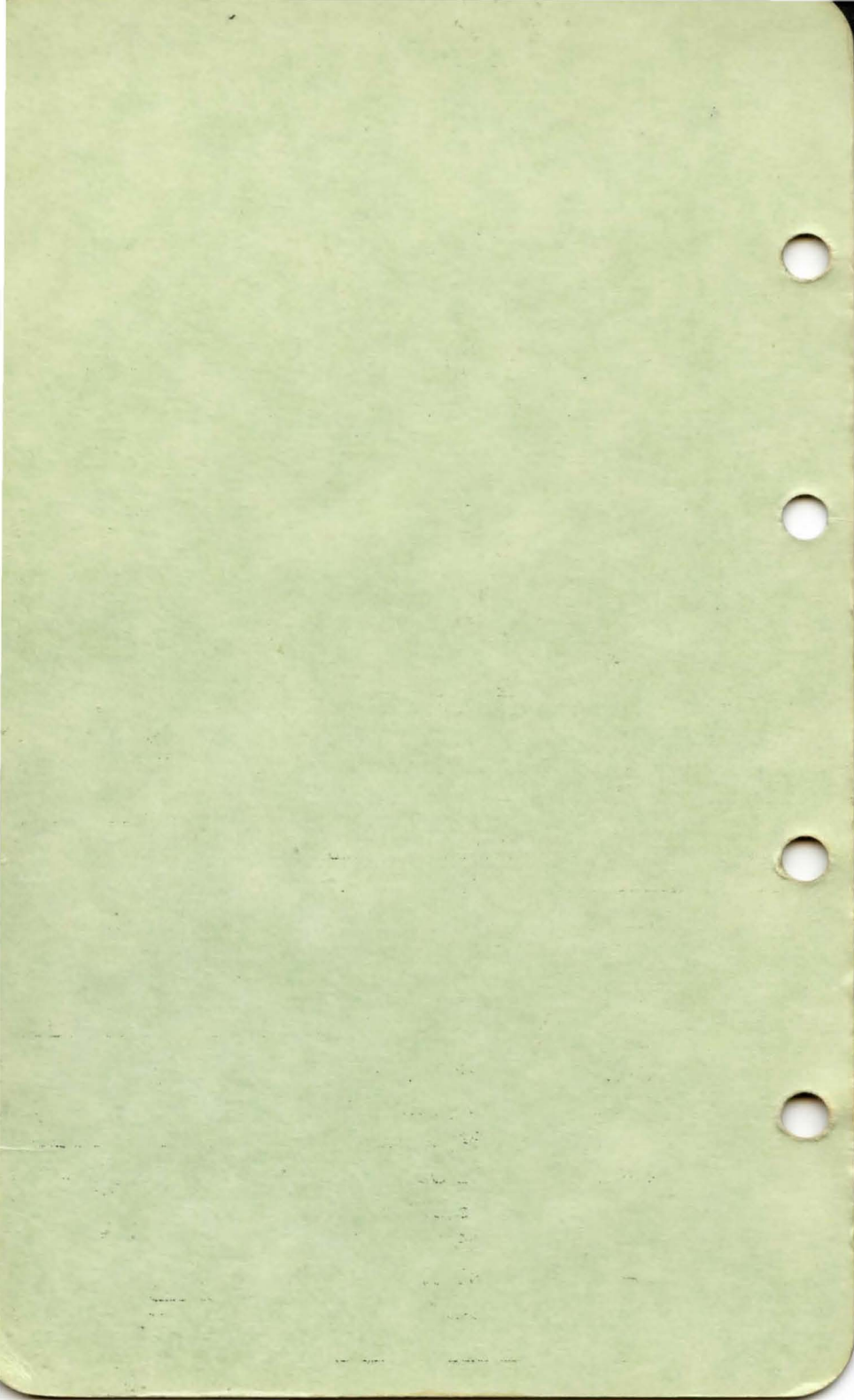
8

9

10

11

12



COCKPIT CHECKS

1. Ejection system — INSPECT, REMOVE SIX PINS
2. Pilot services — CONNECT
3. Pressure suit vent — NORMAL
4. Wing incidence — MATCH WING
5. Radar power — OFF
- 5A. AN/APR-30(V) power switch — OFF
6. Fuel control — NORMAL
7. Throttle — OFF
8. Speed brake — IN
9. Engine master — OFF
- 9A. Speech security controls — AS REQUIRED
10. Stabs — OFF
11. Gear handle — DOWN
12. Oil cooler door — AUTO
13. Fuel dump — OFF
14. Fuel transfer — OFF
15. Generators — OFF
16. Cockpit pressure — CABIN PRESS
17. Air-conditioning — AUTO
18. Armament — OFF

ENGINE START

1. Danger areas — CLEAR
2. External elec power — CONNECTED
3. Generator — TEST
4. Gear indicators — DOWN
5. Engine master — ON
6. Main fuel valve — OPEN
7. Pitot heat — CHECKED
8. Warning lights — PRESS TO TEST
9. Throttle — CRANK, IGNITE, IDLE
10. Generator — OFF
11. External elec power — REMOVED
12. Generator — ON
13. AC and DC indicators — ON
14. Engine, fuel, hyd lights — OFF

INITIAL CHECK

1. Boost pumps — CHECKED
2. Fuel flow — CHECK
3. Gear downlocks — REMOVED
4. Stabs — ON, LIGHTS OFF
5. Cockpit switches — AS DESIRED
6. Manual fuel — CHECK

WITH WING DOWN

7. Emergency pitch trim — CHECK
8. Controls — CYCLE
9. Aileron rudder interconnect — CHECK
10. Cruise droop — CHECK, LEAVE DOWN
11. Autopilot — CHECK
12. Wing — RAISE

WITH WING UP

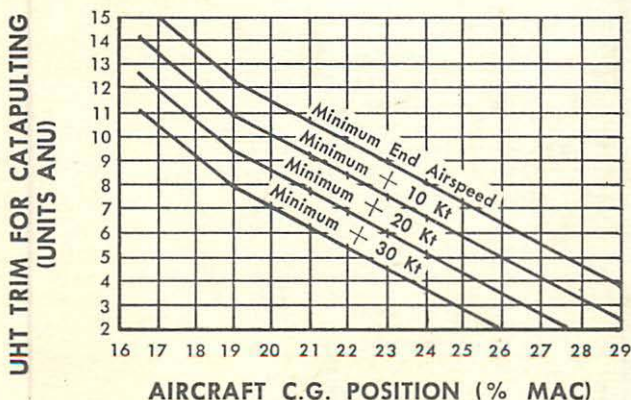
13. Angle of attack — CHECK
14. Controls — CYCLE
15. Aileron rudder interconnect — CHECK
16. Trim systems — CHECK
17. Viscous damper — CHECK
18. Exhaust nozzle — CHECK
19. Brakes — CHECK
20. Hook — CHECK
21. Refueling probe — CHECK AS REQUIRED
22. Wing — SPREAD AND LOCKED
23. Oxygen — CHECK

TAXI

1. Fuel control — NORMAL
2. Mag compass — CHECK
3. Turn and bank — CHECK

INSTRUMENT CHECKLIST

1. Altimeter — SET
2. Radio altimeter — ON
3. Airspeed — ZERO
4. Vertical speed — ZERO
5. Horizon — ERECT AND SET
6. Clock — SET AND RUNNING
7. MA-1 compass — SET
8. TACAN — ON
9. Course line — SET
10. ADF — CHECK
11. IFF/SIF — SET
12. Pitot heat — ON
13. Engine anti-ice — AS REQUIRED
14. Rain remove — AS REQUIRED
15. Engine pressure ratio — SET

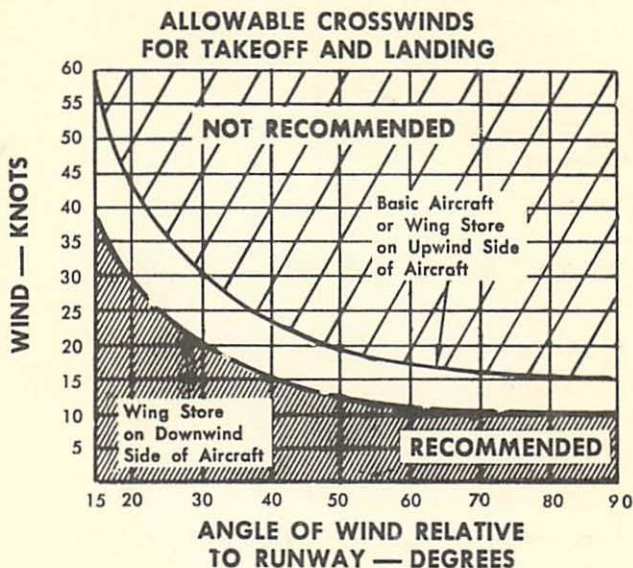
CATAPULT TRIM SETTING

THRUST CHECK DATA — J57-P-20

Minimum Pressure			Minimum Pressure		
°F	Ratio	°C	°F	Ratio	°C
-38	2.86	-38.9	40	2.48	4.4
-36	2.85	-37.8	42	2.47	5.6
-34	2.84	-36.7	44	2.46	6.7
-32	2.83	-35.5	46	2.45	7.8
-30	2.82	-34.4	48	2.44	8.9
-28	2.81	-33.3	50	2.43	10.0
-26	2.80	-32.2	52	2.42	11.1
-24	2.79	-31.1	54	2.41	12.2
-22	2.78	-30.0	56	2.40	13.3
-20	2.77	-28.9	58	2.39	14.4
-18	2.76	-27.7	60	2.38	15.6
-16	2.75	-26.6	62	2.37	16.7
-14	2.74	-25.5	64	2.36	17.8
-12	2.73	-24.4	66	2.35	18.9
-10	2.73	-23.3	68	2.34	20.0
-8	2.72	-22.2	70	2.33	21.1
-6	2.71	-21.1	72	2.32	22.2
-4	2.70	-20.0	74	2.31	23.3
-2	2.69	-18.8	76	2.30	24.4
0	2.68	-17.8	78	2.29	25.6
2	2.67	-16.7	80	2.28	26.7
4	2.66	-15.6	82	2.27	27.8
6	2.65	-14.4	84	2.26	28.9
8	2.64	-13.3	86	2.24	30.0
10	2.63	-12.2	88	2.23	31.1
12	2.62	-11.1	90	2.22	32.2
14	2.61	-10.0	92	2.21	33.3
16	2.60	-8.9	94	2.20	34.4
18	2.59	-7.8	96	2.19	35.6
20	2.58	-6.7	98	2.18	36.7
22	2.57	-5.6	100	2.17	37.8
24	2.56	-4.4	102	2.16	38.9
26	2.55	-3.3	104	2.15	40.0
28	2.54	-2.2	106	2.14	41.1
30	2.53	-1.1	108	2.13	42.2
32	2.52	0	110	2.12	43.3
34	2.51	1.1	112	2.11	44.4
36	2.50	2.2	114	2.10	45.6
38	2.49	3.3	116	2.09	46.7
			118	2.07	47.8

THRUST CHECK DATA — J57-P-20A

Minimum Pressure			Minimum Pressure		
°F	Ratio	°C	°F	Ratio	°C
-38	2.99	-38.9	40	2.60	4.4
-36	2.98	-37.8	42	2.58	5.6
-34	2.97	-36.7	44	2.57	6.7
-32	2.97	-35.5	46	2.56	7.8
-30	2.96	-34.4	48	2.55	8.9
-28	2.95	-33.3	50	2.54	10.0
-26	2.94	-32.2	52	2.53	11.1
-24	2.93	-31.1	54	2.52	12.2
-22	2.92	-30.0	56	2.51	13.3
-20	2.91	-28.9	58	2.50	14.4
-18	2.90	-27.7	60	2.48	15.6
-16	2.89	-26.6	62	2.47	16.7
-14	2.88	-25.5	64	2.46	17.8
-12	2.86	-24.4	66	2.45	18.9
-10	2.85	-23.3	68	2.44	20.0
-8	2.84	-22.2	70	2.43	21.1
-6	2.84	-21.1	72	2.42	22.2
-4	2.83	-20.0	74	2.41	23.3
-2	2.82	-18.8	76	2.40	24.4
0	2.81	-17.8	78	2.39	25.6
2	2.80	-16.7	80	2.38	26.7
4	2.79	-15.6	82	2.37	27.8
6	2.77	-14.4	84	2.36	28.9
8	2.76	-13.3	86	2.35	30.0
10	2.75	-12.2	88	2.34	31.1
12	2.74	-11.1	90	2.33	32.2
14	2.73	-10.0	92	2.32	33.3
16	2.72	-8.9	94	2.31	34.4
18	2.71	-7.8	96	2.29	35.6
20	2.70	-6.7	98	2.28	36.7
22	2.69	-5.6	100	2.27	37.8
24	2.68	-4.4	102	2.26	38.9
26	2.67	-3.3	104	2.25	40.0
28	2.66	-2.2	106	2.24	41.1
30	2.65	-1.1	108	2.23	42.2
32	2.64	0	110	2.22	43.3
34	2.63	1.1	112	2.21	44.4
36	2.62	2.2	114	2.20	45.6
38	2.61	3.3	116	2.19	46.7
			118	2.18	47.8

CROSSWIND CHART**TAKEOFF**

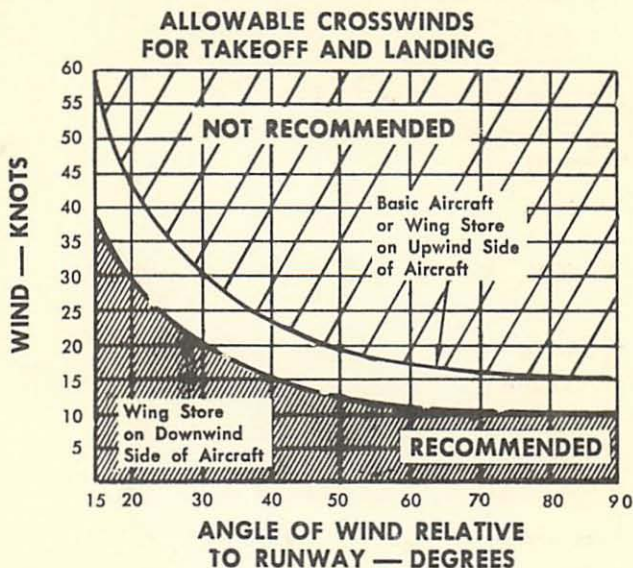
1. Fuel quantity — CHECK
2. Fuel transfer — ON
3. Wing — RAISED, SPREAD AND LOCKED
AND CRUISE DROOP SELECTED
4. Stab lights — OFF
5. Trim — SET
6. Harness — LOCKED, ALL SAFETY PINS REMOVED
7. Canopy gust lock — REMOVED AND STOWED
8. Canopy — CLOSED, LOCKED, HANDLE STOWED
9. Anticollision lights — ON
10. Throttle — MILITARY
11. Engine instruments — CHECK
12. Hydraulic pressures — CHECK
13. Warning lights — OFF
14. Continuous engine ignition — ON

AFTER TAKEOFF

1. Gear — UP
2. Wing — LOWER AND LOCK
3. Droop indicator — NO BARBERPOLE

THRUST CHECK DATA — J57-P-20A

Minimum Pressure			Minimum Pressure		
°F	Ratio	°C	°F	Ratio	°C
-38	2.99	-38.9	40	2.60	4.4
-36	2.98	-37.8	42	2.58	5.6
-34	2.97	-36.7	44	2.57	6.7
-32	2.97	-35.5	46	2.56	7.8
-30	2.96	-34.4	48	2.55	8.9
-28	2.95	-33.3	50	2.54	10.0
-26	2.94	-32.2	52	2.53	11.1
-24	2.93	-31.1	54	2.52	12.2
-22	2.92	-30.0	56	2.51	13.3
-20	2.91	-28.9	58	2.50	14.4
-18	2.90	-27.7	60	2.48	15.6
-16	2.89	-26.6	62	2.47	16.7
-14	2.88	-25.5	64	2.46	17.8
-12	2.86	-24.4	66	2.45	18.9
-10	2.85	-23.3	68	2.44	20.0
-8	2.84	-22.2	70	2.43	21.1
-6	2.84	-21.1	72	2.42	22.2
-4	2.83	-20.0	74	2.41	23.3
-2	2.82	-18.8	76	2.40	24.4
0	2.81	-17.8	78	2.39	25.6
2	2.80	-16.7	80	2.38	26.7
4	2.79	-15.6	82	2.37	27.8
6	2.77	-14.4	84	2.36	28.9
8	2.76	-13.3	86	2.35	30.0
10	2.75	-12.2	88	2.34	31.1
12	2.74	-11.1	90	2.33	32.2
14	2.73	-10.0	92	2.32	33.3
16	2.72	-8.9	94	2.31	34.4
18	2.71	-7.8	96	2.29	35.6
20	2.70	-6.7	98	2.28	36.7
22	2.69	-5.6	100	2.27	37.8
24	2.68	-4.4	102	2.26	38.9
26	2.67	-3.3	104	2.25	40.0
28	2.66	-2.2	106	2.24	41.1
30	2.65	-1.1	108	2.23	42.2
32	2.64	0	110	2.22	43.3
34	2.63	1.1	112	2.21	44.4
36	2.62	2.2	114	2.20	45.6
38	2.61	3.3	116	2.19	46.7
			118	2.18	47.8

CROSSWIND CHART**TAKEOFF**

1. Fuel quantity — CHECK
2. Fuel transfer — ON
3. Wing — RAISED, SPREAD AND LOCKED
AND CRUISE DROOP SELECTED
4. Stab lights — OFF
5. Trim — SET
6. Harness — LOCKED, ALL SAFETY PINS REMOVED
7. Canopy gust lock — REMOVED AND STOWED
8. Canopy — CLOSED, LOCKED, HANDLE STOWED
9. Anticollision lights — ON
10. Throttle — MILITARY
11. Engine instruments — CHECK
12. Hydraulic pressures — CHECK
13. Warning lights — OFF
14. Continuous engine ignition — ON

AFTER TAKEOFF

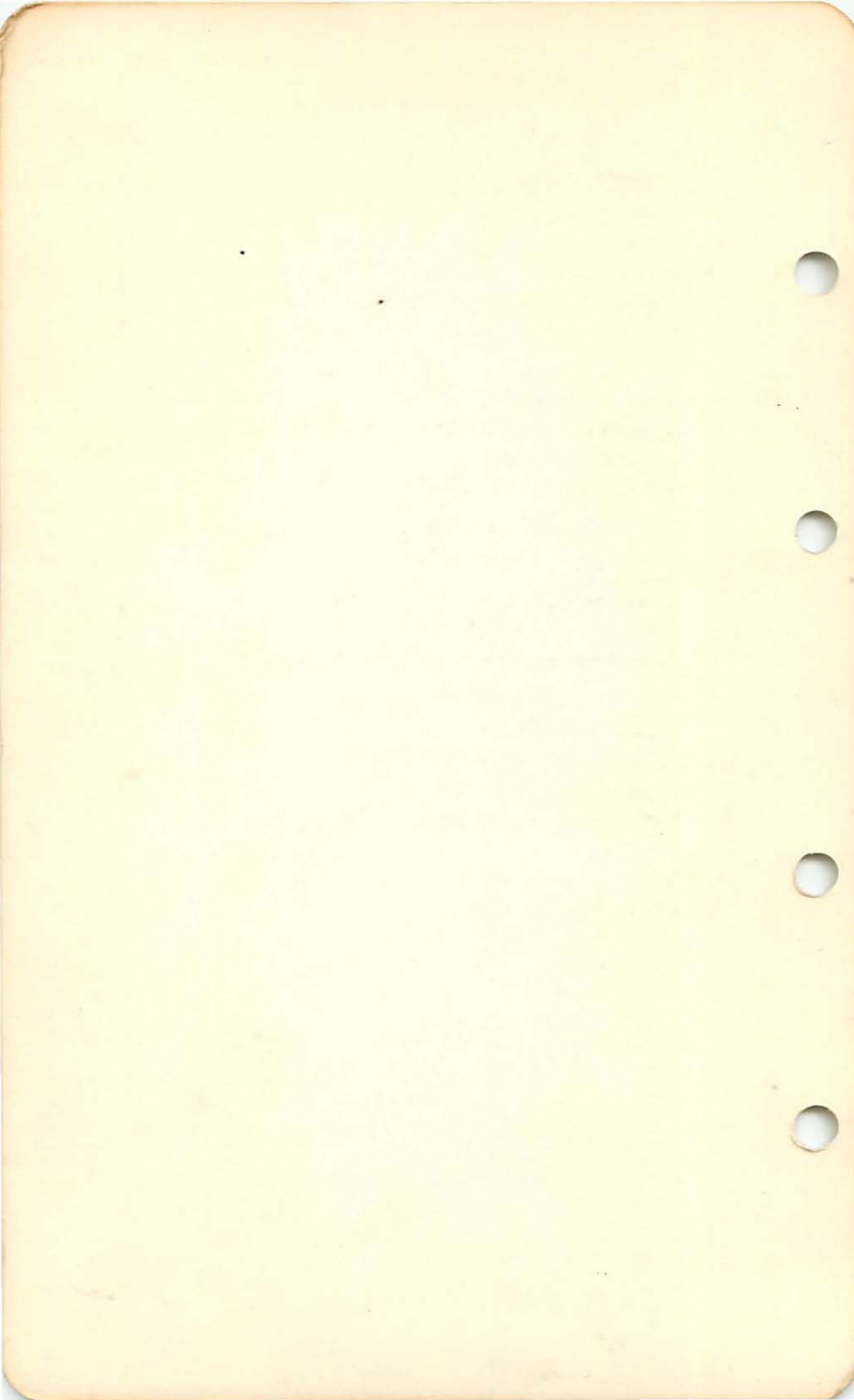
1. Gear — UP
2. Wing — LOWER AND LOCK
3. Droop indicator — NO BARBERPOLE

BEFORE DESCENT

1. Altimeter — SET
2. Defog switch — DEFOG
3. Pitot heat — ENSURE ON
4. Engine anti-ice — AS REQUIRED
5. Fuel quantity — CHECK

TRAFFIC PATTERN

1. Harness — LOCK
2. Fuel quantity — CHECK
3. Cruise droop — DOWN
4. Armament switches — OFF
5. Radar power switch — NORMAL
6. Radar mode switch — IR
7. Radar range selector switch — 60 MILES
8. Landing gear — DOWN
9. Speed brake — IN
10. Wing — RAISE, DROOP DOWN
11. Hook — AS REQUIRED
12. Continuous ignition switch — ON



AFTER LANDING

1. Cockpit pressure and defog — OFF
2. Canopy — OPEN
3. Radar — OFF
4. Cockpit pressure — CABIN
PRESS
5. Trim — NEUTRAL
6. Rain removal — OFF
7. Pitot heat — OFF
8. Anticollision lights — OFF
9. Stabs — OFF
10. Wing — DOWN
11. Cruise droop — UP
12. Gear downlocks — INSTALLED
13. Radio and light switches — OFF
14. Fuel transfer switch — PRESS
DUMP
15. Cockpit pressure — CABIN
DUMP
16. Throttle — OFF
17. Generators — OFF
18. Engine master — OFF
19. Oxygen — OFF
20. All electrical switches — OFF
21. Safety pins — INSTALLED
22. Wheels — CHOCKED
23. Postflight inspection

NAVAIR 01-45HHD-1B

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LIST OF CHANGED PAGES ISSUED

INSERT LATEST CHANGED PAGES, DESTROY SUPERSEDED PAGES.

Note: Text affected by current change indicated by vertical line in outer margin.

Page No.	Date of Latest Change
7	1 Jun 1967
9	1 Jun 1967
11	1 Jun 1967
12A	1 Jun 1967
12B	1 Jun 1967
27	1 Jun 1967
30	1 Jun 1967
43	1 Jun 1967
*47	15 Aug 1967
52	1 Jun 1967

Page No.	Date of Latest Change
52A	1 Jun 1967
53	1 Jun 1967
57	1 Jun 1967
58	1 Jun 1967
*59	15 Aug 1967
60	1 Jun 1967
61	1 Jun 1967
62	1 Jun 1967
62A	1 Jun 1967
69	1 Jun 1967

*Asterisk indicates pages changed, added, or deleted by the current change.

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USAF - In accordance with T.O. No. 00-5-2.

USN - Submit DD 1348 in accordance with NAVSUP Publication 437. For further information refer to NAVSUP Publication 2002, Section VIII and NAVAIR 00-500A.

INTERIM CHANGE SUMMARY

NUMBER	DATE	PAGES AFFECTED	PURPOSE

TAKEOFF DISTANCES — MILITARY THRUST

For F-8E, decrease takeoff speed 4.0 Knots IAS

Distances are for aircraft using the J57-P-20A engine;
increase distance by 8.0% with the J57-P-20 engine.

Landing Condition

Hard-Surfaced Runway

DISTANCE X 100 FEET

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 22,000 lb**SPEED: 136 KIAS***

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	21.2	30.6	15.8	24.0	13.3	20.7
	15	26.0	36.2	19.8	28.5	16.6	24.7
	30	32.0	43.3	24.6	34.5	20.8	30.5
	45	39.2	51.3	30.2	41.0	26.0	36.3
1,000	0	23.2	33.0	17.4	26.0	15.0	23.0
	15	28.6	39.0	21.8	31.2	18.6	27.3
	30	35.0	46.7	27.2	37.4	23.3	32.8
	45	43.7	56.3	34.0	45.5	29.6	40.3
2,000	0	25.5	35.6	19.3	28.2	16.3	24.6
	15	30.8	41.8	23.5	33.4	20.2	29.3
	30	38.6	50.6	30.0	40.5	25.7	35.8
	45	49.0	62.8	38.7	51.0	33.6	45.3
3,000	0	28.0	38.5	21.2	30.6	18.2	26.8
	15	34.0	45.3	26.2	36.3	22.2	32.0
	30	42.8	55.5	33.3	44.8	28.7	39.8
	45	54.7	69.3	43.3	56.5	38.0	50.5
4,000	0	30.0	40.8	22.8	32.5	19.5	28.5
	15	37.2	49.0	28.7	39.2	24.8	34.5
	30	46.7	60.0	36.5	48.6	31.5	43.0
	45	60.0	76.0	47.8	62.3	42.2	55.8
6,000	0	36.5	48.2	28.3	38.4	24.5	34.0
	15	45.5	58.7	35.5	47.5	31.0	42.2
	30	58.0	73.5	46.2	60.7	40.8	54.2
	45	74.5	94.0	60.1	77.8	53.5	69.8

*Takeoff speeds given here are for sea level, standard day conditions;
increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot
per °C.

ENGINE FIRE ON GROUND**FIRES**

Ext Power/Starter Connected

- 1 THROTTLE—OFF
- 2 ENGINE MASTER—ON
- 3 MASTER GEN—ON
- 4 THROTTLE—CRANK
- 5 FIRE OUT—SWITCHES OFF

No External Power/Starter

- 1 THROTTLE—OFF
- 2 ENGINE MASTER—OFF
- 3 MASTER GEN—OFF

ENGINE FIRE IN FLIGHT

THROTTLE—IDLE

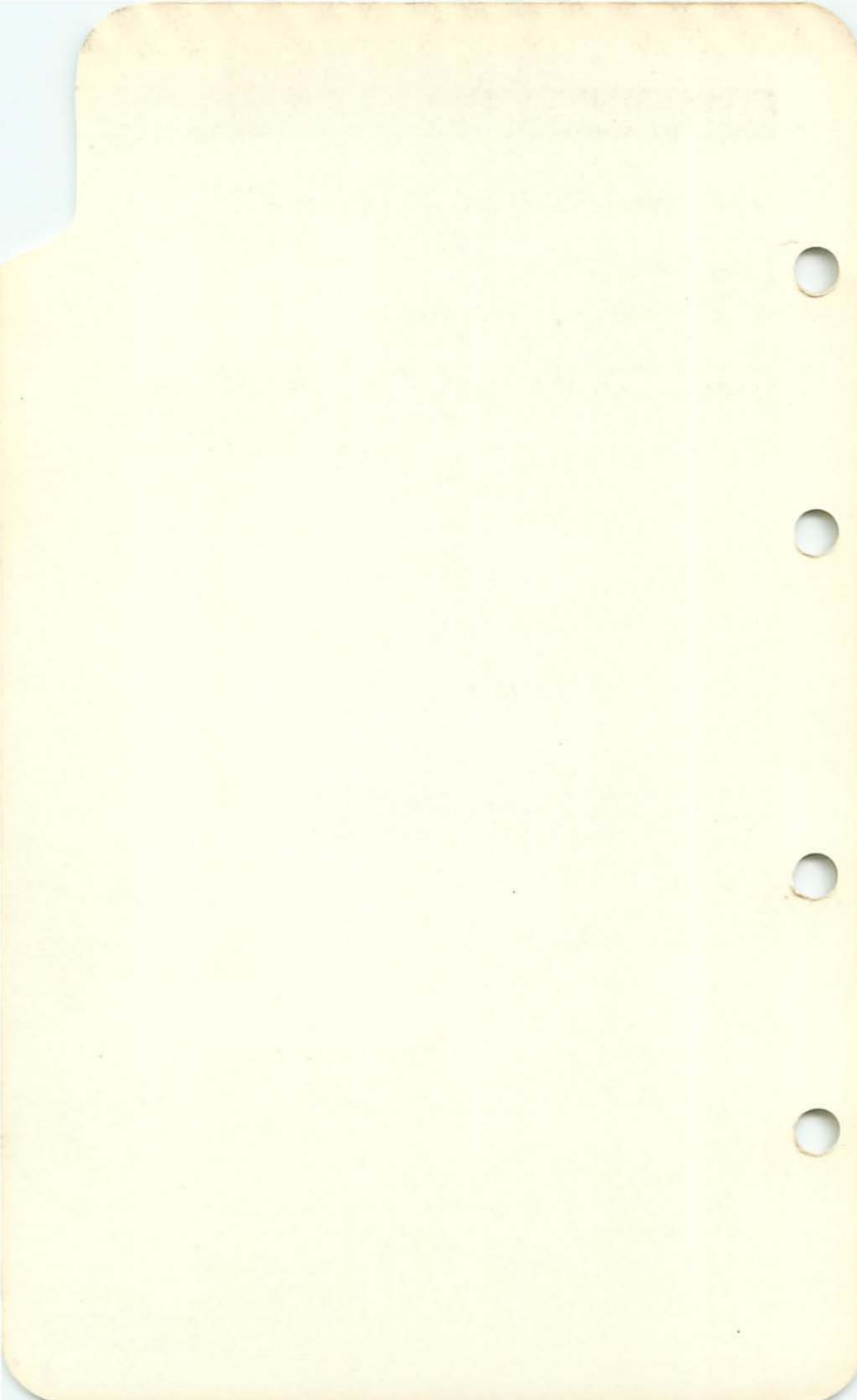
Fire Uncertain

RETURN—MIN POWER

Fire Exists

SHUT DOWN OR EJECT

CONTINUED



ELECTRICAL FIRE

1 AFFECTED EQUIPMENT — OFF

Fire Persists

2 GENERATOR — OFF

3 SEE COMPL ELEC FAILURE (5)

TAKEOFF DISTANCES — MILITARY THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Distances are for aircraft using the J57-P-20A engine;

increase distance by 8.0% with the J57-P-20 engine.

For dashed areas refer to TAKEOFF DISTANCES — MAXIMUM THRUST

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 25,000 lb

SPEED: 147 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	29.5	40.2	22.2	32.0	19.2	28.2
	15	36.5	46.0	28.2	36.8	24.5	32.3
	30	44.6	57.5	34.5	46.5	30.0	41.0
	45	55.5	70.5	44.0	57.8	38.8	51.6
1,000	0	32.8	44.0	25.2	34.8	21.5	30.8
	15	40.0	52.0	31.0	41.8	26.8	37.0
	30	49.5	63.4	39.0	51.5	34.0	46.0
	45	63.5	80.5	50.8	66.2	44.8	59.4
2,000	0	35.8	47.3	17.8	38.0	24.1	33.5
	15	44.0	56.8	34.2	46.0	29.8	40.7
	30	55.0	70.0	43.5	57.3	38.5	51.2
	45	71.2	89.8	57.3	73.8	50.8	66.2
3,000	0	39.2	51.2	30.2	41.1	26.0	36.3
	15	48.0	61.5	37.8	50.0	33.0	44.2
	30	61.0	77.2	48.7	63.5	42.6	56.7
	45	80.0	—	64.7	84.0	57.5	75.5
4,000	0	42.3	54.8	33.0	44.0	28.6	39.0
	15	52.8	69.8	41.5	57.0	36.7	50.8
	30	67.5	85.3	54.2	70.2	48.0	60.3
	45	89.3	—	72.2	94.5	64.8	85.4
6,000	0	52.0	66.3	41.2	54.0	35.8	48.2
	15	66.0	83.5	52.8	68.4	46.8	61.5
	30	85.5	—	69.5	90.0	62.2	81.2
	45	—	—	96.5	—	87.5	—

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

INCORRECT ENG OIL PRESS **ENG/A/B**

45±8

- 1 RPM — SLOWLY TO 85% TO 87%
- 2 AVOID POWER CHANGES, G'S
- 3 NO ABRUPT SP BK
- 4 LAND NEAREST SUIT FIELD
- 5 PRECAUTIONARY APPR

A/B MIN PRESS SHUTOFF

- 1 CYCLE A/B
- Condition Remains
- 2 LAND WHEN PRACTICAL

ENGINE FUEL CONTROL

SEE FUEL CONTROL (4)

TAKEOFF DISTANCES—MILITARY THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Distances are for aircraft using the J57-P-20A engine;

increase distance by 8.0% with the J57-P-20 engine.

For dashed areas refer to TAKEOFF DISTANCES — MAXIMUM THRUST

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 28,000 lb

SPEED: 157 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	39.0	51.0	30.2	41.0	26.0	36.2
	15	49.0	62.8	38.5	51.0	33.5	45.3
	30	60.2	76.2	48.1	62.5	42.2	56.0
	45	75.0	94.8	60.5	78.2	53.8	70.0
1,000	0	43.5	56.2	33.9	45.5	29.3	40.5
	15	54.0	68.7	42.5	56.0	37.5	49.8
	30	67.5	85.3	54.1	70.2	47.9	63.0
	45	86.0	—	70.0	90.5	62.6	81.5
2,000	0	48.0	61.5	37.8	50.0	32.8	44.2
	15	59.0	75.0	47.0	61.5	41.0	55.0
	30	75.0	95.0	60.5	78.5	53.8	70.5
	45	98.8	—	80.8	—	72.2	96.0
3,000	0	52.0	66.5	41.3	54.2	36.0	48.2
	15	65.0	82.2	52.0	67.3	46.0	60.5
	30	83.8	—	68.0	88.2	60.8	79.5
	45	—	—	93.0	—	84.0	—
4,000	0	56.5	71.8	44.8	58.7	39.7	52.5
	15	71.3	89.8	57.5	73.8	51.1	66.2
	30	93.3	—	75.5	99.5	68.0	89.8
	45	—	—	—	—	96.0	—
6,000	0	70.7	89.3	57.0	73.3	50.6	65.8
	15	90.7	—	74.0	96.3	66.0	87.0
	30	—	—	99.5	—	89.5	—
	45	—	—	—	—	—	—

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

FLAMEOUT**FLAMEOUT/AIRSTART**

Try APC If Warranted, Otherwise:

- 1 THROTTLE—OFF
- 2 FUEL TRANSFER—ON
- 3 ENGINE MASTER—ON
- 4 170 TO 250 KIAS, 17% TO
30%
- 5 GENERATORS—OFF
- 6 EPP—OUT
- 7 FUEL—NOR OR MAN.
- 8 EMERG GEN—ON

AIRSTART

- 1 IGNITE
- 2 FUEL FLOW—750 PPH

Relight Obtained

- 3 EMERG GEN—OFF
- 4 MASTER GEN—ON

First Attempt Fails

- 1 THROTTLE—OFF
- 2 REPOSITION FUEL CONT
- 3 REATTEMPT AIRSTART
- 4 FAILS—PRESS IGNITE SW

TAKEOFF DISTANCES — MILITARY THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Distances are for aircraft using the J57-P-20A engine;

increase distance by 8.0% with the J57-P-20 engine.

For dashed areas refer to TAKEOFF DISTANCES — MAXIMUM THRUST

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 31,000 lb

SPEED: 165 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	50.0	64.0	39.5	52.0	34.5	46.2
	15	63.0	79.8	50.3	65.3	44.4	58.4
	30	79.5	—	64.2	83.6	57.0	75.3
	45	—	—	82.0	—	73.3	97.3
1,000	0	55.5	70.5	44.0	57.8	39.0	51.5
	15	70.2	88.7	56.7	72.7	50.1	65.1
	30	89.0	—	72.2	94.5	64.5	85.3
	45	—	—	96.2	—	86.7	—
2,000	0	61.8	78.0	49.5	64.0	43.5	57.1
	15	77.3	97.8	62.6	81.0	55.5	73.0
	30	99.2	—	81.0	—	72.5	96.4
	45	—	—	—	—	—	—
3,000	0	68.0	86.0	55.0	70.7	48.5	63.5
	15	86.0	—	70.0	90.5	62.5	81.8
	30	—	—	93.0	—	83.8	—
	45	—	—	—	—	—	—
4,000	0	74.0	93.5	59.8	77.3	53.0	69.3
	15	94.7	—	77.3	—	69.0	91.8
	30	—	—	—	—	99.0	—
	45	—	—	—	—	—	—
6,000	0	93.0	—	76.0	98.7	68.0	89.8
	15	—	—	—	—	93.5	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

FUEL CONTROL**FUEL**

- 1 THROTTLE—IDLE
- 2 FUEL CONT—MANUAL
- 3 THROTTLE—SLOWLY SET
- 4 LAND WHEN PRACTICAL
- 5 NO APPROACH COMPENSATE

FUEL BOOST PUMPS

- 1 THROTTLE—IDLE
- 2 BELOW 30,000 FT
- 3 RETURN—MIN POWER
- 4 NO A/B ABOVE 6,000 FT
OR ABOVE 300 KIAS
- 5 NO NEGATIVE G

Max Nose-Down Attitudes

1,200 LB FUEL—20°

600 TO 1,200 LB—10°

BELOW 600 LB—LEVEL

- Before Deselecting A/B
- 2 G OR NOSE UP

CONTINUED



ENGINE FUEL PUMP

- 1 NO UNNECESSARY A/B
 - 2 LAND WHEN PRACTICAL
- Flameout, Have Fuel Flow
RELIGHT

AFT TRANSFER PUMP

- 1 FUEL TRANSFER—OFF
Before Landing
- 2 DUMP WING FUEL
Landing
- 3 MAIN FUEL—1,000 LB MIN
F-8E Attack—Below 2,000 lb Fuel
MAX SPEED—300 KIAS
NORMAL FLYING ONLY

TRANSFER SHUTOFF

- 1 FUEL TRANS—PRESS DUMP
- 2 MAIN FUEL—ADJUST
NO AERIAL REFUELING

CONTINUED

TAKEOFF DISTANCES — MILITARY THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS
Distances are for aircraft using the J57-P-20A engine;
increase distance by 8.0% with the J57-P-20 engine.

For dashed areas refer to TAKEOFF DISTANCES — MAXIMUM THRUST

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 34,000 lb

SPEED: 174 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	62.7	79.3	50.2	64.8	44.2	58.1
	15	80.8	—	65.5	85.1	58.3	76.7
	30	—	—	83.6	—	75.1	99.9
	45	—	—	—	—	—	—
1,000	0	70.2	88.7	56.7	72.8	50.1	65.3
	15	90.0	—	73.3	95.5	65.5	86.1
	30	—	—	96.5	—	86.5	—
	45	—	—	—	—	—	—
2,000	0	79.0	99.9	63.8	82.8	56.4	74.6
	15	99.0	—	81.0	—	72.3	96.3
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
3,000	0	87.8	—	71.5	93.0	63.8	84.0
	15	—	—	91.9	—	82.7	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
4,000	0	96.0	—	78.5	—	70.1	93.0
	15	—	—	—	—	94.0	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
6,000	0	—	—	—	—	92.2	—
	15	—	—	—	—	—	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—

*Takeoff speeds given here are for sea level, standard day conditions;
increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot
per °C.

FUEL LEAKS

- 1 AVOID A/B EXCEPT EMERG
- 2 220 KIAS MIN TO 135°
POSITION, CLEAN CONFIG
- 3 EPP — OUT
- 4 EMERG GEN — OFF

At 90° Position

- 5 WING UP, GEAR DN
- 6 MAINTAIN 175 KIAS

Final Approach Point

- 7 1,500 FT FROM RUNWAY,
175 KIAS, 150 FT ALTITUDE,
SECURE ENGINE

If Arrest Necessary, Use
Upwind Gear. No Short
Field Arrest.

TAKEOFF DISTANCES — MILITARY THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Distances are for aircraft using the J57-P-20A engine;

increase distance by 8.0% with the J57-P-20 engine.

For dashed areas refer to TAKEOFF DISTANCES — MAXIMUM THRUST

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 34,000 lb

SPEED: 174 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	62.7	79.3	50.2	64.8	44.2	58.1
	15	80.8	—	65.5	85.1	58.3	76.7
	30	—	—	83.6	—	75.1	99.9
	45	—	—	—	—	—	—
1,000	0	70.2	88.7	56.7	72.8	50.1	65.3
	15	90.0	—	73.3	95.5	65.5	86.1
	30	—	—	96.5	—	86.5	—
	45	—	—	—	—	—	—
2,000	0	79.0	99.9	63.8	82.8	56.4	74.6
	15	99.0	—	81.0	—	72.3	96.3
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
3,000	0	87.8	—	71.5	93.0	63.8	84.0
	15	—	—	91.9	—	82.7	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
4,000	0	96.0	—	78.5	—	70.1	93.0
	15	—	—	—	—	94.0	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—
6,000	0	—	—	—	—	92.2	—
	15	—	—	—	—	—	—
	30	—	—	—	—	—	—
	45	—	—	—	—	—	—

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

MAIN GEN/TRANS RECT ◀ ELEC/FLT CT

- 1 DESELECT A/B
- 2 MASTER GEN—RESET, ON
Generator Fails to Reset
- 3 EPP—WHEN REQD
- 4 LAND WHEN PRACTICAL
EPP Fails
SEE COMPL ELEC FAILURE

COMPLETE ELEC FAILURE

- 1 THROTTLE—IDLE
BELOW 30,000 FT
- 2 RETURN—MIN POWER
FLIGHT LIMITS
(See Fuel Boost Pumps)

CONTINUED

YAW TRIM AND STAB

1 YAW STAB—OFF RESET

Oscillation Stopped

2 YAW STAB—ON

Warning Light Still On

3 YAW STAB—OFF RESET

MAX—675 KIAS, 1.5 IMN

MAX, LAND—180 KIAS

OBSERVE G LIMITS

ROLL—180°, CLEAN STOPS

(Gradual)

ROLL TRIM AND STAB

1 ROLL STAB—RESET, ON

Warning Light Still On

2 ROLL STAB—OFF RESET

MAX, LAND—180 KIAS

PITCH TRIM

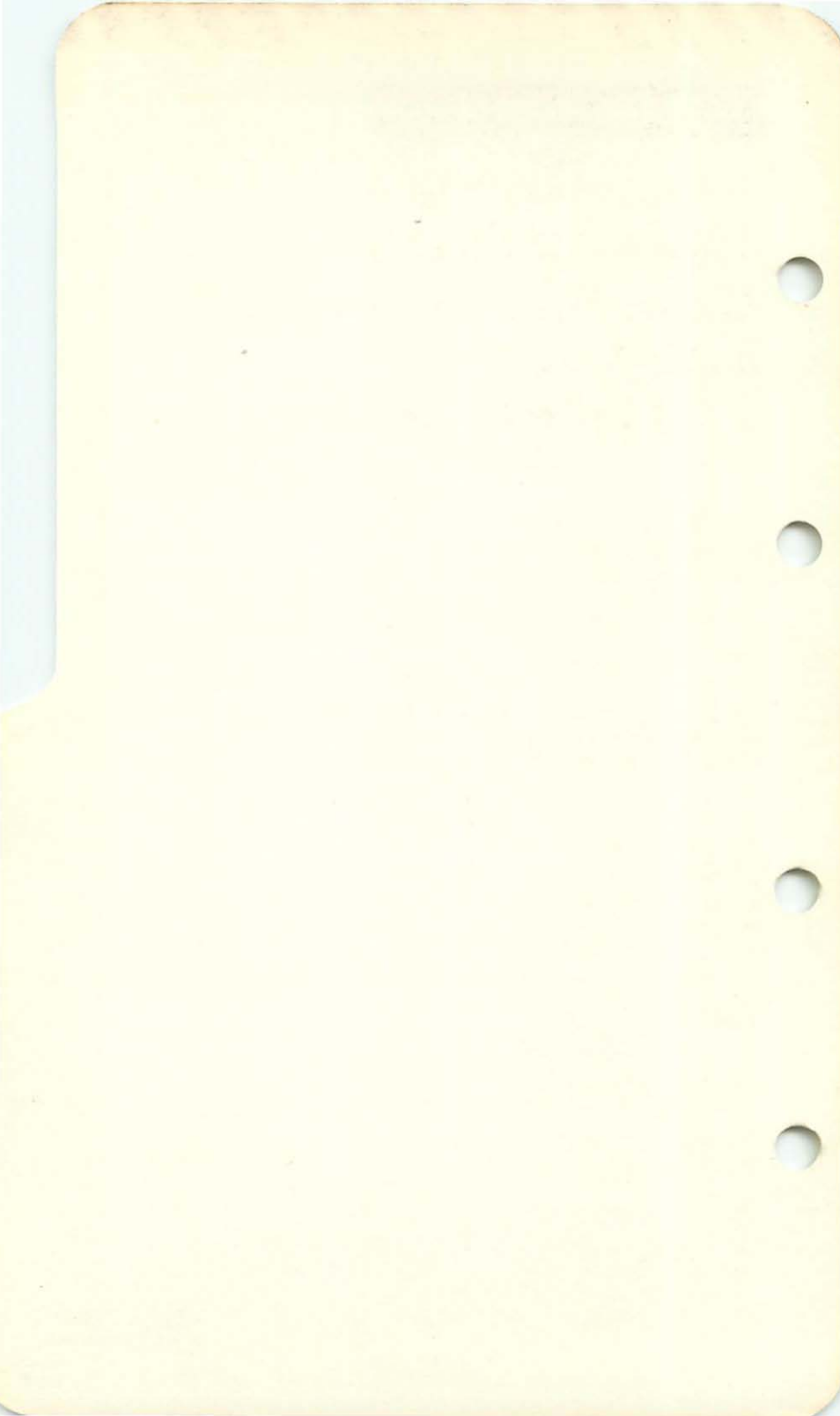
1 EMER TRIM—CHAN 1 OR 2

2 EMER TRIM HANDLE—UP

No Response

3 SELECT OTHER CHANNEL

CONTINUED



LATERAL CONTROLS

Before Raising Wing

1 CLIMB TO 10,000 FT

Uncontrollable With Wing Up

2 WING—DOWN

3 LAND—WING DOWN

TAKEOFF DISTANCES — MAX THRUST

For F-8E, decrease takeoff speed 4.0 Knots IAS

Landing Condition

Hard-Surfaced Runway

DISTANCE X 100 FEET

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 22,000 lb**SPEED: 132 KIAS***

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	11.0	19.5	8.1	15.5	6.8	13.5
	15	13.5	22.4	10.0	18.0	8.3	15.8
	30	16.0	25.5	12.0	20.5	10.2	18.2
	45	19.6	29.8	14.8	24.0	12.4	21.2
1,000	0	12.2	20.8	9.0	16.7	7.8	14.7
	15	14.7	23.8	11.0	19.0	9.3	16.7
	30	17.5	27.3	13.2	22.0	11.1	19.7
	45	21.2	31.3	16.2	25.4	14.0	22.6
2,000	0	13.3	22.2	9.9	17.9	8.4	15.7
	15	16.0	25.5	12.0	20.5	10.2	18.2
	30	19.3	29.4	14.6	23.5	12.3	20.9
	45	23.3	33.8	18.0	27.5	15.3	24.4
3,000	0	14.5	23.6	10.8	18.8	9.0	16.5
	15	17.5	27.3	13.2	22.0	11.1	19.7
	30	21.2	31.3	16.2	25.4	14.0	22.6
	45	25.5	36.0	19.9	29.4	17.3	26.0
4,000	0	16.0	25.5	12.0	20.5	10.2	18.2
	15	19.3	29.4	14.6	23.5	12.3	20.9
	30	23.0	33.2	17.8	27.0	15.2	23.8
	45	28.0	39.0	21.8	31.8	18.9	28.1
6,000	0	19.3	29.4	14.6	23.5	12.3	20.9
	15	23.3	33.8	18.0	27.5	15.3	24.4
	30	27.7	38.5	21.6	31.4	18.8	27.8
	45	33.9	45.8	26.6	37.7	23.2	33.7

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

PC HYDRAULIC**HYDRAULIC****PC No. 1 Out**

EPP—OUT IF REQD
NO ROLL STAB
MAX G—4.0

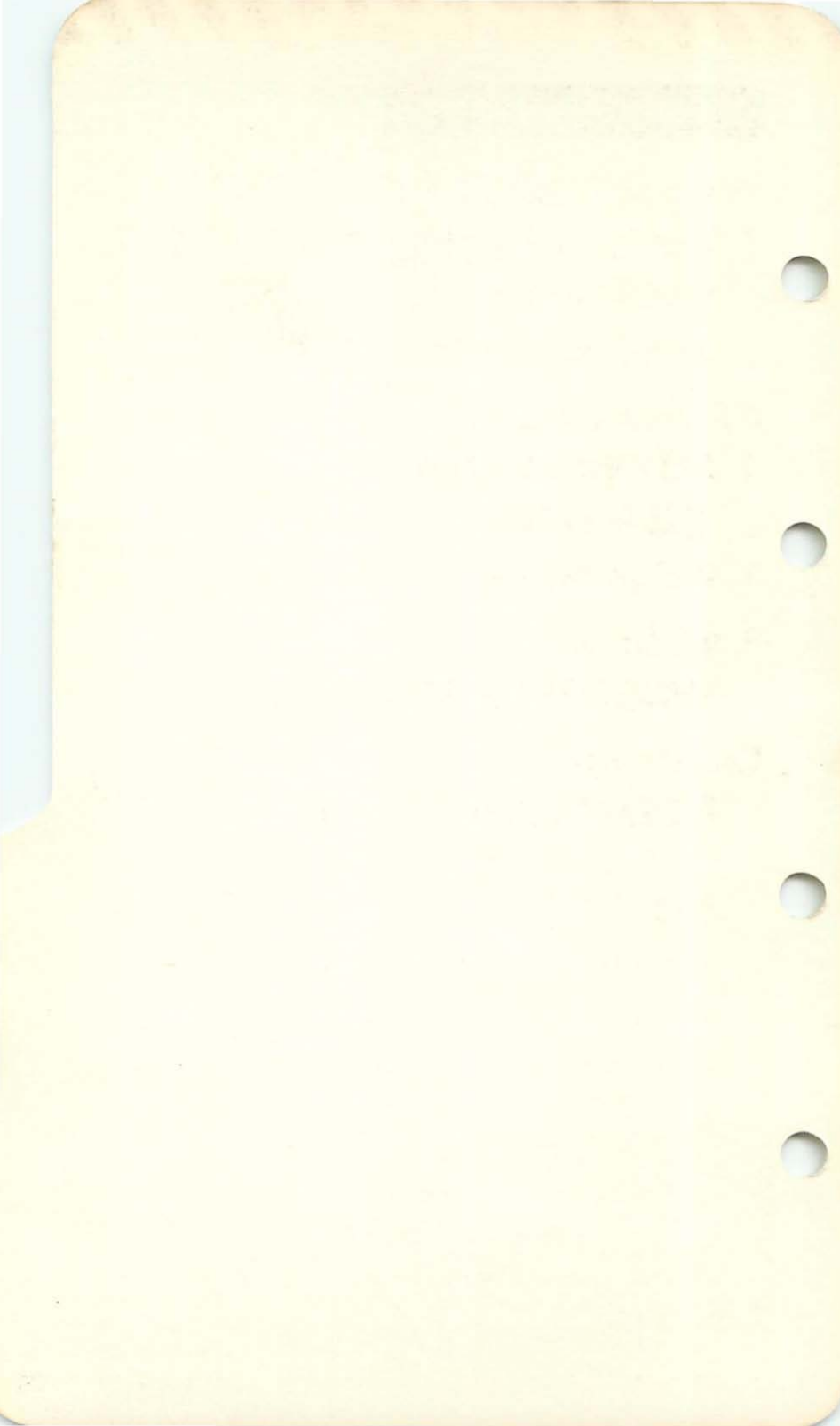
PC No. 2 Out

EPP—OUT IF REQD
NO SPOILERS, YAW STAB
MAX G—YAW STAB LIMITS

Either System Out

MAX—600 KIAS, 0.92 IMN
MAX, LAND—180 KIAS
MAX BANK—90°
MOVE CONTROLS SMOOTHLY
NO SLIPS, SKIDS
EMERG GEN—OFF
MIN (EPP OUT)—140 KIAS
LAND NEAREST SUIT FIELD

CONTINUED



UTILITY HYDRAULIC

Pressure Remains

- 1 GEAR—DOWN (IF PRACTICAL)
- 2 WING—UP (IF PRACTICAL)
- 3 LAND WHEN PRACTICAL

All Pressure Lost

- 1 RETURN TO BASE
- 2 BLOW GEAR
- 3 BLOW WING

Field Landing

SHORT FIELD ARRESTMENT

Carrier Landing

NORMAL ARRESTMENT

TAKEOFF DISTANCES — MAX THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 25,000 lb

SPEED: 143 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	15.0	24.4	11.2	19.6	9.5	17.3
	15	18.0	28.0	13.7	22.5	11.5	19.9
	30	21.9	32.1	17.0	25.5	14.8	22.8
	45	26.5	37.2	20.6	30.6	18.0	27.0
1,000	0	16.5	26.0	12.5	21.0	10.7	18.6
	15	19.8	30.0	15.0	24.2	12.8	21.3
	30	23.9	34.4	18.5	28.0	15.9	24.7
	45	29.0	40.0	22.4	32.7	19.3	29.0
2,000	0	18.0	28.0	13.7	22.5	11.5	19.9
	15	21.9	32.1	17.0	25.5	14.8	22.8
	30	26.1	36.7	20.4	29.8	17.5	26.6
	45	31.8	43.3	25.0	35.3	21.7	31.7
3,000	0	19.7	29.9	14.9	24.1	12.7	21.2
	15	23.7	34.2	18.4	27.8	15.8	24.5
	30	28.7	37.7	22.2	32.4	19.1	28.7
	45	34.7	45.3	27.2	36.7	23.7	33.1
4,000	0	21.9	32.1	17.0	25.5	14.8	22.8
	15	26.1	36.7	20.4	29.8	17.5	26.6
	30	31.4	42.9	24.7	34.9	21.4	31.3
	45	38.0	50.2	30.1	41.2	26.4	36.7
6,000	0	26.1	36.7	20.4	29.8	17.5	26.6
	15	31.4	42.9	24.7	34.9	21.4	31.3
	30	37.8	50.0	30.0	41.0	26.3	36.5
	45	46.2	59.5	36.9	49.0	32.7	44.1

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

EJECTION**EJECTION / BAILOUT**

- 1 CORRECT POSTURE
- 2 FACE CURTAIN—PULL

Seat Fails to Eject

- 1 FACE CURTAIN—HOLD
- 2 CANOPY INTERRUPT—PULL
- 3 FACE CURTAIN—PULL
(Both Hands)

Canopy On, Can't Pull Interrupt

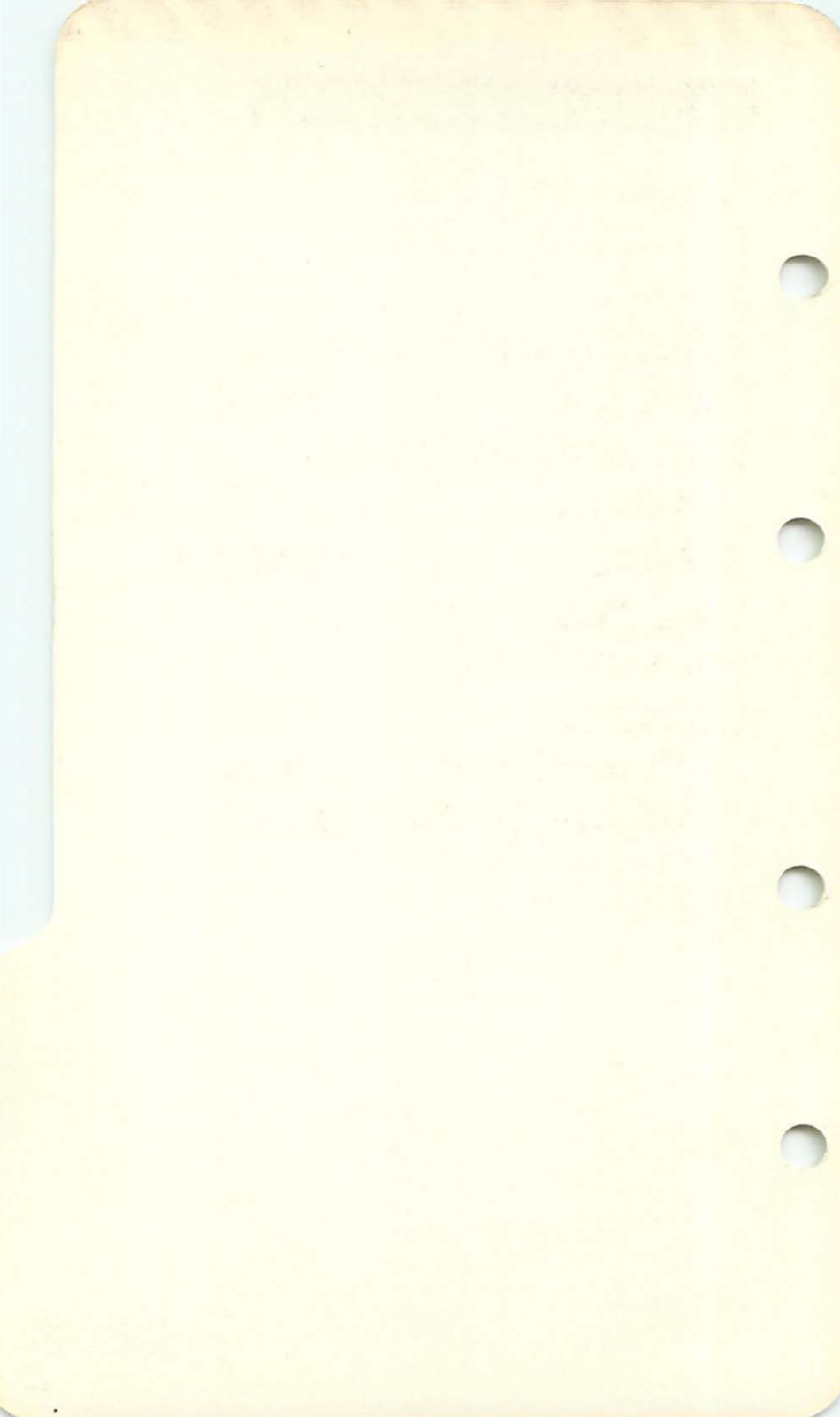
- 1 EMERG CANOPY—PULL

Or

CANOPY LOCKS—OPEN
(Manually)

- 2 FACE CURTAIN—PULL
(Both Hands)

CONTINUED



BAILOUT (CANOPY GONE)

- 1 GEAR — UP
- 2 STORES — JETTISON
- 3 WING — UP
- 4 SPEED — MIN W/O STALL
- 5 EMERG HARNESS — RELEASE
- 6 LEG RESTRAINT LINES —
SEPARATE
- 7 SERVICES — DISC AT CONSOLE
- 8 AIL. TRIM — FULL R OR L
- 9 WINGS — LEVEL
- 10 BAILOUT
(Opposite Low Wing Trim)
- 11 D RING — BELOW 10,000 FT

TAKEOFF DISTANCES — MAX THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 28,000 lb

SPEED: 153 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	19.8	30.0	15.0	24.2	12.8	21.3
	15	23.8	34.3	18.5	27.9	15.8	24.6
	30	28.6	37.6	22.2	32.3	19.0	28.6
	45	34.8	45.4	27.3	36.8	23.8	33.2
1,000	0	21.6	31.8	16.5	25.2	14.2	22.4
	15	25.9	36.5	20.3	29.7	17.6	26.7
	30	31.3	42.8	24.6	34.8	21.2	31.1
	45	38.0	50.2	30.1	41.2	26.5	36.7
2,000	0	23.8	34.3	18.5	27.9	15.8	24.6
	15	28.6	37.6	22.2	32.3	19.0	28.6
	30	34.4	45.0	27.0	36.4	23.6	32.8
	45	41.9	54.7	33.4	45.0	29.5	40.4
3,000	0	25.9	36.5	20.3	29.6	17.6	26.4
	15	31.3	42.8	24.6	34.8	21.2	31.2
	30	37.6	49.8	29.6	40.8	26.0	36.3
	45	45.8	59.0	36.7	48.6	32.4	43.6
4,000	0	28.6	37.6	22.2	32.3	19.0	28.6
	15	34.4	45.0	27.0	36.4	23.6	32.8
	30	41.2	53.8	32.8	44.3	28.8	39.8
	45	50.2	64.0	40.2	53.0	35.8	47.8
6,000	0	34.4	45.0	27.0	36.4	23.6	32.8
	15	41.2	53.8	32.8	44.3	28.8	39.8
	30	50.0	63.8	40.0	52.8	35.6	47.6
	45	61.0	75.9	49.8	63.6	44.4	57.5

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

DITCHING**DITCHING / EGRESS**

- 1 WING—AS IS
(If Down, Blow Droops)
- 2 CANOPY—JETTISON
- 3 GEAR—UP
- 4 SPEED BRAKE—RETRACT
- 5 HARNESS—LOCKED
- 6 GLIDE—170 KIAS
- 7 ENGINE MASTER—OFF
- 8 THROTTLE—OFF
- 9 CONTACT—145 KIAS
(Nose High)

EMERGENCY EGRESS

- 1 CANOPY—OPEN NORMALLY
(If Unable, Jettison)
- 2 SHOULDER FITTINGS—FREE
- 3 EMERG HARNESS—RELEASE
- 4 LEG RESTRAINT—FREE
- 5 SERVICES—DISCONNECT

TAKEOFF DISTANCES — MAX THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 31,000 lb

SPEED: 162 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	25.0	35.5	19.4	29.0	16.7	25.8
	15	30.0	41.0	23.3	33.6	20.2	30.0
	30	36.2	48.0	28.5	39.3	25.0	35.3
	45	44.2	57.3	35.5	47.5	31.2	42.7
1,000	0	27.3	38.0	21.5	31.0	18.5	27.5
	15	33.0	44.7	25.9	36.3	22.5	32.4
	30	39.8	52.2	31.5	42.8	27.5	38.6
	45	48.4	62.0	38.7	51.3	34.4	46.2
2,000	0	30.0	41.0	23.3	33.6	20.2	30.0
	15	36.2	48.0	28.5	39.3	25.0	35.3
	30	43.8	56.9	34.8	47.1	30.5	42.3
	45	53.5	67.5	43.5	56.0	38.4	50.5
3,000	0	33.0	44.7	25.9	36.3	22.5	32.4
	15	39.8	52.2	31.5	42.8	27.5	38.6
	30	47.9	61.6	38.4	51.0	34.0	45.8
	45	58.7	73.3	47.8	61.0	42.5	55.3
4,000	0	36.2	48.0	28.5	39.3	25.0	35.3
	15	43.8	56.9	34.8	47.1	30.5	42.3
	30	52.8	66.8	42.5	55.6	37.7	50.0
	45	64.8	80.2	53.0	67.0	47.1	60.7
6,000	0	43.8	56.9	34.8	47.1	30.5	42.3
	15	52.8	66.8	42.5	55.6	37.7	50.0
	30	64.3	79.8	52.3	66.6	46.4	60.4
	45	79.5	97.3	65.6	82.0	59.0	74.7

*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

JETTISONING - F-8E**JETTISON**

GEAR—UP

Salvo

SAL JET SW—LW/F-U, RW/F-L

Selective

1 ARM SELECT—AS DESIRED

2 SELECT JETTISON—ON

Selective—Rkt Pks on MER/TER

1 ARM SELECT—AS DESIRED

2 SEL JETT—MER/TER STORES

3 TRIGGER—ONCE EA PACK

JETTISONING - F-8D

GEAR—UP

With EPP Elec Power

EMERG GEN—ON

Dual Pylons

JETTISON SW—UP, LWR

Single Pylons

JETTISON SW—LWR

LANDING EMERGENCIES

FAILURE	ACTION — FIELD	ACTION — CARRIER
All Gear Up	Controlled Ejection OR , Conditions Ideal: Normal Approach Minimum Sink Touchdown	Controlled Ejection
Nose Gear Up or Trail	Normal Landing (No Arrest) Ease Nose On	<i>Unable to Divert</i> Barricade Arrest Hook Down Option-Normal Arrest Avoid High Sink
Both Main Gear Up	Runway Foamed Short Field Arrest	<i>Unable to Divert</i> Controlled Ejection or Barricade Arrest Hook Down
One Main Gear Up or Trail	Runway Foamed Short Field Arrest	<i>Unable to Divert</i> Barricade Arrest Hook Down Option-Normal Arrest Avoid High Sink
One Main Gear and Nose Gear Up or Trail	Runway Foamed Short Field Arrest	<i>Unable to Divert</i> Barricade Arrest Hook Down
Nose Gear Canted	Normal or Arrested Landing <i>Just Before Touchdown</i> Master Gen — OFF	
Gear Barberpole	Treat as Corresponding Gear Up unless Gear Determined Down	Treat as Corresponding Gear Up unless Gear Determined Down
Nosewheel Missing	Normal Landing (No Arrest) Ease Nose On	<i>Unable to Divert</i> Barricade Arrest Hook Down
One Main Wheel Missing	Runway Foamed Short Field Arrest	<i>Unable to Divert</i> Barricade Arrest Hook Down
Any Landing Gear Failure With Wing Down	Landing Appropriate to Gear Failure	<i>Unable to Divert</i> Controlled Ejection
Blown Tires	Short Field Arrest	Normal Arrest
Wing Down	Cr Droop Preferred No Indexer or APC 16 UNITS (160-175 KIAS) Long Field Arrest	<i>Unable to Divert</i> Max WOD — 45 Knots OLS Setting — 4° No Barricade Cr Droop Preferred, Otherwise, Ld Droop No Indexer or APC 17 UNITS (150-160 KIAS)

Utility Hydraulic Failure	Short Field Arrest	Normal Arrest
Rough Field Landing	Gear — DOWN	
Tail Hook Failure	Normal Landing	<i>Unable to Divert</i> Barricade Arrest
Main Gear Severed On Landing	Continue Rollout	Select A/B Climb <i>Loss of Control</i> Eject

LANDING EMERGENCIES ◀ LANDING

Before Landing

- 1 WING FUEL — DUMP
- 2 FUSELAGE FUEL — REDUCE
- 3 FUEL DUMP — OFF
- 4 FUEL TRANS — PRESS DUMP
- 5 JETTISON CANOPY IF NEC
(Except Barricade Engage)

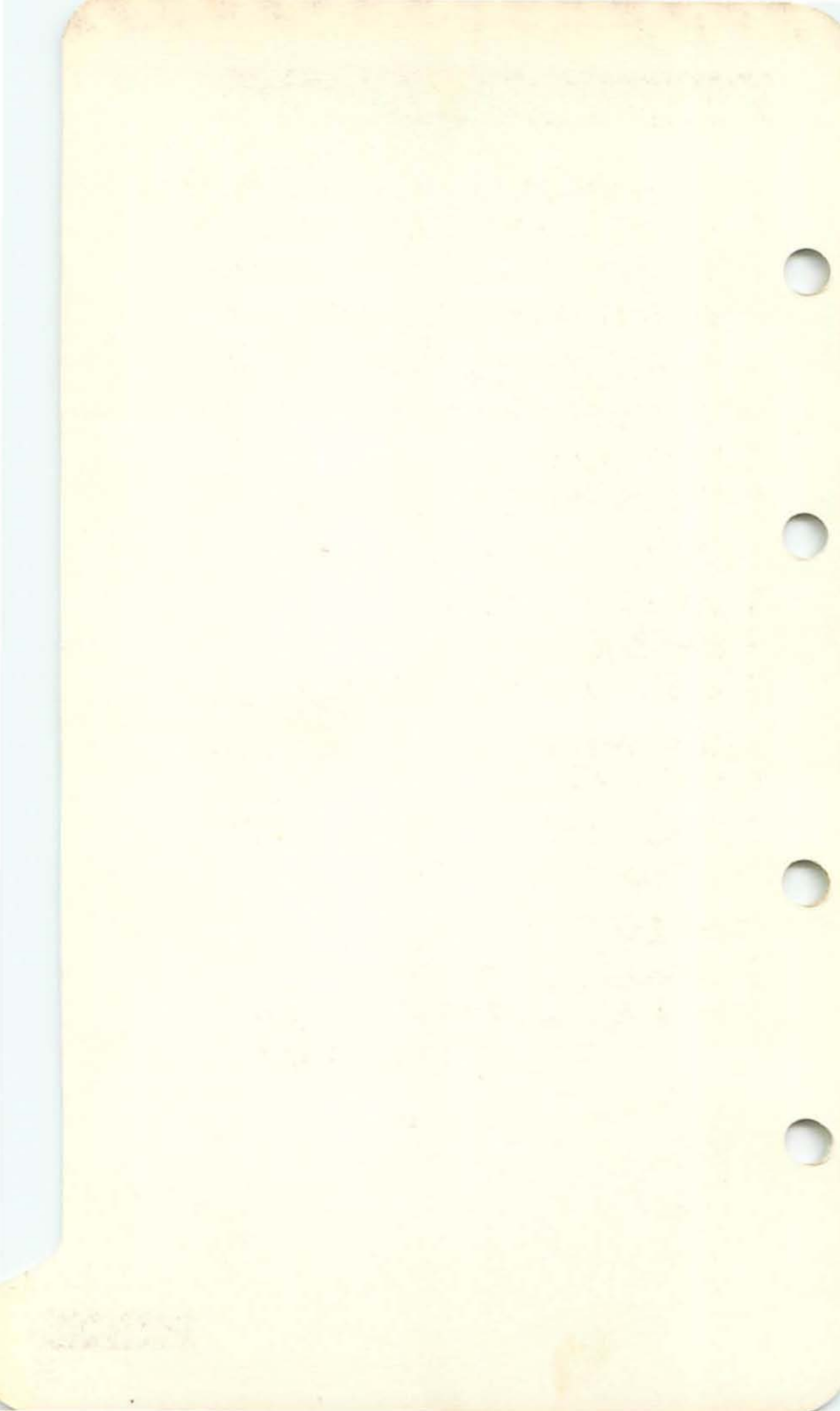
Landing

SEE CHART

PRECAUTIONARY APPROACH

- 1 EPP — OUT
- 1,500 Ft from Runway
- 2 150 FT, 175 KIAS, 88%

CONTINUED



STUCK-THROTTLE APPROACH

APC Operating (Fuel Cont Norm)

- 1 NORMAL APPROACH
- 2 SHORT FIELD ARREST, THEN
ENGINE MASTER — OFF
- 3 If Wire Missed, Hold APC ON

APC Won't Operate

- 1 EPP — OUT/ON
- 2 EXCESS ELEC EQUIP — OFF

5,000 Ft from Touchdown

- 3 300 FT, 175 KIAS
- 4 ENGINE MASTER — OFF
- 5 S/B to Maintain 175 KIAS

After Flameout

- 6 S/B — AS IS
- 7 ROLL AND YAW STAB — OFF
(Below 175 KIAS)

Over End of Runway

- 8 EMERG GEN — OFF
- 9 MIN A/S — 140 KIAS (F-8D)
135 KIAS (F-8E)

Long Field Arrestment

CONTINUED

DEAD ENGINE LANDING

NOTES

'Speeds are for maximum gross weight of 23,000 pounds
Use normal braking with steady pressure
Lower hook for arrested landing

7 TOUCH DOWN
Min Airspeed —
135 KIAS, F-8E
140 KIAS, F-8D

Avoid hitting
nosewheel first

6 FINAL
Airspeed —
170 KIAS
Altitude —
1,000 feet

4 180° POSITION — LOW KEY
Altitude — 4,000 feet
(3,000 minimum)
5,000 feet downwind
from intended touch
down point

2 APPROACH TO HIGH KEY
Airspeed — 175 KIAS
Raise wing
Extend landing gear
FUEL DUMP switch — OFF
EMER GEN switch — OFF

1 GLIDE
Wing down; Gear up; Cruise
droop
Airspeed — 220 KIAS
Throttle — OFF
ENGINE MASTER switch — OFF
EMER POWER handle — PULLED
EMER GEN switch — ON
ROLL STAB switch — OFF RESET
YAW STAB switch — OFF RESET
FUEL DUMP switch — ON

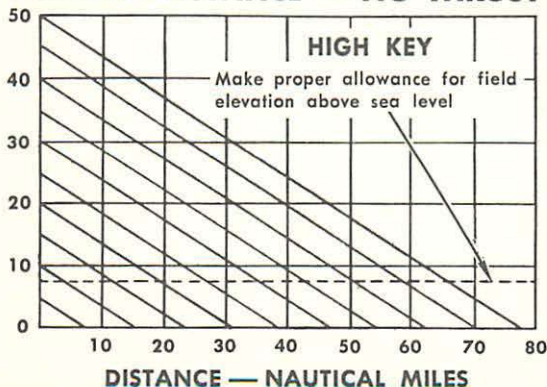
5 90° POSITION
Altitude — 2,000 feet
Airspeed — 170 KIAS
Recheck EMER GEN switch — OFF

3 HIGH KEY

Altitude — 8,000 feet
Sharp turn at or just
short of touch down
point

GLIDING DISTANCE — NO THRUST

PRESSURE ALTITUDE — 1,000 FEET



TAKEOFF DISTANCES — MAX THRUST (Continued)

For F-8E, decrease takeoff speed 4.0 Knots IAS

Shaded figures are for takeoff over 50-ft obstacle

GROSS WEIGHT: 34,000 lb

SPEED: 170 KIAS*

Field Alt (Ft)	Temp °C	Wind — Knots					
		0		20		30	
Sea Level	0	31.0	42.5	24.5	34.6	21.0	31.0
	15	37.3	49.5	29.5	40.5	26.0	36.2
	30	45.3	58.4	36.2	48.3	32.0	43.8
	45	55.8	70.0	45.5	58.2	40.3	52.6
1,000	0	34.0	45.8	26.6	37.5	23.2	33.6
	15	41.0	53.6	32.8	44.2	28.8	39.7
	30	50.0	63.8	40.0	53.0	35.5	47.8
	45	60.7	75.5	49.6	63.0	44.0	57.0
2,000	0	37.3	49.3	29.5	40.4	26.0	36.0
	15	45.3	58.4	36.2	48.3	32.0	43.8
	30	55.0	69.0	44.5	57.3	39.5	51.8
	45	67.0	82.8	54.8	69.3	49.0	62.7
3,000	0	41.0	53.6	32.8	44.2	28.8	39.7
	15	50.0	63.8	40.0	53.0	35.5	47.8
	30	60.2	75.0	49.1	62.5	43.7	56.7
	45	73.5	90.0	60.7	75.5	54.1	68.8
4,000	0	45.0	58.1	35.8	48.0	31.6	43.5
	15	55.0	69.0	44.5	57.3	39.5	51.8
	30	66.2	81.9	54.1	68.6	48.2	62.0
	45	81.2	99.0	67.2	83.2	60.5	76.1
6,000	0	55.0	69.0	44.5	57.3	39.5	51.8
	15	66.8	82.6	54.6	69.1	48.8	62.5
	30	80.5	98.4	66.7	82.8	59.9	75.6
	45	99.5	120.2	82.7	102.2	74.7	93.8

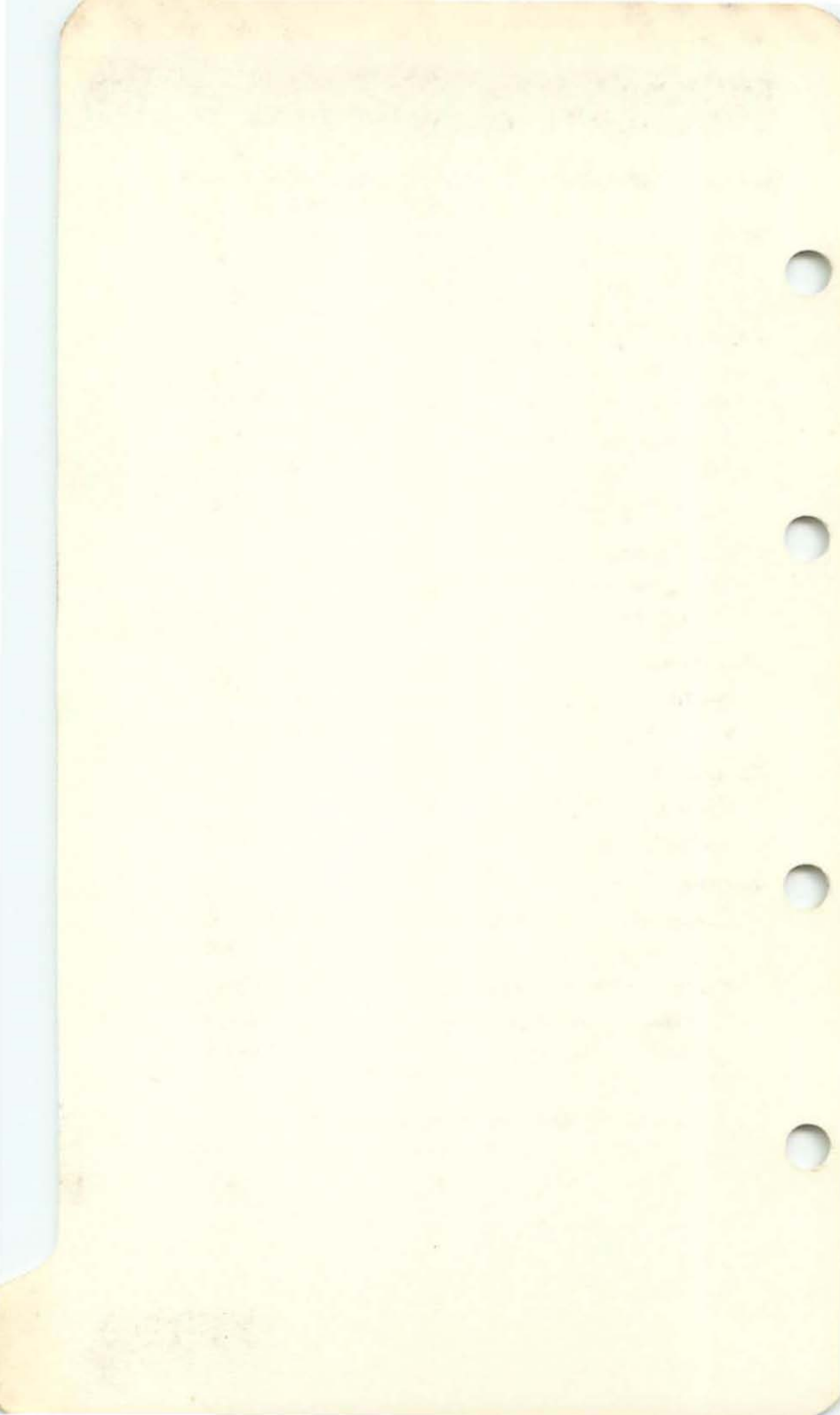
*Takeoff speeds given here are for sea level, standard day conditions; increase takeoff speed 0.6 knot per 1,000 feet field elevation and 0.1 knot per °C.

EMER SIGS (AIR TO AIR)**VIS SIG****GENERAL**

SIGNAL	MEANING	RESPONSE
Arms bent across forehead weeping; at night, horizontal motion of flashlight shone at other aircraft	General emergency signal meaning, I am in trouble	Carry out squadron doctrine for escort of disabled aircraft
Landing motion with open hand; at night, circular motion of flashlight shone at other aircraft	I must land immediately	Assume lead if indicated and return to base or nearest suitable field
Point to pilot and give series of thumb down movements; at night, flash series of dots with exterior lights	Are you having difficulty?	Thumbs up: I am all right Thumbs down: I am having trouble Lights off once, then on steady: I am all right Lights flashing: I am having trouble

'HEFOE' SIGNALS*(Preceded by General Emergency Signal)*

SIGNAL (Number of Fingers Extended Upward or Number of Flashes of Exterior Lights or Flashlight)	MEANING	RESPONSE
One Finger One Flash	Hydraulic Trouble	Nod of Head: I Understand
Two Fingers Two Flashes	Electrical Trouble	
Three Fingers Three Flashes	Fuel Trouble	
Four Fingers Four Flashes	Oxygen Trouble	Series of Flashes: I Understand
Five Fingers Five Flashes	Engine Trouble	



AIRSPED IND FAIL.**A/S IND****FLIGHT CONDITION****ANGLE OF ATTACK — UNITS
(1.0-G FLIGHT)****Takeoff**

Start wing down 9.0
 Wing locked by 14.0

MRT Climb (cruise droop out)

0 to 10,000 feet 8.0-9.0
 10,000 to 20,000 feet 9.0-9.5
 20,000 to 30,000 feet 9.5-10.5
 30,000 to 40,000 feet 10.5-11.5
 Above 40,000 feet 11.5

Max Endurance

Cruise droop in (Below 30,000 feet) or out
 (Above 30,000 feet) 13.0

Max Range

Sea level 9.5
 40,000 feet 11.5

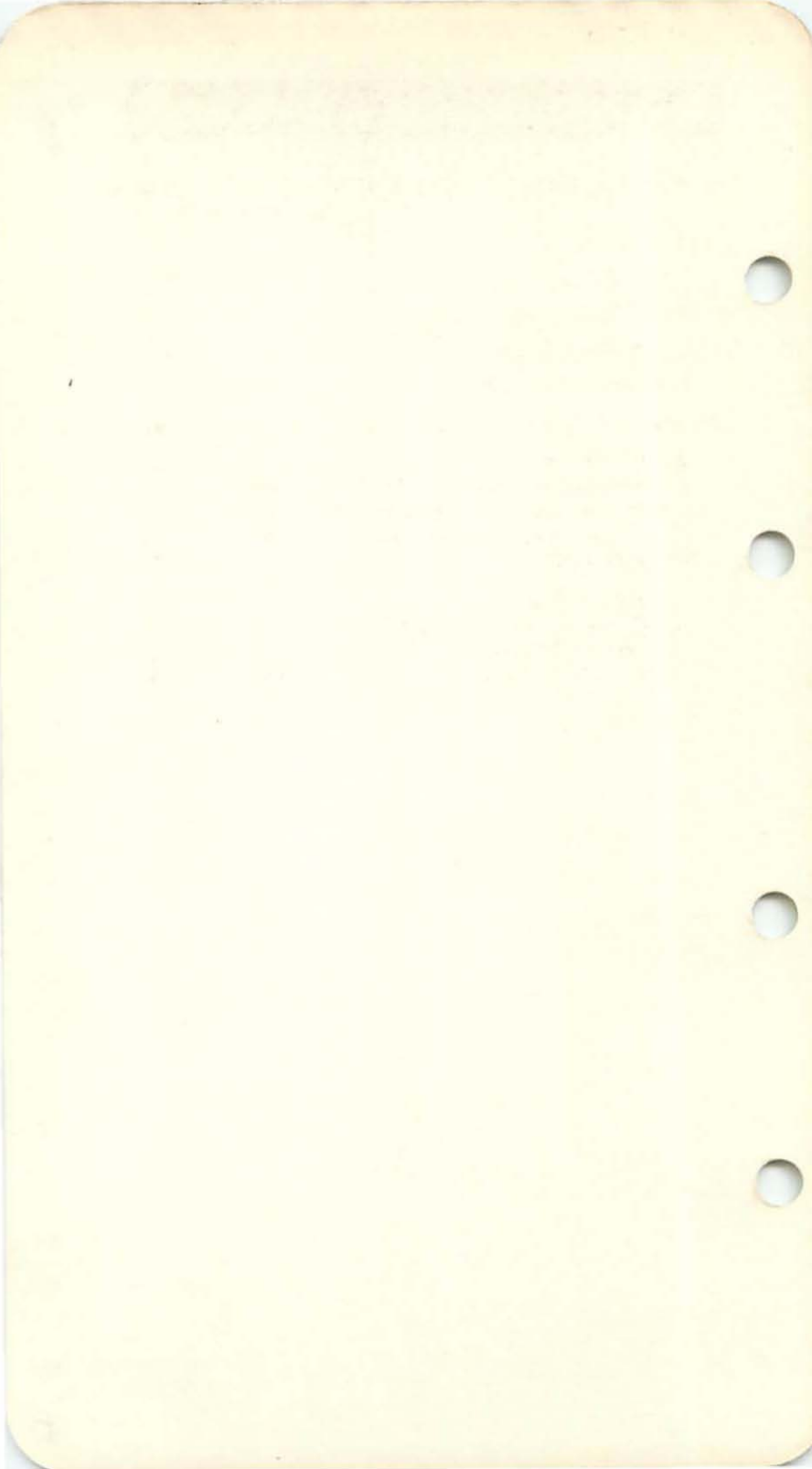
Penetration

S/B down, 82% 4,000 to
 6,000 FPM rate of descent 13.0

Landing

Gear down (wing down) 12.0-13.0
 Wing raised 14.0
 Carrier pattern and approach 13.25
 GCA pattern (landing configuration) 11.0
 GCA pattern (final) 13.25
 Field landing 13.25
 Wing down landing (cruise droop out or in):
 Carrier 17.0
 Field 16.0

CONTINUED



AIRSPPEED INDICATOR FAILURE

FLIGHT CONDITION	ANGLE OF ATTACK — (UNITS) (1.0-G FLIGHT)
------------------	---

Stall Warning

Clean (cruise droop in)	15.5
Clean (cruise droop out)	17.0
Clean (land droop out)	20.0
Landing configuration	15.0

Airspeed Vs. Angle of Attack (Without External Pylons)

Inflight check:

Clean: 3,000 pounds fuel, 300 KIAS, cruise droop out (add 7 knots for each additional 1,000 pounds fuel; deduct 7 knots for each 1,000 pounds less)	10.0
--	------

Landing configuration:

3,000 pounds fuel, 150 KIAS (add 4 knots for each additional 1,000 pounds fuel; deduct 4 knots for each 1,000 pounds less)	11.0
--	------



SECTION II

NORMAL PROCEDURES

TABLE OF CONTENTS

EXTERIOR INSPECTION	44
COCKPIT CHECKS	47
ENGINE START	47
INITIAL CHECK	48
TAXI	49
INSTRUMENT CHECKLIST	49
TAKEOFF	52
AFTER TAKEOFF	52
BEFORE DESCENT	52A
TRAFFIC PATTERN	52A
AFTER LANDING	53

EXTERIOR INSPECTION

NOSE SECTION

Access doors/panels — SECURED
Pitot cover — REMOVED
Nose cone — SECURED
Intake duct — NO OBSTRUCTION, WRINKLES, MISSING RIVETS
A/A transducer vane — NO DAMAGE
Oxygen filler — CAP SECURE, ON BUILDUP, COVER CLOSED
Gun camera window — NO DAMAGE
Emergency air vent — CLOSED
IR receiver — CLEAN, NO DAMAGE

NOSEWHEEL WELL

Nose gear doors — SECURE
Nose gear — STRUT, TIRE
Approach lights — NO DAMAGE, LENSES CLEAN
Downlock — INSTALLED
Armament disable sw — GUARD DOWN
Underside of fuselage — NO HYDRAULIC LEAKS

RIGHT FORWARD FUSELAGE

Pylons and launchers — SECURED
Ordnance — SECURED, SAFETY PINS INSTL
Formation light — NO DAMAGE
Static ports — CLEAR
Hydraulic reservoir — PROPER SERVICE
Pneumatic gages — PROPER PRESSURE
Underside of fuselage — NO FLUID LEAKS
Lwr anticollision light — NO DAMAGE
Access doors/panels — SECURED
Speed brake — NO DAMAGE/FLUID LEAKS

CONTINUED

RIGHT MAIN WHEEL WELL

Gear door/actuator — SECURE, NO CRACKS
 Wheel well — NO HYDRAULIC LEAKS
 Gear — STRUT EXTENSION, TIRE INFLATION
 Brake pucks — WITHIN LIMITS
 Wheel bolts — SECURE, NONE MISSING
 Land/taxi light — NO DAMAGE
 Fuel system vent — NOT COVERED
 Downlock — INSTALLED
 PC accumulator — NO LEAKS
 Tiedown ring — FLUSH
 Gear-up lockpin — SECURE
 Uplock roller — NO BINDING
 Main fuel line — NO LEAKS

RIGHT WING

General condition — NO FLUID LEAKS
 Access doors/panels — SECURED
 Leading edge — NO DAMAGE/HYD LEAKS
 Wing hinge pins — LOCKED (PANELS SPREAD AND
 LOCKED)
 Wingfold warning flags — RETRACTED (PANELS SPREAD
 and LOCKED)
 Donut seal — NOT LEAKING/DEFORMED
 Formation light — NO DAMAGE
 Position light — NO DAMAGE
 Aileron — NO DAMAGE/LEAKS, BATTEN REMOVED
 Spoiler — NO DAMAGE
 Flap — NO DAMAGE
 External stores — SECURED RACKS, RAILS, LAUNCHERS

RIGHT AFT FUSELAGE

PC No. 2 reservoir — PROPER SERVICING
 Access doors/panels — SECURED
 Fuel cell cavity vents — NO OBSTRUCTION
 Right ventral fin — SECURE, NO DAMAGE
 Underside of fuselage — NO FLUID LEAKS
 Formation lights — NO DAMAGE

CONTINUED

EMPENNAGE AND TAIL CONE

Tail hook — SECURE, NO LEAKS
Horizontal tail — NO DAMAGE
Vertical tail — NO DAMAGE
Rudder — NO DAMAGE, BATTEN REMOVED
Position light — NO DAMAGE
Tailpipe — NO WRINKLES/CRACKS, COLOR NORMAL
Nozzle bearings — NO RUST/BINDING
Nozzle flaps — NO DAMAGE, BINDING/RUST ON
LINKAGE
Upper wing surfaces — PANELS SECURE, NO
WRINKLING/BUCKLING

LEFT AFT FUSELAGE

Repeat RIGHT AFT FUSELAGE
Fuel vent — NO OBSTRUCTION
PC No. 1 reservoir — PROPER SERVICING

LEFT MAIN WHEEL WELL

Repeat RIGHT MAIN WHEEL WELL
Wing fuel man. shutoff — OPEN
Fuel selector switch — POWER OFF
Pressure fueling cap — SECURED
Hyd pump handle — STOWED

LEFT WING

Repeat RIGHT WING

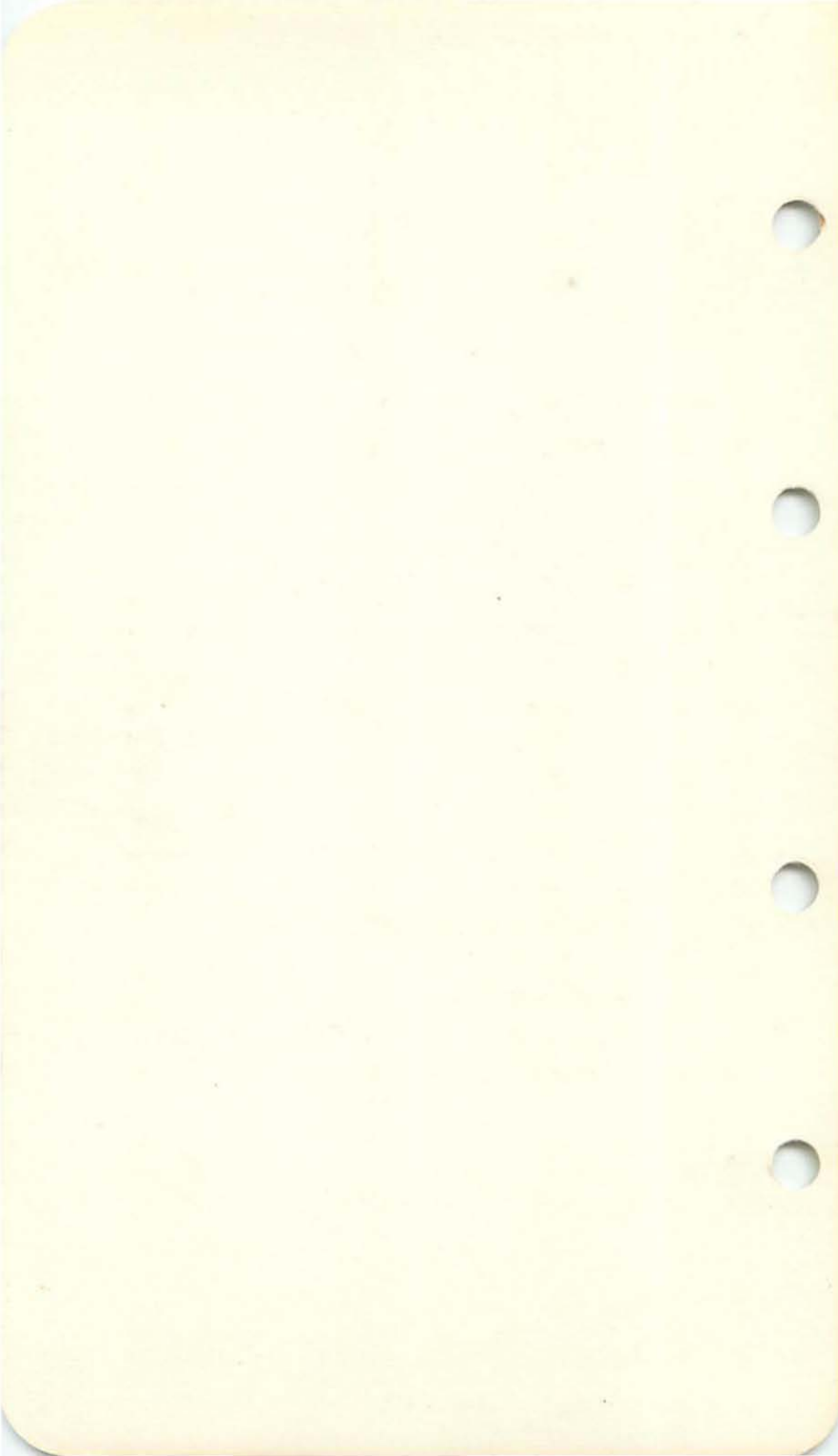
LEFT FORWARD FUSELAGE

Access doors/panels — SECURED
Formation light — NO DAMAGE
Upper anticollision light — NO DAMAGE
Pylons and launchers — SECURED
Ordnance — SECURED, SAFETY PINS INSTL
Canopy — CRAZING/CRACKS WITHIN LIMITS

SECTION III

SPECIAL PROCEDURES

(INFORMATION TO BE FURNISHED
AT A LATER DATE)



SECTION IV

REFERENCE DATA

TABLE OF CONTENTS

ELECTRICAL DISTRIBUTION	58
CROSS-COUNTRY INFORMATION	60
FUELING	60
ENGINE OIL SYSTEM SERVICING	62A
OXYGEN SYSTEM SERVICING	63
UTILITY HYDRAULIC SYSTEM SERVICING	64
POWER CONTROL SYSTEM SERVICING	65
PNEUMATIC SYSTEM SERVICING	66
VISCOUS DAMPERS SERVICING	67
AC GENERATOR DRIVE (CSD) SYSTEM SERVICING....	68
TIRES	69
EXTERNAL ELECTRICAL POWER REQUIREMENTS.....	69
ENGINE STARTER REQUIREMENTS	69
TOWING	69
FOULED-DECK ENDURANCE	70
FOULED-DECK RANGE	74
RANGE FACTORS	78
FOULED-DECK — LANDING CONFIGURATION	80
LANDING GROUND ROLL	81

ELECTRICAL DISTRIBUTION

The master generator switch in ON powers all ac buses from main generator or external power source and dc buses by means of the transformer-rectifier.

With power package extended, emergency generator switch in ON powers only the primary and emergency buses. Switch in LAND powers only emergency buses.

EMERGENCY BUSES**AC**

Altimeter vibrator
 Attitude indicator
 Emergency pitch trim
 Instrument transformer:
 Engine fuel flow
 Engine oil pressure
 Hydraulic pressure
 Navigation indicator
 Pitch trim
 Primary interior lights
 Roll trim and stabilization
 Wing position lights

DC

Angle-of-attack indicator
 and indexer
 Approach lights
 Automatic fuel transfer
 Engine fuel pump warning
 light
 Engine fuel shutoff valve
 Engine ignition
 Engine oil/hydraulic pressure
 warning light
 Exterior light control
 Fire detector
 Flood lights
 Fuel control unit
 changeover
 Jettison (salvo and selective)
 Landing gear position
 indicators
 Landing gear warning
 light
 Leading edge droop
 Manual fuel control light
 Roll trim and stabilization
 Stabilization warning lights
 Transfer fuel pump
 caution light (Before
 AFC 492)
 Wing fuel dump valves
 Wing pressurization
 Wing-wheels-droop
 warning light

CONTINUED

PRIMARY BUSES

AC

Cockpit temperature control
 Forward main fuel boost pump
 Integrated electronics package
 ADF radio
 IFF radar identification
 UHF command radio
 Liquid oxygen indicator
 MA-1 compass
 Main fuel quantity
 Pitot heat
 TACAN radio
 Tail position light
 Transfer fuel quantity
 Yaw trim and stabilization

DC

Afterburner fuel control
 Emergency generator warning light
 Engine cranking control
 Integrated electronics package
 ADF radio
 IFF radar identification
 UHF command radio
 Jettison (missile)
 MA-1 compass
 Speech security equipment
 Speed brake
 TACAN radio
 Yaw trim and stabilization

SECONDARY BUSES

AC

Aft main fuel boost pump
 Aft transfer fuel pump
 Air bottle heaters
 Anticollision lights
 Approach power compensator system
 Automatic pilot
 Center main fuel boost pump
 ECM equipment
 Engine pressure ratio indicator
 Fire control system
 Formation lights
 Forward transfer fuel pump
 Gun interlock
 Inverted flight fuel pumps
 IR-Detector
 Main cell forward wall fuel pump
 Missile power
 Oil cooler door actuator
 Radar
 Radar altimeter
 Radar recorder
 Seat adjustment
 Secondary interior lights
 Inflight refueling probe light

DC

Approach lights flasher
 Approach power compensator system
 Armament bus
 Arresting gear
 Automatic pilot
 Boost pumps
 Chaff dispenser system
 Continuous engine ignition
 ECM equipment
 Electronics package fan
 Engine anti-icing
 Engine cranking air valve
 Fire control system
 Fuel boost pump warning light
 Fuel low level warning light
 Fueling valves
 Gun camera
 Gun vent doors
 Inflight refueling system
 IR-Detector
 Landing and taxi light
 Landing gear down lock solenoid
 Missile cooling
 Missile firing
 Missile power
 Neutral trim indicators
 Nose gear steering
 Oil cooler door control and indicator
 Oxygen warning light
 Radar
 Radar altimeter
 Radar recorder
 Statistical accelerometer
 Transfer fuel pump caution light (After AFC 492)
 Wing selector valve lock
 Wingfold sequencing

CROSS-COUNTRY INFORMATION

FUELING

Authorized fuels are:

Ashore

Primary grade is JP-5 (F-44). Acceptable alternates are JP-4 (F-40) and F-34 (commercial grade Jet A-1)*. Emergency fuels† are F-35, F-42, F-45, and AvGas grades 100/130 (F-18) and 115/145 (F-22).

Afloat

Primary grade is JP-5 (F-44). Emergency fuels† are AvGas grades 100/130 (F-18) and 115/145 (F-22).

Note

F-34, F-35, F-40, and F-45 fuels shall not be defueled into JP-5 (F-44) fuel storage on aircraft carriers because of their low flash points.

*May not be used for high altitude maximum range missions because of relatively high fuel freeze temperature.

†When AvGas is used, flight operation is limited as follows:

No afterburner above 6,000 feet or 300 KIAS

Maximum climb — 1,500 fpm

Do not exceed 10,000 feet if less than 2,200 lb of fuel remain upon reaching that altitude.

FUEL QUANTITIES

Fuel Cell	Pounds*		U.S. Gallons
	JP-4	JP-5	
Main	2,762.5	2,890.0	425
Midfuselage	572.0	598.4	88
Total Main Fuel	3,334.5	3,488.4	513
Forward fuselage	591.5	618.8	91
Aft fuselage	1,118.0	1,169.6	172
Wing	3,718.0	3,889.6	572
Total Transfer Fuel	5,427.5	5,678.0	835
Total Aircraft Fuel	8,762.0	9,166.4	1,348

*JP-4 fuel at 6.5 pounds per gallon. JP-5 fuel at 6.8 pounds per gallon.

Partial Refueling: If FUEL SELECTOR is at:

REFUEL PARTIAL — Transfer system filled; 425 gallons in main and midfuselage cells.

REFUEL MAIN CELL — Main cell filled; midfuselage cells also filled on those aircraft in which the solenoid-operated check valves (between main and midfuselage cells) have been replaced by acceleration check valves.

Precautions:

If the fueling facility is not equipped with a flowmeter, only procedural check points applicable to aircraft fuel quantity gages will be used. The aircraft main and transfer indicating systems

CONTINUED

must be operating properly to obtain valid checks. Station a man in the cockpit to monitor the fuel quantity indicators during fueling operations.

No radio or radar activity is permissible within a radius of 75 feet during refueling. Check that the aircraft and fuel truck are properly grounded. Discharge any static electricity from the fuel nozzle before attaching it to the fueling manifold. Station a fire guard during fueling and defueling operations. Station one man in the cockpit to monitor main and transfer fuel quantity indicators during fueling operations.

Failure of the vent system during fueling can cause cell rupture and structural damage. To prevent the possibility of fuel cell rupture and structural damage, fuel venting must be monitored during the fueling process. Wing cell venting is monitored by a man utilizing a gage and hose assembly connected to the wing. The hose is connected to a pressure-sensing line quick-disconnect fitting located in the right-hand wing access panel and the gage is hung in the left gear well. Station a man at the fuselage vent (located in the left-hand ventral fin) to check vent airflow during fueling. Check venting by holding the hand near the vent and feeling airflow. Do not block the vent by holding the cupped hand over it. At the start of the cycle, after completing the primary and secondary checks, there will be a strong continuous flow of air from the fuselage vent with a barely detectable indication on the wing pressure gage. As the airflow from the fuselage vent decreases, wing vent pressure will rise to $1\frac{1}{4}$ to $1\frac{1}{2}$ psi if the system is operating properly. Should the gage reading exceed $1\frac{1}{2}$ psi, stop fueling immediately.

If the aircraft is fueled with the fuselage aft section removed, check fuselage cells vent airflow at vent line disconnect on upper left-hand side of disconnect bulkhead. If engine has been run with aft section removed, the CV15-206325-1 drain hose must be removed from the vent line before fueling. If aircraft is fueled with the wings folded, check wing vent airflow at fuel dump line (donut) seal on right-hand wingfold rib.

All fueling personnel should be properly instructed before attempting refueling operation. The complete fueling procedure cannot be accomplished while the engine is in operation and is supplying electrical power since primary and secondary checks require external ac power with the master generator switch in TEST. Pressure fueling on the deck with the engine in operation and internal power being used should be limited to one such cycle between normal ground fueling operations. During every pressure fueling on the deck, with or without the engine operating, the vents must be checked. During every pressure fueling without the engine operating, primary and secondary checks must be performed in accordance with the fueling procedure. To permit fueling with the engine operating, the inflight refueling probe must be extended and the inflight refueling probe switch left in the OUT position; or external power must be applied with the refueling probe in and the probe switch in the OFF position. There must be enough wind across the deck to dissipate fuel fumes from the wing and fuselage vent outlets.

Fueling Procedure — Static:

1. Check that fueling nozzle, aircraft and fueling unit are grounded and that all other necessary precautions described in preceding paragraphs are being observed.

CONTINUED

NAVAIR 01-45HHD-1B

2. Place engine master, fuel dump, all radio/radar, inflight refueling probe, emergency generator, and master generator switches in OFF.
3. Connect external electrical power.
4. Place master generator switch in TEST.
5. Open manual shutoff valve in wing fuel transfer line. Rotate fuel selector switch to CHECK SECONDARY.
6. Adjust fueling source to 40 to 60 psi.
7. Remove cap from fueling manifold.
8. Connect ground wire.
9. Attach fueling nozzle to fueling manifold and connect ground wire. If nozzle has manual lever, lever must be locked fully open. Start fuel flowing into aircraft and adjust pressure to 40 to 60 psi.
10. Check flowmeter and aircraft main and transfer fuel quantity gages. Fuel flow must stop before fuel admitted to aircraft exceeds 45 gallons on flowmeter, or 300 pounds total increase on gages. If fuel flow does not stop, disconnect nozzle immediately and notify proper maintenance personnel.
11. Check flowmeter and aircraft main and transfer fuel quantity gages. Rotate fuel selector switch to CHECK PRIMARY. Fuel flow must stop before additional 30 gallons on flowmeter or 200 pounds on gages is admitted to aircraft. If fuel does not stop, disconnect nozzle immediately and notify proper maintenance personnel. Monitor flowmeter and gages for no less than 30 seconds. If flow rate after shutoff exceeds 3 gallons per minute on flowmeter or 20 pounds per minute on gages, disconnect nozzle and notify proper maintenance personnel.
12. Rotate fuel selector switch to CHECK SECONDARY and with switch in this position, repeat check of step 11.
13. If CHECK PRIMARY and CHECK SECONDARY steps are acceptable, rotate fuel selector switch to fuel load desired. While monitoring fuselage and wing vents, complete desired fueling.
14. When system automatically shuts off, stop fueling source pump, remove nozzle, place master generator switch in OFF and remove external electrical power.
15. Rotate fuel selector switch to the off position.

Fueling Procedure (Hot Refueling) External Electrical Power

1. Check that fueling nozzle, aircraft and fueling unit are grounded.
2. With pilot in the aircraft and engine running, turn master generator, all radio/radar, fuel dump, inflight refueling probe, and electrical switches off.
3. Connect electrical power.

After AFC 492 if low fuel-level light is flashing when refueling, the flashing may be stopped by placing the fuel transfer switch in PUMP OFF. The flashing light in no way affects or is affected by the fueling procedures.

4. Place master generator switch in TEST. Primary/secondary fueling checks can be accomplished while the engine is in operation with external power supplied and master generator switch in the test position. If primary/secondary checks are not satisfactory, discontinue hot refueling and notify proper maintenance personnel.

CONTINUED

5. Rotate fuel selector switch to CHECK SECONDARY.
6. Refueling procedure remains the same as steps 6 through 15 in the Fueling Procedure — Static. No restriction is placed on this refueling procedure providing satisfactory primary/secondary checks are completed.

Fueling Procedure (Hot Refueling) Aircraft Electrical Power

1. Check that fueling nozzle, aircraft and fueling unit are grounded.
2. With pilot in the aircraft and engine running, turn all radio/radar, fuel dump, and electrical switches to off.
After AFC 492 if low fuel-level light is flashing when refueling, the flashing may be stopped by placing the fuel transfer switch in PUMP OFF. The flashing light in no way affects or is affected by the fueling procedures.
3. Extend inflight refueling probe and leave probe switch in out position and master generator switch ON.
4. Adjust fueling source to 40 to 60 psi.
5. Remove cap from fueling manifold.
6. Connect ground wire.
7. Attach fueling nozzle to fueling manifold. Start fuel flowing into aircraft. Fuel vents must be checked during this and all ground refueling operations.

CAUTION

Primary/secondary fueling checks and partial fueling require external AC power and cannot be accomplished while engine is in operation and supplying electrical power. Refueling to full load should be limited to one such cycle between normal ground fueling operations.

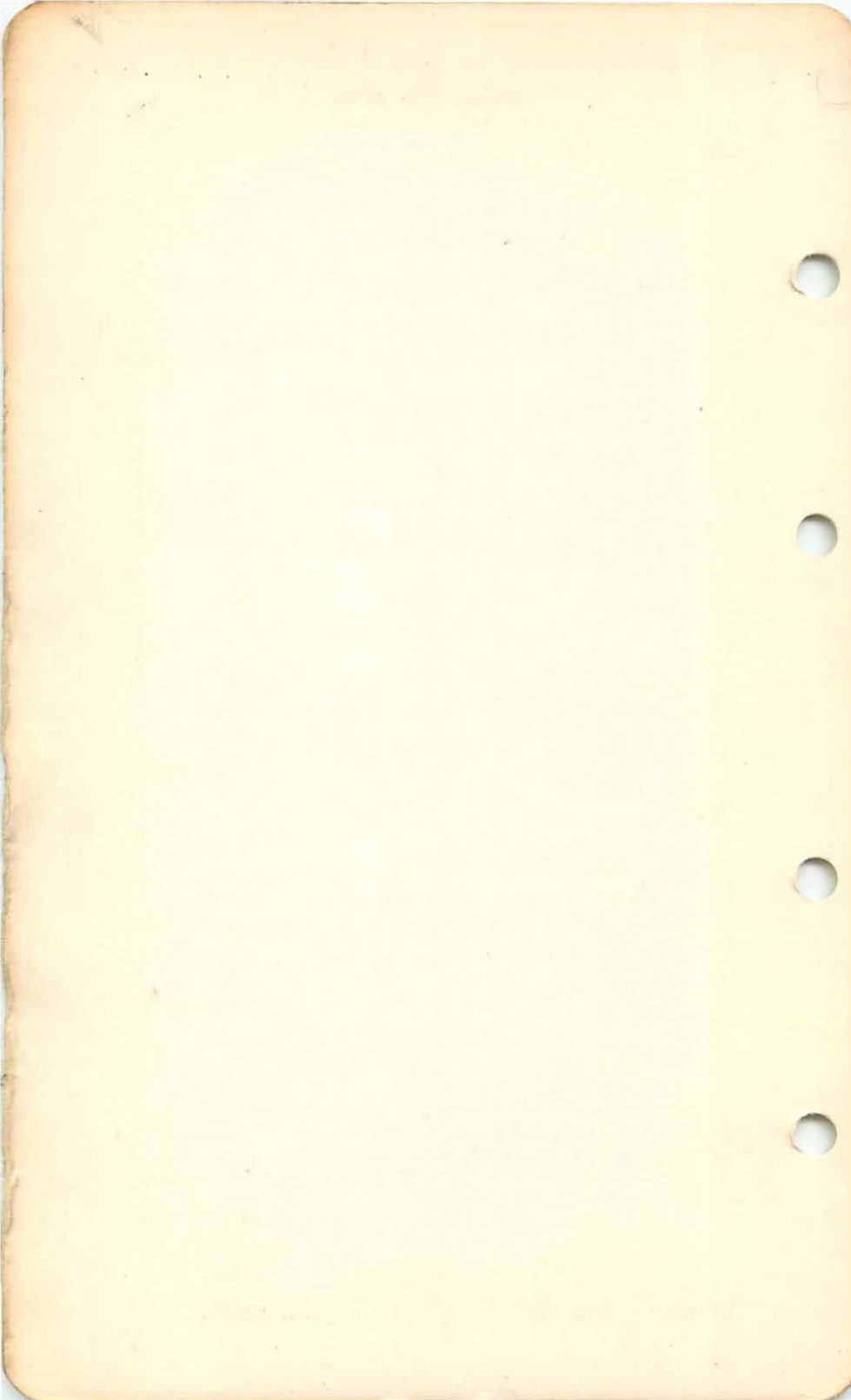
8. Complete desired fueling. When the system automatically shuts off, stop the fueling source pump and remove the nozzle.

ENGINE OIL SYSTEM SERVICING

Service the engine oil system with gas turbine lubricating oil, MIL-L-23699 (Wep). When changing oil, the required quantity is approximately 5 gallons. Do not overfill. Check oil level within 5 minutes after engine shutdown. If this is not practical, operate engine for a minimum of 30 seconds at 75% rpm before checking oil level. If checked at any other time, an erroneous reading will be obtained.

1. Open oil filler door and swing safety mechanism up.
2. Clean area around filler cap to prevent contamination of oil.
3. Remove oil reservoir cap and check oil level. If oil is not visible by looking into reservoir, servicing is needed.
4. Add oil as necessary to bring oil level in sight.
5. Replace oil filler cap and close oil filler door.

CONTINUED



OXYGEN SYSTEM SERVICING

Service oxygen system with MIL-O-21749 liquid oxygen only. Liquid oxygen boils at -183°C (-297.4°F). Keep oxygen away from oil, grease, or other combustible materials. Ensure adequate ventilation.

1. All electrical power off, aircraft grounded, fire guard standing by.
2. Place oxygen selector valve in OFF.
3. Open access panel and turn vent and buildup valve handle to VENT position.
4. Remove filler valve cap. Purge cart filler line for approximately 30 seconds and immediately attach it to the aircraft filler valve.
5. Increase pressure slowly until cart filler gage indicates 65 (± 5) psi.
6. Fill system until liquid oxygen spills out of overboard vent, then close filler line from cart.
7. Disconnect filler line from filler valve. Some leakage from the filler valve may occur when the filler line is removed. This is normal and will end when the filler valve warms to ambient temperature.
8. Using a lint-free cloth, wipe away accumulated frost from filler valve and replace filler valve cap.
9. Place vent and buildup valve handle to buildup position. Note and record time. Push handle all the way in to avoid leakage around handle shaft when access panel is replaced.
10. Plug pressure gage assembly into oxygen disconnect on left-hand console. Close shutoff valve.
11. Place oxygen selector valve on. Within 10 minutes of the time recorded in step 9, gage must indicate between 63 and 120 psi.
12. Place oxygen selector in OFF. Gage pressure must be within tolerances shown on allowable pressure drop chart.
13. Slowly open pressure gage shutoff valve to bleed trapped pressure and remove gage assembly from oxygen disconnect.
14. Connect seat pan hose to oxygen disconnect and connect gage assembly to seat pan pilot's mask connector.
15. Place oxygen selector valve on. Within 10 minutes, gage must indicate 63 to 120 psi.
16. Place oxygen selector valve off. If indicated pressure exceeds 75 psi, crack shutoff valve and bleed pressure to 60 to 75 psi. Pressure must not drop more than 19 psi in 1 minute.
17. Slowly open shutoff valve on gage assembly, bleed pressure, and remove from oxygen disconnect.
18. Place oxygen selector valve on, allow unrestricted flow for 15 seconds, then close valve.
19. Connect external electrical power and check oxygen quantity indicator for an indication of 5.0 liters (± 0.8).
20. Disconnect external electrical power.

CONTINUED

UTILITY HYDRAULIC SYSTEM SERVICING

Service the system with red hydraulic fluid, MIL-H-5606A, and dry air or nitrogen. Use only hydraulic fluid produced by the following companies, and only the type shown:

<i>Manufacturer</i>	<i>Identification</i>	<i>Qualification Reference</i>
American Oil and Supply Company	PQ 1296	WCLT R59-47
Bray Oil Company	Brayco 756 Code P-190 Brayco 756A Brayco 756B	WCRT R55-11 ASRCE 61-88 ASRCE 61-89
California Texas Oil Company	Caltex RPM No. 2 PED 2585 TL-3969 Code 662	TSEAM 047-7 ASRCE 61-92 WCLT R59-17
Humble Oil and Refining Company	Univis J-43 Code WS2997	WCRT R55-140
Golden Bear Oil Company	Code 566	WCRT R55-42
Pennsylvania Refining Company	Code 3587 Code 4751	WCLT R58-41 ASRCE 61-65
Royal Lubricants Company	Rayco 756 Rayco 756A Rayco 756B	WCRT R55-11 ASRCE 61-90 ASRCE 61-91
Shell Oil Company	Aeroshell No. 4	WCLT R58-42
Socony-Mobil Oil Company	Mobil RL-102A	TSEAL 4-044-61
Standard Oil Company of California	RPM No. 2 312798B-R PED 2585	TSEAM 047-7 ASRCE 61-92
Texaco Incorporated	TL-3969 Code 662	WCLT R59-17

1. Remove access panel 226.
2. Remove caps on hydraulic filler valve and air filler valve.
3. Stroke pressure oiler hand pump until filler hose is full of clean hydraulic fluid. Attach filler hose to hydraulic filler valve.
4. If possible, service utility hydraulic system with components positioned as follows:
 Arresting gear — UP
 Landing gear — DOWN
 Speed brake — CLOSED
 Wing and droop — CLEAN CONDITION

CONTINUED

5. If components are in position as noted, fill reservoir to full mark. If wing cannot be lowered, fill only to refill mark. If any of the other components cannot be positioned as above, fill reservoir until indicator is $\frac{1}{2}$ inch below full mark.
6. Remove lockwire from reservoir bleed valve. Connect bleed line to valve and bleed until clear fluid, free of air and foam, flows from bleed line. Close bleed valve. Remove bleed line and lock-wire valve.
7. Recheck fluid level and add more fluid if necessary.
8. Remove hydraulic filler line and install filler valve cap.
9. Connect nitrogen source and pressure gage to air filler valve. Pressurize reservoir until gage indicates 35 (+5, -0) psi.
10. Disconnect nitrogen source; install filler valve cap and access panel.

POWER CONTROL SYSTEM SERVICING

The servicing procedure is the same for both systems. Servicing valves for PC system No. 1 are located in the left-hand main gear well. Servicing valves for the PC system No. 2 are located in the right-hand main gear well. Service with red hydraulic fluid (see Utility System Servicing for approved fluids) and dry air or nitrogen.

SERVICING ACCUMULATOR

1. Remove cap from air filler valve.
2. Connect T-handle filler and pressure gage to air filler valve. Check that bleed valve is closed (screwed out).
3. Hold lower nut of air filler valve with wrench and loosen upper nut to open internal valve seal.
4. Slowly screw T-handle in and read pressure on gage. If pressure is above 1,600 psi, slowly open bleed valve and reduce pressure to 1,500 (± 100) psi. If pressure is below 1,400 psi, connect nitrogen source to bleed valve and pressurize accumulator to 1,500 (± 100) psi. Close bleed valve and disconnect nitrogen source.
5. Screw T-handle out and tighten upper nut to close valve seal.
6. Open bleed valve to bleed air from line and disconnect T-handle filler and pressure gage from filler valve.
7. Install cap on air filler valve hand-tight.

SERVICING RESERVOIR

1. Cycle control stick to droop control surfaces.
2. Remove cap from hydraulic filler valve and air filler valve.
3. Remove access panels 310, 313, and 353.
4. Stroke pressure oiler hand pump until filler hose is full of clean hydraulic fluid. Connect hose to filler valve.
5. Pump hydraulic fluid into reservoir until indicator reads FULL SYS PRESS ZERO.
6. Connect T-handle filler and pressure gage to air filler valve. Check that bleed valve is fully closed.

CONTINUED

7. Slowly screw T-handle in and read pressure on gage. If pressure is above 55 psi, slowly open bleed valve and reduce pressure to 50 (+5, -0) psi. If pressure is below 50 psi, connect nitrogen source to bleed valve and pressurize to 50 (+5, -0) psi. Close bleed valve and disconnect nitrogen source.
8. Screw T-handle out and open bleed valve to bleed air from line. Remove T-handle filler and pressure gage.
9. Cut and remove lockwire from PC system bleed plug, and connect plastic tubing.
10. Open bleed plug and bleed until clear fluid, free of air and foam, flows from bleed plug. Remove plastic tube from bleed plug. Torque bleed plug to 10 (± 5) pound-inches and lock-wire.
11. Check fluid level indicator for FULL SYS PRESS ZERO indication.
12. Disconnect hydraulic filler line from filler valve. Install caps on filler valves and install access panels.

PNEUMATIC SYSTEM SERVICING

The pneumatic system is serviced by filling both the 375-cubic-inch and 1,100-cubic-inch pneumatic bottles. Service with dry air or nitrogen (Type I, Grade A, MIL-N-6011) to pressures listed on appropriate system decal.

1. Open access panel 230.
2. Reset all actuated emergency systems.
- 2A. Check that electrical power is disconnected from the aircraft.
3. Remove 375-cubic-inch pneumatic bottle filler valve cap or 1,100-cubic-inch bottle filler valve cap as applicable, and attach T-handle adapter filler. Attach nitrogen source to T-handle filler adapter.
4. Screw T-handle in and fill bottle slowly. Rapid filling will cause bottle to heat. Screw T-handle out and shut off nitrogen supply as pressure on applicable gage reaches desired gage indication for ambient temperature.
5. Disconnect nitrogen source and install filler cap on valve.
6. Install access panel.

CONTINUED

VISCOUS DAMPERS SERVICING

FILLING FORWARD CYLINDER

1. Remove aircraft filler line plug located in access panel 114.
2. Bleed air from pressure oiler filler line by cracking line nut. Continue bleeding and attach line to viscous damper filler valve. After all air has been removed, tighten line nut.
3. Fill viscous damper to proper level, maintaining 85 (± 15) psi at damper filler valve. Damper is properly serviced when only green color is visible in damper integral inspection window. Damper is overfilled when any red is visible, and is underfilled when any bare metal is visible. Observe fluid level through inspection window in access panel 114. (On aircraft BuNo. 147035 through 147045, remove INT LTS control panel from right-hand console to observe fluid level.)
4. When fluid reaches proper level, disconnect pressure oiler filler line and install aircraft filler plug. (Install INT LTS control panel if required.)
5. If damper is overfilled, remove access panel 114. Crack top bleed port plug on damper and drain hydraulic fluid until red color is replaced with green in damper inspection window. Do not stroke control stick during this step.
6. Tighten bleed port plug and install access panel.

FILLING AFT CYLINDER

1. Remove access panel 410.
2. Remove damper filler cap and connect pressure oiler filling line to damper filler inlet.
3. Insert lint-free cloth around access 410 and thoroughly bleed pressure oiler filling line by supplying low-pressure fluid and cracking filling line nut at damper filler inlet. Continue bleeding until all evidence of air is eliminated. Tighten filling line nut.
4. Increase pressure oiler filling pressure to 85 (± 15) psi and fill damper until only green is visible in damper inspection hole. Observe inspection hole through damper inspection port in access panel 412.
5. Relieve filling pressure and disconnect pressure oiler from viscous damper filler inlet.
6. Install damper filler cap and torque cap 40 to 60 pound-inches. If the cap comes loose in flight, it can jam the control linkage in the vertical fin.
7. If viscous damper is overfilled (red showing in damper inspection hole) remove access panel 412. Crack bleed port plug on damper and drain hydraulic fluid until red color is replaced with green in damper inspection hole. Do not cycle control stick while performing this step. Tighten bleed port plug when fluid reaches proper level.
8. Remove cloths and install access panel.

CONTINUED

AC GENERATOR DRIVE (CSD) SYSTEM SERVICING

Before servicing system, the oil level indicating light provided with the preoiler should be checked for proper operation. To determine if the CSD reservoir level is low, plug oil level indicating light into CSD oil test light jack in the right-hand main gear well. If light glows, the system does not require servicing. If light does not glow, the system requires servicing.

SERVICING RESERVOIR

1. Make sure that fill and overflow hose connections are clean.
2. Remove cap and connect filler line from preoiler to CSD oil filler connections in the main gear well.
3. Connect overflow line ($\frac{3}{4}$ -inch diameter) to CSD overflow connection. Oil will flow from line when servicing is being done after the engine has been run, even if low oil level has been indicated. This is only collected oil and system must still be serviced.
4. Fill system with filtered gas turbine lubricating oil MIL-L-23699 (Wep) until oil flows from open end of overflow line. When oil level indicating light glows, servicing is near completion and care should be taken to prevent overfilling. When oil flowing out overflow line has diminished to a slow drip, discontinue filling operation.
5. Disconnect overflow and fill lines. Check level with test light.

CONTINUED

TIRES

Type: 6.6 x 26, tubeless, Type VII; equivalent ply rating, 16 —
Main gear.

Type: 5.5 x 22, tubeless, Type VII; equivalent ply rating, 12 —
Nose gear.

Service with dry air or nitrogen as follows:

Main gear — With aircraft gross weight less than 30,000
pounds:

400 psi (carrier)

300 psi (land or FMLP)

— With aircraft gross weight 30,000 pounds or
greater:

365 psi (land)

400 psi (carrier or FMLP)

Nose gear — With aircraft gross weight less than 30,000
pounds:

165 psi (land)

265 psi (carrier or FMLP)

— With aircraft gross weight 30,000 pounds or
greater:

265 psi (land, carrier, or FMLP)

EXTERNAL ELECTRICAL POWER REQUIREMENTS

115-volt, 400-cycle, 3 phase ac

ENGINE STARTER REQUIREMENTS

Engine starting requires one of the following starting units:

GTC-85 or GTE-85 gas turbine compressor

MD-1A jet starting trailer*

USAF Model MA-1TA gas turbine compressor

USAF Model MA-2 gas turbine compressor*

Boeing Model 502 gas turbine compressor

TOWING

1. Check that nose and main gear locks are installed.
2. A qualified crew member must be in the cockpit to operate the brakes.
3. Remove pilot's extension step.
4. During backward towing, do not apply brakes abruptly. Do not tow backwards faster than 2 miles per hour when aircraft fuel is 1,400 pounds or less.

*Set to low pressure ratio.

FOULED-DECK ENDURANCE

WITH DUAL PYLONS AND LAUNCHERS

Standard Day

Cruise Condition: All Altitudes

Best endurance speed at all altitudes 236 KIAS.

Provides 600-pound reserve fuel at return to sea level; for larger fuel reserve use figures for less fuel on board.

Use schedules for climb and descent.

Endurance figures include time for climb (to opt alt) and descent to sea level.

Time for descent from 40,000 feet is 14 minutes.

MRT CLIMB

Alt	IMN	IAS
S.L.	.67	436
10	.70	385
20	.73	336
30	.77	292
35	.80	272
40	.80	244

IDLE THRUST**DESCENT****ALL ALTITUDES — 236 KIAS****IF YOU ARE AT SEA LEVEL**

Fuel on Board — Lb	Time At S.L.	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	4.5	6	5.5	640
1000	8.5	13	11	680
1200	13	18	16.5	700
1600	21.5	23	27	720
2000	30.0	25	38.5	730
2400	38.5	27	49.5	735

IF YOU ARE AT 10,000 FEET

Fuel on Board — Lb	Time At 10,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	8	14	8.5	685
1000	13.5	19	14.5	705
1200	18.5	21	20.5	715
1600	28.5	24	31.5	725
2000	38	26	43	730
2400	48	27	54.5	735

CONTINUED

IF YOU ARE AT 20,000 FEET

Fuel on Board — Lb	Time At 20,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	11.5	19	—	705
1000	17.5	20	17.5	715
1200	23	23	23.5	720
1600	34	25	35	730
2000	44.5	27	46	735
2400	55.5	28	57.5	740

IF YOU ARE AT 30,000 FEET

Fuel on Board — Lb	Time At 30,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	13	30	—	745
1000	19.5	30	—	745
1200	25	30	—	745
1600	36.5	30	—	745
2000	47.5	30	—	745
2400	59	30	—	745

IF YOU ARE AT 35,000 FEET

Fuel on Board — Lb	Time At 35,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	14	30-35	—	760
1000	20	30-35	—	760
1200	26	30-35	—	760
1600	37.5	30-35	—	760
2000	49	30-35	—	760
2400	60.5	30-35	—	760

IF YOU ARE AT 40,000 FEET

Fuel on Board — Lb	Time At 40,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	15	30-40	—	775
1000	21	30-40	—	775
1200	27	30-40	—	775
1600	38.5	30-40	—	775
2000	50	30-40	—	775
2400	62	30-40	—	775

FOULED-DECK ENDURANCE

F-8E WITH WING PYLONS, FOUR EMPTY FUSELAGE ZUNI PACKS
 Standard Day Cruise Condition: All Altitudes

Best endurance speed at all altitudes: 225 KIAS.

Provides 600-pound reserve fuel at return to sea level; for larger fuel reserve use figures for less fuel on board.

Use schedules for climb and descent.

Endurance figures include time for climb (to opt alt) and descent to sea level.

Time for descent from 39,000 feet is 12.5 minutes.

**IDLE THRUST
DESCENT**

ALL ALTITUDES — 225 KIAS

MRT CLIMB

Alt	IMN	IAS
S.L.	.58	384
10	.61	340
20	.66	301
30	.72	267
35	.75	253
40	.75	229

IF YOU ARE AT SEA LEVEL

Fuel on Board — Lb	Time at S.L.	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	4	4	5	625
1000	8	10	10	655
1200	12	15	15	675
1600	20	20	25	695
2000	28	23	35	705
2400	36	25	45	710

IF YOU ARE AT 10,000 FEET

Fuel on Board — Lb	Time At 10,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	7.5	12	8	665
1000	12	15	13.5	675
1200	17	19	19	690
1600	26.5	22	29	700
2000	35.5	25	39	710
2400	44.5	26	49	715

CONTINUED

IF YOU ARE AT 20,000 FEET

Fuel on Board — Lb	Time At 20,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	10	20	—	695
1000	15.5	20	—	695
1200	20.5	21	21	700
1600	31	24	31.5	710
2000	41	25	42	710
2400	51	26	52	715

IF YOU ARE AT 30,000 FEET

Fuel on Board — Lb	Time At 30,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	12	30	—	725
1000	17.5	30	—	725
1200	22.5	30	—	725
1600	33.5	30	—	725
2000	43.5	30	—	725
2400	54.5	30	—	725

IF YOU ARE AT 35,000 FEET

Fuel on Board — Lb	Time At 35,000	Opt Altitude	Time At Opt Alt	Descend When Fuel Reaches
800	12.5	30-35	—	740
1000	18.5	30-35	—	740
1200	23.5	30-35	—	740
1600	34.5	30-35	—	740
2000	40.0	30-35	—	740
2400	55.5	30-35	—	740

IF YOU ARE AT 39,000 FEET

Fuel on Board — Lb	Time At 39,000	Altitude Opt	Time At Opt Alt	Descend When Fuel Reaches
800	13.5	30-39	—	750
1000	19	30-39	—	750
1200	24.5	30-39	—	750
1600	35	30-39	—	750
2000	45.5	30-39	—	750
2400	56.5	30-39	—	750

FOULED-DECK RANGE

WITH DUAL PYLONS AND LAUNCHERS

Standard Day

Cruise Condition: All Airspeeds

Provides 600-pound reserve fuel at return to sea level; for greater fuel reserve use figures for less fuel on board.

Use schedules for climb, cruise and descent.

Range figures include distance for climb (to optimum alt) and descent to SL.

Distance for descent from 40,000 feet is 73 nautical miles.

Use Range Factors chart for wind corrections.

IDLE THRUST**DESCENT****ALL ALTITUDES — 236 KIAS****MRT CLIMB**

Alt	IMN	IAS
S.L.	.67	436
10	.70	385
20	.73	336
30	.77	292
35	.80	272
40	.80	244

BEST RANGE SPEED

Alt	IMN	IAS
S.L.	—	301
10	.52	287
20	.61	278
30	.72	271
35	.78	264
40	.83	253

IF YOU ARE AT SEA LEVEL

Fuel on Board — Lb	Range At S.L.	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	18	5	22	635
1000	37	14	50	685
1200	55	21	87	715
1600	92	32	171	755
2000	127	38	252	770
2400	164	40	337	775

IF YOU ARE AT 10,000 FEET

Fuel on Board — Lb	Range At 10,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	38	15	39	690
1000	62	23	69	720
1200	86	29	111	740
1600	134	36	197	765
2000	181	40	281	775
2400	228	40	367	775

CONTINUED

IF YOU ARE AT 20,000 FEET

Fuel on Board — Lb	Range At 20,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	54	20	—	710
1000	87	30	88	745
1200	119	34	133	760
1600	180	39	219	775
2000	239	40	304	775
2400	301	40	391	775

IF YOU ARE AT 30,000 FEET

Fuel on Board — Lb	Range At 30,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	68	30	—	745
1000	109	35	110	760
1200	146	38	150	770
1600	222	40	238	775
2000	297	40	324	775
2400	372	40	412	775

IF YOU ARE AT 35,000 FEET

Fuel on Board — Lb	Range At 35,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	73	35	—	760
1000	117	37	118	770
1200	159	39	161	775
1600	240	40	243	775
2000	321	40	334	775
2400	402	40	425	775

IF YOU ARE AT 40,000 FEET

Fuel on Board — Lb	Range At 40,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	80	40	—	775
1000	123	40	—	775
1200	168	40	—	775
1600	254	40	—	775
2000	341	40	—	775
2400	427	40	—	775

FOULED-DECK RANGE

F-8E WITH WING PYLONS, FOUR EMPTY FUSELAGE ZUNI PACKS
 Standard Day Cruise Condition: All Airspeeds

Provides 600-pound reserve fuel at return to sea level; for greater fuel reserve use figures for less fuel on board.

Use schedules for climb, cruise and descent.

Range figures include distance for climb (to optimum alt) and descent to SL.

Distance for descent from 39,000 feet is 62 nautical miles.

Use Range Factors chart for wind corrections.

**IDLE THRUST
 DESCENT
 ALL ALTITUDES — 225 KIAS**

MRT CLIMB

Alt	IMN	IAS
S.L.	.58	384
10	.61	340
20	.66	301
30	.72	267
35	.75	253
40	.75	229

BEST RANGE SPEED

Alt	IMN	IAS
S.L.	—	282
10	—	266
20	.57	259
30	.68	254
35	.73	247
40	.77	235

IF YOU ARE AT SEA LEVEL

Fuel on Board — Lb	Range At S.L.	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	16	5	20	630
1000	32	11	43	660
1200	43	20	75	695
1600	80	31	141	730
2000	112	36	209	740
2400	144	39	280	750

IF YOU ARE AT 10,000 FEET

Fuel on Board — Lb	Range At 10,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	33	14	38	670
1000	55	21	67	700
1200	77	27	99	720
1600	120	35	163	140
2000	161	38	233	745
2400	202	39	307	750

IF YOU ARE AT 20,000 FEET

Fuel on Board — Lb	Range At 20,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	47	23	50	705
1000	78	29	82	725
1200	106	33	116	735
1600	160	37	187	745
2000	210	39	258	750
2400	262	39	332	750

IF YOU ARE AT 30,000 FEET

Fuel on Board — Lb	Range At 30,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	60	30	—	730
1000	95	33	99	735
1200	128	36	136	740
1600	194	39	205	750
2000	256	39	276	750
2400	320	39	349	750

IF YOU ARE AT 35,000 FEET

Fuel on Board — Lb	Range At 35,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	67	35	—	740
1000	103	35	—	740
1200	138	37	144	745
1600	207	39	214	750
2000	275	39	285	750
2400	345	39	358	750

IF YOU ARE AT 39,000 FEET

Fuel on Board — Lb	Range At 39,000	Opt Altitude	Range At Opt Alt	Descend When Fuel Reaches
800	69	39	—	750
1000	107	39	—	750
1200	145	39	—	750
1600	217	39	—	750
2000	289	39	—	750
2400	362	39	—	750

RANGE FACTORS CHART

USE OF RANGE FACTORS CHART

1. Use Fouled Deck Range chart for applicable configuration to obtain optimum altitude, best range indicated airspeed and the no-wind distance that can be flown consistent with fuel available.
2. Enter Range Factors Chart in the relative wind angle block that most nearly corresponds to existing wind direction.
3. Using optimum altitude, read across until existing wind velocity is reached to find Range Factor.
4. Multiply no-wind distance found in step one by range factor to find maximum distance that can be flown.

Relative Wind Angle Degrees	Opt Alt	Wind Velocity — Knots				
		40	60	80	100	120
0°	SL	.877	.817	.757	.693	.634
	10	.884	.826	.769	.707	.652
	20	.896	.845	.794	.740	.688
	30	.910	.864	.820	.776	.728
	35	.916	.873	.830	.789	.746
	40	.919	.877	.835	.795	.754
30°	SL	.891	.835	.781	.719	.662
	10	.897	.844	.793	.735	.680
	20	.909	.863	.817	.768	.717
	30	.922	.881	.840	.800	.758
	35	.926	.888	.850	.812	.771
	40	.929	.891	.855	.818	.779
60°	SL	.933	.893	.852	.808	.762
	10	.936	.900	.860	.818	.776
	20	.945	.914	.880	.844	.808
	30	.953	.926	.898	.868	.838
	35	.955	.930	.904	.877	.849
	40	.957	.933	.907	.882	.854
90°	SL	.993	.984	.970	.952	.932
	10	.993	.985	.973	.957	.939
	20	.995	.987	.979	.965	.952
	30	.996	.990	.984	.975	.964
	35	.996	.990	.985	.977	.968
	40	.997	.991	.986	.979	.970

CONTINUED

USE OF RANGE FACTORS CHART (Continued)

Relative Wind Angle Degrees	Opt Alt	Wind Velocity — Knots				
		40	60	80	100	120
120°	SL	1.056	1.078	1.100	1.118	1.134
	10	1.053	1.075	1.096	1.113	1.130
	20	1.047	1.069	1.088	1.104	1.121
	30	1.041	1.061	1.077	1.093	1.107
	35	1.038	1.057	1.073	1.088	1.102
	40	1.037	1.055	1.071	1.086	1.099
150°	SL	1.106	1.158	1.208	1.257	1.305
	10	1.102	1.151	1.199	1.244	1.290
	20	1.090	1.134	1.175	1.217	1.258
	30	1.085	1.127	1.165	1.207	1.246
	35	1.072	1.107	1.142	1.179	1.213
	40	1.070	1.104	1.139	1.173	1.207
180°	SL	1.124	1.187	1.247	1.310	1.370
	10	1.118	1.177	1.235	1.294	1.352
	20	1.103	1.156	1.208	1.259	1.312
	30	1.090	1.135	1.181	1.225	1.270
	35	1.084	1.127	1.170	1.212	1.254
	40	1.082	1.123	1.164	1.206	1.247

FOULED-DECK — LANDING CONFIGURATION

LANDING CONFIGURATION RANGE CHART

Landing configuration: Speed brakes IN, Gear DOWN, wing UP,
Missile effect negligible

Starting at sea level and returning to sea level with 600 pounds
fuel

Climb — 175 KIAS Military power

Cruise — 175 KIAS Power as required

Descend — 175 KIAS Idle power

Fuel on Board — lb	Range at SL — NM	Opt Alt 1,000 ft	Range at Opt Alt — NM	Start Descent when Fuel Reaches: — lb
1,000	15	5	15.5	645
1,500	34	10	37.5	680
2,000	53	15	62.5	710
2,500	71.5	15	88	710

Note: 15,000 feet highest optimum altitude any fuel load.

RANGE FACTORS FOR LANDING CONFIGURATION

These factors are applicable to Landing Configuration only at an optimum airspeed of 175 KIAS.

Relative Wind Angle Degrees	Wind Velocity — Knots				
	40	60	80	100	120
0°	.772	.657	.544	.429	.315
30°	.806	.688	.579	.463	.347
60°	.867	.784	.693	.591	.479
90°	.974	.942	.895	.837	.764
120°	1.091	1.124	1.147	1.163	1.166
150°	1.183	1.283	1.370	1.454	1.535
180°	1.228	1.343	1.457	1.572	1.686

LANDING GROUND ROLL

Landing Condition

Hard-Surfaced Runway

LANDING GROUND ROLL X 100 FT

Note: Add 500 feet to clear 50-ft obstacle

GROSS WEIGHT: 20,000 lb**SPEED: 129 KIAS**

Wind (Knots)	Temp °C	Field Elevation — Ft		
		S.L.	3,000	6,000
0	0	36.5	43.5	55.5
	15	39.0	49.0	62.0
	30	43.0	55.0	69.0
	45	48.0	61.5	76.0
10	0	27.5	32.0	40.5
	15	29.0	35.5	46.0
	30	31.5	40.0	52.0
	45	34.5	46.0	58.0
20	0	21.5	24.5	30.0
	15	22.5	26.0	34.0
	30	24.0	29.5	38.5
	45	25.5	34.0	43.0
30	0	17.5	19.0	22.5
	15	18.0	20.0	25.0
	30	19.0	22.5	28.0
	45	20.0	25.0	31.5
40	0	14.0	15.0	17.5
	15	14.5	16.0	19.5
	30	15.0	17.5	21.0
	45	16.0	19.0	22.5

CONTINUED

LANDING GROUND ROLL (Continued)

Note: Add 500 feet to clear 50-ft obstacle

GROSS WEIGHT: 22,000 lb**SPEED: 136 KIAS**

Wind (Knots)	Temp °C	Field Elevation — Ft		
		S.L.	3,000	6,000
0	0	47.5	56.5	71.0
	15	51.0	63.5	78.5
	30	56.0	70.5	86.5
	45	62.0	78.0	94.5
10	0	34.5	41.5	53.5
	15	36.5	47.5	60.5
	30	41.0	53.0	68.5
	45	46.0	60.0	75.0
20	0	25.5	31.0	39.5
	15	26.5	35.0	45.0
	30	30.5	39.5	52.0
	45	34.0	44.5	57.0
30	0	20.0	23.5	29.0
	15	20.5	26.0	33.0
	30	23.0	28.5	38.0
	45	25.0	33.0	41.5
40	0	16.0	18.0	21.5
	15	16.5	19.5	23.5
	30	17.5	21.5	26.0
	45	19.5	23.0	28.5

CONTINUED

