

PREFLIGHT CHECK

BEFORE EXTERIOR INSPECTION.

1. Check for engineering status and servicing.
2. Ejection seat safety pins--safe for parking
3. Canopy pip-pin--In position
4. Canopy internal release handle--Fully housed
5. Battery master switch--OFF
6. Booster pump c/b(2)--in
7. Starter c/b--in
8. Inverter c/b(4) (T7)--in
9. Landing gear selectors:
LEFT DOWN button fully in
UP button out, not turned to emergency override
RIGHT UP button out not turned to emergency override
Red override button in (or DOWN button fully in)
10. Landing gear and flap emergency pressures--2000 PSI (min)
11. Wheelbrake accumulator pressure--750 PSI (min)

EXTERIOR INSPECTION.

1. Systematically check outside of aircraft for signs of damage, security of panels, doors, wheel fairings and external stores. Check the struts for correct extension, ground locks removed, tires for creep, excessive wear or cuts, and brake lines for damage or leaks. Check all covers removed. Make the following specific checks:
 2. Refueling cap--Secure
 3. Aileron accumulator pressure--900 PSI (min)
 4. Elevator accumulator pressure--1575 PSI (min)
 5. Pitot cover-- removed
 6. Canopy and windshield--clean and undamaged

COCKPIT CHECK (EJECTION SEATS)

1. Manual separation handle--Not pulled
2. Guillotine firing cable--Connected to guillotine firing unit sear
3. Guillotine sear safety pin--Removed and stowed
4. Parachute withdrawal line--Under guillotine flap
5. Drogue gun static rod--Secured
6. Drogue gun--Servicing pin removed
7. Top latch--Internal plunger flush with housing
8. Drogue withdrawal line--Routed over lift lines, secured to drogue gun piston
9. Scissor shackle--Closed and flat
10. Face-screen firing cable--Connected to canopy jettison firing unit sear and to time delay firing unit sear

COCKPIT CHECK (EJECTION SEATS) CONTINUED

11. Seat-pan firing cable--Ring threaded over cable to time delay firing unit sear
12. Barostatic time release unit--Static rod connected
13. Emergency oxygen--Safety pin removed; not fired
14. Combined harness--Check security
15. Canopy jettison firing unit sear safety pin--Stowed

COCKPIT CHECKS

(AFTER STRAPPING IN)

1. Parking Brake--On
2. Safety Pins (Seat & Canopy)--
Stowed
3. Drag Chute Switches--Central
4. Flight Controls--Off
5. Engine Master Switch--Off
6. Battery Master Switch--Off
7. Start System, Test--Test/Return
To Normal
8. Left & Right Gear Controls--
Both "Down", Red Button-In
9. Pitot Heat--Off
10. Battery Master Switch--On

COCKPIT CHECKS

(PRESTART LEFT TO RIGHT)

1. Electrical Power--On
2. Emergency Gear and Flap
Accumulators--Check (2000psi)
3. G-Suit--Test (On 2000psi)
4. Cabin Pressure Warning--Test
5. Hood Override--Closed Position
6. Cabin Temp Control--Auto
7. Flood Air Flow--Auto
8. Cabin Temperature Selector--As
Required
9. Cabin Pressure Control--Off
(Inboard)
10. LP Cock--On
11. HP Cock--Off (Test Relight
Button)
12. Top Temp Control--On
13. HP Isolation Switch--Normal
(Red Guard Down)
14. Throttles--Movement,
Synched, Close

**COCKPIT CHECKS
(PRESTART LEFT TO RIGHT)
CONTINUED**

- 15. Aileron & Rudder Trim Indicators--Check Condition
- 16. Tailplane Standby Trim--Cover Down
- 17. Battery Test Panel--Normal/Start
- 18. Emergency Gear Control--Not Pulled
- 19. Brake Accumulator--750psi Minimum
- 20. AOA Heat Switch--On
- 21. Hydraulic Pressure Gauge--Condition
- 22. Extra Air Switch--Not Applicable
- 23. Gear & Flap Control Panels--Set
- 24. Emergency Flap Handle--Not Pulled
- 25. Windshield Wiper--Park (Clockwise)

**COCKPIT CHECKS
(PRESTART LEFT TO RIGHT)
CONTINUED**

- 26. Drag Chute Test Switch--Test
- 27. Hydraulic Power Controls--Off/Warning Lights On Both MIs White
- 28. Tailplane Trim Indicator--Check Condition
- 29. Compass Free/Slave Switch--Slaved
- 30. Spin Panel--Check Condition
- 31. Standby Inverter MI--White
- 32. Flight And Engine Instruments--Condition, T&S Supply Normal
- 33. Oil Pressure--Below Zero
- 34. Ignition Switch--On (Safetied)
- 35. Generator Warning Lights--On
- 36. Emergency Lights Switch--Off
- 37. IFF--As Required

COCKPIT CHECKS

**(PRESTART LEFT TO RIGHT)
CONTINUED**

- 38. Pylon Jettison Switches--Safe
- 39. Canopy Control & Light--As Required
- 40. Fire Warning--Test
- 41. Accelerometer--Reset
- 42. Fuel Panel--Set (Contents, Boost Pumps--ON, c/bs, Lights)
- 43. Tailplane Interconnect--Off
- 44. Chute Stream Light--Out
- 45. Comm/Nav Panel--As Required
- 46. Panel/Flood Lights--Normal
- 47. Engine Anti-Ice--Shut
- 48. Inverter Lights--Amber
- 49. Air Brake Test Switch--Normal
- 50. Starter c/b--In
- 51. Inverter Control Switches--Normal
- 52. Anti-G Control--Off
- 53. Canopy Jettison Control--Fully Down

COCKPIT CHECKS

**(PRESTART LEFT TO RIGHT)
CONTINUED**

- 54. Left Oxygen Panel--On, Test And Set
- 55. AC/DC Master Switches--Off (Down)
- 56. Exterior Lighting Switches--As Required
- 57. Right Spin Panel--Check Condition
- 58. Right Flight/Engine Instruments--Check Condition
- 59. Right Gear & Flap Control--Set (Button In, Flaps In Gate)
- 60. Hydraulic Power Controls--On (Mls White)
- 61. Right Oxygen Panel--On, Test And Set
- 62. Tailplane Trim Cut-out--Cover Down
- 63. Aileron & Trim Indicators--Check Condition
- 64. Circuit Breaker Panel--Check

STARTING ENGINE

Complete all prestart checks.

1. Engine Master Switch--ON
(Gang bar up)
2. Start Button--PRESS Approx 1
SEC/RELEASE
3. Approx 1000rpm--HP COCK ON
4. Monitor Start--RPM, JPT
(640deg max-3sec.)
5. Approx 30seconds--IDLE
(3000rpm $\pm$ 100) 36%
6. Check Engine Instruments--IN
LIMITS (JPT 525deg max, OIL
PRESSURE 10psi min)

Pod Start Pre-Taxi Checks

1. AC/DC Master Switches--ON
2. Comm/Nav/IFF--SET AS
REQUIRED
3. Hydraulic Power Controls--ON
(Mis Black)
4. RPM--3700rpm (Ck Batt Charge) 44.5%
5. Inverters--CHECK
(Changeover, select NORMAL, Ck
both Mis MAIN, Artificial Horizon flag
clear, Standby Inverter MI black)
6. Air Brake--TEST
7. Flaps--TEST AND SET (38deg.
w/stores, 0deg. clean)
8. Fuel Panel & Boost Pumps--LP
warning light out, booster pump
lights out, contents
9. Tailplane and Trim; Aileron and
Rudder--CK ALL MODES

STARTING ENGINE

Complete all prestart checks.

1. Engine Master Switch--ON
(Gang bar up)
2. Start Button--PRESS Approx 1
SEC/RELEASE
3. Approx 1000rpm--HP COCK ON
4. Monitor Start--RPM, JPT
(640deg max-3sec.)
5. Approx 30seconds--IDLE
(3000rpm $\pm$ 100) ~~36%~~
6. Check Engine Instruments--IN
LIMITS (JPT 525deg max, OIL
PRESSURE 10psi min)

Post Start Pre-Taxi Checks

1. AC/DC Master Switches--ON
2. Comm/Nav/IFF--SET AS
REQUIRED
3. Hydraulic Power Controls--ON
(MIs Black)
4. RPM--3700rpm (Ck Batt Charge) ~~44.5%~~
5. Inverters--CHECK
(Changeover, reselect NORMAL, Ck
both MIs MAIN, Artificial Horizon flag
clear, Standby Inverter MI black)
6. Air Brake--TEST
7. Flaps--TEST AND SET (38deg.
w/stores, 0deg. clean)
8. Fuel Panel & Boost Pumps--LP
warning light out, booster pump
lights out, contents
9. Tailplane and Trim; Aileron and
Rudder--CK ALL MODES

**POST START PRE-TAXI CHECKS
CONTINUED**

Trim Checks: (1) Stick free, tailplane zero select tailplane interconnect on, move stick aft over full range, and while tailplane is moving nose up, *blip* the trim sw in opposite direction and check the trim overrides follow up tail, release stick and ck tailplane to zero± small amount caused by trimming in opposite direction; (2) Stick free retrim to zero and repeat (1) in opposite direction (pushing stick forward); (3) Retrim to zero move stick back or forward and raise standby trim cover, ck cut out is working by moving stick and trimming and ck the operation of standby trim, leave tailplane more than one deg. from zero position, lower standby trim cover and check trim returns to zero± one deg. with stick free;

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**POST START PRE-TAXI CHECKS
CONTINUED--Trim Checks Continued**

(4) Switch interconnect off.

ABORT if these cks not satisfactory

**10. Flight Instruments--LEFT &
RIGHT CHECK**

**11. Hydraulics--CHECK (2800-
3000psi)**

**12. Canopy--CLOSED OR TAXIING
POSITION**

**PRE-TAKEOFF CHECKS-
FATIGHOP**

1. Fuel--CHECK PANEL LP
WARNING LIGHT OUT, BOOSTER
PUMP LIGHTS OUT, CONTENTS
2. Flaps--CORRECT SETTING (38
deg. with stores, zero clean)
3. Anti-Ice--AS REQUIRED
4. Trim--CORRECT SETTINGS
(One deg. nose up with Inbd stores,
zero deg. clean)
5. Tailplane--OFF
6. Instruments--WORKING, NO
FLAGS
7. Drag Chute--LIGHT OUT
8. Canopy--LOCKED, LIGHT ON,
INDICATORS ALIGNED
9. Pressurization OFF
9. Hydraulics--2800-3000psi,
Lights Out
10. Harness--AS REQUIRED
11. Oxygen--CONTENTS,
CONNECTIONS, FLOW
12. Power Controls--ON, Mis
BLACK
13. Pins--PULLED & STOWED

**PRE-TAKEOFF CHECKS
CONTINUED**

14. Takeoff Emergencies--BRIEF
COMPLETE

ABORT:

1. THROTTLE--IDLE
2. MAXIMUM BRAKING
3. DRAG CHUTE--STREAM
4. FLAPS--FULL DOWN
5. HP COCK--OFF IF NECESSARY

GROUND EGRESS:

1. LEG RESTRAINTS--RELEASE
2. OXYGEN/COMM CORD/G-SUIT--
RELEASE
3. QUICK RELEASE FITTING--
RELEASE

**ENGINE FAILURE ON TAKEOFF
BELOW 250 KTS:**

1. ZOOM
2. EJECT

ENGINE CHECK

TAKEOFF AREA ENGINE CHECKS

1. Power Controls--ON (Above 4500rpm operate ailerons and elevators over full range, both MIs remain black)
2. Wheelbrakes--HOLDING AT 7200rpm 86.5%
3. Oil Pressure--14psi (Minimum at 7200rpm) 86.5%

TAKEOFF

1. RPM--8100+50 (Not obtained at part throttle) 96.4%
2. JPT--580 to 690deg
3. Brakes--RELEASE (Differential braking for steering to 90 kts then rudder)
4. Acceleration--NORMAL
5. Fire Warning--OUT
6. Assume Takeoff Attitude--115kts

TAKEOFF/CLIMB CONTINUED--LEVEL OFF

7. Fly--145 to 150kts (Don't over rotate)
8. Brakes--ON (Until gear up and locked)
9. Landing Gear--UP (Button fully in lights out)
10. Flaps--UP
11. Pressurization--ON
12. Normal Climb--THROTTLE SET TO 370kts/.82 MACH (Max Climb full throttle to 430kts/.85 MACH)

LEVEL OFF

1. Power--MAX (10 min 8100+50rpm, 690deg. JPT) 96.4%
INTERMEDIATE
MAX CONTINUOUS
(30MIN 7950rpm, 655deg. JPT) 95.5%
(7700rpm, 625deg. JPT) 92.5%
2. Speeds--Cruise (30M .70 MACH 7100rpm, 40M .79 MACH 7500rpm)