

Interior check

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1. Harness and rudder pedals..... SECURE / ADJUST
2. Ejection control handle..... CLEAR
3. OBOGS control switch..... OFF
4. OXY flow knob..... OFF
5. OBOGS BIT plunger..... VERIFY UNLOCKED AND FULLY EXTENDED

Left console

1. Circuit breakers (4)..... IN
2. Manual canopy handle..... STOWED
3. Nuclear weapon consent switch..... ENABLE
4. MC and HYD ISOL..... NORM
5. OBOGS control switch..... OFF
6. COMM 1 / IFF ANT SEL switches..... AUTO / BOTH
7. COMM panel..... SET
8. VOL panel..... SET
9. APU switch..... OFF
10. FCS GAIN switch..... NORM
11. PROBE switch..... RETRACT
12. EXT TANKS switches..... NORM
13. DUMP switch..... OFF
14. INTR WING switch..... NORM
15. GEN TIE CONTROL switch..... NORM (guard down)
16. EXT LT panel..... SET
17. Throttles..... OFF
18. PARK BRK..... SET
19. LDG/TAXI LIGHT switch..... OFF
20. ANTI SKID switch..... ON (Land) / OFF (Carrier)
21. FLAP switch..... FULL
22. SELECT JETT knob..... SAFE
23. LDG GEAR handle..... DOWN
24. CANOPY JETT handle..... FORWARD

Instrument panel

1. Master arm switch..... SAFE
2. FIRE and APU FIRE warning lights..... NOT PRESSED
3. L/R DDI, HI/MPCD, and HUD..... OFF
4. Altitude source..... BARO / RDR as req'd
5. Attitude source..... AUTO
6. Comm 1 and 2 knobs..... OFF
7. ADF switch..... OFF
8. ECM mode..... OFF
9. Dispenser select knob/dispenser switch..... OFF
10. Auxiliary release switch..... NORM
11. Clock..... CHECK AND SET
12. Standby attitude reference indicator..... CAGE/LOCK
13. IR coolant switch..... OFF
14. Spin recovery switch..... GUARD DOWN/OFF

Right Console

1. Circuit breakers (4).....IN
2. Arresting hook handle.....UP
3. Wing fold handle.....SAME AS WING POSITION
4. AV COOL.....NORM
5. Radar altimeter.....OFF
6. L / R generator switches.....NORM
7. Battery switch.....OFF
8. ECS system.....SET
 - a. MODE switch.....AUTO
 - b. CABIN TEMP knob.....10 o'clock
 - c. CABIN PRESS switch.....NORM
 - d. BLEED AIR knob.....NORM / DOWN
 - e. ENG ANTI ICE switch.....OFF
 - f. PITOT ANTI ICE switch.....AUTO
9. DEFOG handle.....MID RANGE
10. WINDSHIELD switch.....OFF
11. Interior lights.....AS DESIRED
12. Sensors.....OFF
13. KY-58 panel.....SET
14. AN/AWB-3(V) monitor control.....SET
15. NVG container.....SECURE/NVG STOW (if required)

Startup

Engine Start

1. Battery switch ON (if not previously ON)
2. Fire warning TEST A and B
 - a. Check APU ACCUM caution light OFF
3. APU switch ON (READY light within 30 seconds)
4. Engine crank switch R
5. Right throttle IDLE (15% rpm minimum)
6. GPWS Voice Alerts CHECK
7. DDI, HI/MPCD, HUD, UFC avionics, radar altimeter ON
8. HMD switch ON
9. EMI/IFEI CHECK

- a. After engine start, it may be necessary to advance power above IDLE to get the ECS turbine started.

Ground idle - 402 engine

- | | |
|-------------------------------|---------------|
| N2 | 63 – 70% |
| EGT | 190° – 590°C |
| Fuel flow | 420 – 900 pph |
| Nozzle | 73 – 84% |
| Oil pressure (warm oil) | 45 – 100 PSI |
10. Bleed air knob CYCLE THRU OFF TO NORM
The bleed air shutoff valves close during the fire warning test and the bleed air knob must be cycled thru OFF to NORM with ac power on to reset the valves.
 11. Warning and caution lights TEST
For a crossbleed start, ensure APU switch is OFF and a minimum of 80% rpm and 1,900 pph fuel flow
 12. Engine crank switch L
 13. Left throttle IDLE (15% RPM minimum)
 14. Engine crank switch CHECK OFF
 15. EMI/IFEI CHECK
 16. External electrical power DISCONNECT (if required)
 17. Left DDI FCS
 18. Right DDI BIT
 19. HMPCD HSI (map off)

Taxi & Takeoff

Cockpit Setup

1. Waypoint zero and magnetic variation.....CHECK
2. INS knob.....CV, GND (parking brake set) or IFA (functioning GPS)
3. RADAR knob.....OPR
4. WING FOLD.....SPREAD AND LOCK
5. FCS RESET button.....PUSH
If wings are folded, verify aileron X's present
 - If no reset
 - a. T.O. trim button.....PUSH (note TRIM advisory)
 - b. FCS exerciser mode.....INITIATE*Lift FCS BIT consent switch and push FCS RESET button simultaneously.*
 - If still no reset
 - c. FCS circuit breakers.....PULL 4 CHANNELS
 - d. Wait 10 seconds
 - e. FCS circuit breakers.....RESET
 - f. FCS RESET button.....PUSH
6. FLAPS.....AUTO
7. FCS exerciser.....Hold paddle and FCS RESET
8. FLAPS.....HALF
9. FCS BIT.....PERFORM (Hold paddle and BIT pushtile)
10. TRIM.....CHECK
Check pitch, roll, and yaw trim for proper movement and then set for takeoff.
11. T.O. trim button.....PRESS UNTIL TRIM ADVISORY DISPLAYED
12. FLAPS.....AUTO
13. Controls.....CHECK ($\pm 1^\circ$ tolerance)
 - a. Control stick.....CYCLE
 - Full aft.....24 NU stabilator
 - Full fwd.....3 NU
 - R/L Aileron.....CHECK 20 units diff stab
 - b. Flaps.....CHECK differential trailing edge flaps
 - c. Rudder pedals.....HALF
 - c. Rudder pedals.....CYCLE 30° left and right
14. Trim.....SET FOR TAKEOFF
 - Shore..... 12°
 - 44,000 lbs and below..... 16°
 - 45,000 - 48,000 lbs..... 17°
 - 49,000 lbs and above..... 19°*If takeoff trim is not set, full leading edge down stabilator movement may not be available and takeoff distance will increase.*
15. Refueling probe, launch bar, speed brake, arresting hook, pitot heat.....CYCLE
Launch bar optional for shore ops.
16. OBOGS control switch.....ON
17. OXY flow knob.....ON
18. APU.....VERIFY OFF
19. Fuel.....BIT/SET BINGO
20. Altimeter.....SET
21. Radar altimeter.....ON / SET
22. BIT.....NOTE DEGD/FAIL
23. Sensors (IFF / TCN / ILS / D/L).....SET, as req'd
24. STORES profiles (MODE, MFUZ, EFUZ, DRAG, MULT).....SET, as req'd

25. Countermeasures.....SET, as req'd
26. COMM 1 / COMM 2.....SET FREQ, as req'd
27. Standby attitude indicator.....UNCAGE, SET
28. OBOGS system.....CHECK
29. Mask on, OBOGS DEGD caution.....OFF
Momentarily press and release the OBOGS monitor pushbutton to verify
 - a. MASTER CAUTION.....ON
 - b. OBOGS DEGD caution.....ON
 - c. Helmet caution tone.....ON*Continued operation and use of the OBOGS system with an OBOGS DEGD caution may result in hypoxia.*
30. Canopy.....FULL OPEN or FULL CLOSED during taxi
31. INS knob.....NAV
32. Left DDI.....HUD
33. Right DDI.....CHKLST
34. HMPCD.....HSI, SET WPT

Taxi

1. Exterior lights.....CHECK ON, as req'd
2. LDG/TAXI LIGHT switch.....ON, as req'd
3. Wheel brakes.....CHECK
4. Nosewheel steering.....CHECK

Before takeoff

1. Canopy.....CLOSED
2. IFF.....CHECK ON
3. INS.....CHECK
4. Parking brake handle.....FULLY STOWED
5. Speed brake.....OFF
6. MENU TAKEOFF checklist.....COMPLETE
 - a. CONTROLS
 - b. WINGS
 - c. TRIM
 - d. FLAPS
 - e. HOOK
 - f. HARNESS
 - g. WARN LIGHTS
 - h. NWS LO
 - i. SEAT ARM
7. Engines.....MIL CHECK (if desired)

Military power - 402 engine

- N2.....90 – 102%
- EGT.....715° – 880°C
- Fuel flow.....6000 – 12500 pph
- Nozzle.....0 – 48%
- Oil pressure (warm oil).....95 – 180 psi
- Afterburner.....CHECK if desired

After takeoff

1. Landing gear.....UP
2. Flaps.....AUTO

Enroute / Cruise

Enroute

1. COMM 1 / COMM 2.....SET FREQ, As req'd
2. Weapons.....CONFIGURE, as req'd
3. Countermeasures.....PROGRAM, as req'd
4. DISPENSER.....ON / BYPASS, as req'd
5. ECM.....STBY / REC / XMT, as req'd
6. RWR.....ON

10,000 feet

1. Cockpit altimeter.....CHECK
2. Fuel transfer.....CHECK
3. Radar altimeter low alt/warning setting.....CHECK/SET

Cruise check

1. Cabin pressurization/temperature.....MONITOR
Aircraft altitude.....Cabin altitude
30,000 ft.....10,000 - 12,000 ft
40,000 ft.....15,000 - 17,000 ft

Fence In / Fence out

Fence In

7. COMM 1 / COMM 2.....SET FREQ, Call flight
8. Exterior lights.....OFF
9. Fuel.....CHECK, Set BINGO
10. SELECT JETT.....SET, Jettison as req'd
11. MASTER.....ARM, A/G / A/A, as req'd
12. Weapon.....Select / config, as req'd
13. Altimeter source.....BARO/RAD, as req'd
14. Left DDI.....EW, Box HUD
15. Right DDI.....ATTN RDR, DCLTR
16. HMPCD.....SA, Config as req'd
17. DISPENSER switch.....ON / BYPASS, as req'd
18. ECM.....REC / XMT, as req'd
19. RWR.....ON, as req'd
20. HMD.....ON, as req'd
21. RAD ALT.....SET, as req'd

Fence Out

22. COMM 1 / COMM 2.....SET FREQ, Call flight
23. Exterior lights.....ON, as req'd
24. SELECT JETT.....SAFE
25. MASTER.....SAFE
26. L/R DDI, HMPCD.....As req'd
27. DISPENSER switch.....ON / BYPASS, as req'd
28. ECM.....STBY
29. HMD.....As req'd

Approach / Landing

Descent / penetration

1. Engine anti-ice AS DESIRED
 2. Pitot heat AUTO
 3. Defog handle HIGH
 4. Windshield anti-ice/rain switch AS DESIRED
 5. Altimeter setting CHECK
 6. Radar altimeter SET AND CHECK
 7. HUD NAV Master Mode
- Compare with standby flight instruments and standby compass*
8. Altimeter source BARO / RAD, as req'd
 9. NAVAIDS cross check
 10. ARA-63 (ILS) ON AND CHANNEL SET
 11. IFF AS DIRECTED
 12. Weapons/sensors AS REQUIRED

Approach

1. MENU LANDING checklist COMPLETE
 - a. WHEELS
 - b. FLAPS
 - c. HOOK
 - d. ANTI-SKID
 - e. HARNESS
 - f. DISPENSER

After landing

1. Ejection seat SAFE
2. Landing gear handle mechanical stop FULLY ENGAGED
3. Flap switch AUTO
4. Speed brake OFF
5. T.O. trim button PUSH (note TRIM advisory)
6. Canopy FULL OPEN or FULL CLOSED

Shutdown

Before engine shutdown

- | | |
|---|---------------------------|
| 1. Parking brake | SET |
| 2. BIT Display | RECORD DEGD |
| 3. BLIN codes | RECORD |
| 4. Radar maintenance codes | NOTE IF PRESENT |
| 5. INS post flight update | PERFORM |
| 6. INS | OFF (10 sec pre-shutdown) |
| 7. Standby attitude reference indicator | CAGE/LOCK |
| 8. Sensors, radar, avionics and VTRS | OFF |
| 9. Comm 1 and 2 | OFF |
| 10. Exterior and interior lights | OFF |
| 11. OBOGS control switch | OFF |
| 12. OXY flow knob | OFF |
| 13. Canopy | OPEN |

Engine shutdown

1. Brake gauge.....3,000 PSI
2. Nosewheel steering.....DISENGAGE
3. Flaps.....FULL
4. Left throttle.....OFF
5. Monitor engine rpm. As N2 rpm decreases below 7%, gently pump the stick approximately ± 1 inch fore and aft at approximately 2 cycles per second, decreasing hydraulic pressure on shutdown engine below 800 psi. Ensure system pressure on operating engine remains above 1500 psi. (Pressure must remain below 800 psi on shutdown engine for valid test.)
6. Pump stick while monitoring FCS page for FCS X's and/or BLIN codes for 10 seconds after system pressure on shutdown engine drops below 800 psi. Record if present.
 - a. BLIN code 63 and/or rudder X's indicate a malfunctioning rudder switching valve and further maintenance action is required.
 - b. BLIN code 66 and/or aileron X's indicate a malfunctioning aileron switching valve and further maintenance action is required.
7. If only BLIN code 67 and/or LEF X's are present, attempt FCS RESET. Record results. (Recurring BLIN code 67 and/or LEF X's after FCS RESET indicates a malfunctioning LEF switching valve and further maintenance action is required.)
8. DDI, HI/MPCD, and HUD.....OFF
9. Right Throttle.....OFF
10. Battery switch.....OFF (when amber FLAPS light illuminates)