FLIGHT CREW CHECKLIST

BMS SERIES F-16X AIRCRAFT

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NOTE

This publication is designed for use ONLY with FALCON BMS.

NOTE

The following diagram depicts the general locations of each switch or knob referenced in this document.

Cockpit Diagram

HUD, ICP, ICP SYM Switch (HUD Brightness), Master ARM, RF Switch

Wheel lights, GND JETT ENABLE button, PARKING BRAKE, LANDING LGHTS, STORES CONFIG, CMDS, SPEED BRAKE indicator, LANDING GEAR Handle

INSTR MODE sel switch, FUEL QTY SEL knob, Altimeter FUEL QTY Indicator, FTIT, HYD PRESS, FUEL FLOW, NOZ POS ind, RPM

COMM Panel, ECM PWR, MAIN PWR switch, EPU switch, CNI switch, EXTERNAL LIGHT panel, FUEL CTRL knob, ENG CTRL switch, JFS switch, RWR PWR

Test Panel, DIG BACKUP, MANUAL TF switch, FLCS BIT, Trim Panel, A/R DOOR switch SNSR PWR panel, HUD CTRL panel, INTERNAL LIGHTING panel, AIR SOURCE knob

Avionics Power panel, INS CTRL

NORMAL PROCEDURES

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INTERIOR INSPECTION

- 1. Personal Gear SECURED
- 2. Mission Documentation CHECKED/VERIFIED

POWER OFF

Left Panel

- 1. PROBE HEAT switch OFF
- FLCS PWR/TEST switch NORM
- DIGITAL BACKUP switch OFF
- ALT FLAPS switch NORM
- 5. MANUAL TF FLY UP switch ENABLE
- LE FLAPS switch AUTO
- 7. BIT switch OFF
- TRIM/AP DISC switch NORM
- 9. ROLL, YAW, PITCH TRIM Centered

CAUTION

Failure to secure FUEL MASTER switch in correct position may cause engine damage or failure during engine start.

- 10. FUEL MASTER switch MASTER
- 11. ENGINE FEED knob NORM
- 12. A/R DOOR switch CLOSED
- 13. CNI Knob BACKUP
- 14. TACAN AS REQ'D
- 15. EXTERNAL LIGHTING SET
 - a. ANTI COLLISION ON
 - b. FLASH/STEADY FLASH
 - c. WING/TAIL BRT
 - d. MASTER ON
- 16. EPU switch NORM
- 17. MAIN PWR switch OFF

NOTE

To prevent aircraft battery from being depleted, MAIN PWR switch should not be left in BATT or MAIN PWR position for longer than 5 minutes when aircraft is not connected to ground or external power. Doing so may prevent aircraft from properly starting.

- 18. AVTR PWR switch OFF
- 19. ECM-OFF
- 20. COMMUNICATIONS SET
 - a. COMM 1 Full CW/ SQL Enable
 - b. COMM 2 Full CW/ SQL Enable
 - c. MSL Full CW

- d. THREAT Full CW
- e. INTERCOM CW
- 21. ENG CONT switch NORM
- 22. JFS switch OFF
- 23. UHF SEL knob BOTH
- 24. SPFFD BRAKE CLOSED

Left Auxiliary Console

- 1. CMDS OFF (ALL)
- STORES CONFIG switch AS REQ'D
- LANDING LIGHTS OFF
- 4. LANDING GEAR Handle DOWN
- 5. GND JETT ENABLE switch OFF
- 6. ANTI SKID/BRAKE switch PARKING BRAKE
- 7. SYMBOLOGY knob OFF

Instrument Panel

- 1. RF switch NORM
- 2. AP SET
 - a. ATT HOLD
 - b. OFF
- 3. LASER ARM switch OFF
- 4. HUD SET
- 5. FUEL QTY SEL knob NORM
- 6. FUEL TRANS switch NORM
- 7. INSTR MODE knob AS REQ'D

Right Panel

- 1. SNSR PWR switch OFF (ALL)
- 2. Interior Lighting SET
- AIR SOURCE knob NORM.
- 4. AVIONICS POWER switches OFF (ALL)

WARNING

Ensure MASTER ARM switch is in the OFF position prior to starting engine. Improperly loaded or malfunctioning armament may inadvertently fire during aircraft power up sequence.

WARNING

Ensure Landing Gear Handle is locked in the DOWN position prior to starting engine.

WARNING

Ensure ANTI SKID/BRAKE switch is set to PARKING BRAKE prior to starting engines. Failure to do so may allow the aircraft to roll during engine start.

NOTE

To prevent aircraft battery from being depleted, MAIN PWR switch should not be left in BATT or MAIN PWR position for longer than 5 minutes when aircraft is not connected to external power.

BEFORE STARTING ENGINE

- MAIN PWR switch BATT
- 2. FLCS PWR TEST switch TEST
- 3. MAIN PWR switch MAIN PWR
- Canopy CLOSED

NOTE

Canopy may remain open until completion of the BEFORE TAXI checklist

STARTING ENGINE

- 1. JFS switch START 2
 - a. JFS RUN light Illuminated
- 2. SEC MASTER CAUTION light Extinguished
- 3. IDLE CUTOFF SET (AS REQ'D)

- ENGINE Warning light Extinguished at 55% RPM
- 5. JFS switch Verify OFF
 - a. JFS RUN light Extinguished
- FUEL FLOW 500-2500
- 7. OIL PRESSURE Minimum 15 psi
- 8. NOZ POS Minimum 80%
- 9. RPM 65-75%
- 10. FTIT Maximum 625°
- 11. HYD PRESS A & B 2850-3250 psi

AFTER STARTING ENGINE

- 1. TEST panel CHECKED
 - a. PROBE HEAT TEST
 - b. PROBE HEAT switch AS REQ'D
 - c. FIRE & OHEAT DETECT button TEST
 - d. MAL & IND LTS button TEST
 - i. Verify MASTER WARNING LIGHT panel
 - ii. Verify Audible Warning System
- 2. SNSR PWR panel SET
 - a. LEFT HDPT switch AS REQ'D
 - b. RIGHT HDPT switch AS REQ'D
 - c. FCR switch FCR
 - d. RDR ALT switch STDBY
- 3. HUD CONTROL PANEL SET

- 4. AVIONICS POWER panel ON (ALL)
- INS POWER knob ALIGN NORM

NOTE

INS alignment may take up to 8 minutes to complete. HUD and DED will flash ALIGN when alignment is complete.

- HUD CONFIGURED
- 7. SYMBOLOGY power knob SET
- 8. FLCS BIT Initiated
- 9. ECM SET
 - a. ECM PWR OPR
 - b. RWR switch ON
 - c. JMR switch ON
 - d. CH switch ON
 - e. FL switch ON
 - f. PRGM AS REQ'D
 - g. MODE AS REQ'D
- 10. RWR PWR ON
- 11. SPEED BRAKE CHECKED
- 12. Wheel Indicators CHECKED

NOTE

After selecting each position on the FUEL QTY SEL knob, verify correct quantity is displayed on the fuel gauge.

- 13. FUEL SYSTEM CHECKED
 - a. FUEL QTY TEST
 - b. FUEL QTY NORM
 - c. FUEL QTY RSVR
 - d. FUEL QTY INT WING
 - e. FUEL QTY EXT WING
 - f. FUEL QTY EXT CTR
 - g. FUEL QTY NORM
- 14. Avionics Programmed
 - a. DTC Loaded
 - b. Multifunction Displays CONFIGURED
- 15. FLCS BIT COMPLETE
 - a. FLCS BIT switch OFF
- 16. DIGITAL BACKUP CHECKED
 - a. DIGITAL BACKUP switch BACKUP
 - b. CONTROL SURFACES (ALL) CHECKED
 - c. DIGITAL BACKUP switch OFF
- 17. Trim CHECKED
 - a. ROLL/YAW/PITCH trim CHECKED
 - b. Trim RESET
 - c. Trim SET (AS REQ'D)

- 18. A/R System CHECKED (AS REQ'D)
 - a. A/R Door OPENED
 - b. A/R Door Operation Verified
 - c. A/R RDY light Illuminated
 - d. A/R Door CLOSED
 - e. A/R RDY light Extinguished

WARNING

EPU test may require throttles to be increased to 20%. Ensure ANTI SKID/BRAKE switch is set to PARKING BRAKE prior to Testing EPU.

19. EPU - CHECKED

- a. EPU switch ON
- b. EPU RUN light Illuminated
- c. EPU AIR light Illuminated
- d. EPU HYDRAZN light Illuminated
- e. FLCS test switch EPU/GEN
 - i. FLCS bus lights Illuminated
- f. THROTTLES Advanced to maximum 20%
 - HYDRAZN light Extinguished
- g. THROTTLES Return to IDLE
- h. EPU switch OFF
- i. EPU switch NORM

WARNING

Ensure ANTI SKID/BRAKE switch is set to PARKING BRAKE prior to SEC ENGINE test.

- 20. SEC ENG CONTROL CHECKED
 - a. SEC ENG CONT switch SEC
 - b. SEC MASTER CAUTION light Illuminated
 - c. THROTTLE Advance to 10%
 - d. THROTTLE POS IND Verify Movement with throttle
 - e. SEC ENG CONT switch NORM
 - f. SEC MASTER CAUTION light Extinguished
- 21. Ejection Seat Handle ARMED
- 22. LANDING LIGHT ON

BEFORE TAXI

- 1. CNI switch UFC
- 2. COMM Panel SET
 - a. COMM 1 TOWER SET
 - b. COMM 2 FLIGHT/PACKAGE SET
- Altimeter SET
- 4. ICP CONFIGURED
 - a. T-ILS SET
 - b. BINGO SET
 - c. ALLOW SET
 - d. DLNK SET

5. TACAN - CONFIGURED

NOTE

TACAN will be configured IAW briefed procedures. 63 Channel offset will be used to coordinate flight member separation. Flight Lead may dictate alternate settings to accommodate AR, Multi-Flight Packages, or Element Separation AS REQ'D.

- SMS CONFIGURED
 - a. AGM/HARM PWR ON (AS REQ'D)
 - b. AG DROP STORES CONFIGURED (AS REQ'D)
 - i. RIPPLE SET
 - ii. INTERVAL SET
 - iii. REL ANG SET
 - iv. CBU BURST SET
 - v. ARMING FUSE SET
 - vi. RELEASE PROFILE CONFIGURED

TAXI

- 1. Canopy CLOSED
- 2. Nose Wheel System ACTIVATED
- 3. Exterior Lights SET
- 4. LANDING LIGHT ON
- 5. CHOCKS REMOVED
- 6. AVTR AS REQ'D
- 7. ANTI SKID/BRAKE switch OFF
- 8. WARNING LIGHTS Checked/Reset

NOTE

INS alignment may take up to 8 minutes to complete. HUD and DED will flash ALIGN when alignment is complete. INS Short Align is complete when INS System display shows solid RDY during align, and may be used for normal operations.

- INS SET
 - a. ALIGNMENT Verify complete
 - b. INS POWER knob NAV

WARNING

DO NOT Taxi prior to INS Alignment completion.

BEFORE TAKEOFF

- 1. ALT FLAPS switch NORM
- 2. SPEED BRAKE CLOSED
- 3. PROBE HEAT switch PROBE HEAT
- 4. FUEL QTY SEL knob NORM
- 5. EXTERNAL LIGHT Panel SET
- 6. DEPR RET switch AS REQ'D
- 7. RDR ALT switch RDR ALT

WARNING

Damage may occur to Landing Gear if speeds exceed 300 KIAS before gear are retracted.

AFTER TAKEOFF

- LANDING GEAR UP
 - a. WHEEL INDICATOR lights Extinguished
 - b. LANDING GEAR handle UP/LOCKED
- 2. EXTERNAL LIGHTS panel SET
 - a. FLASH/STEADY STEADY
 - b. WING/TAIL BRT
 - c. ANTI COLLISION OFF
- 3. LANDING LIGHTS OFF
- 4. RADIOS SET
- 5. ICP CONFIGURED
- 6. ALT switch AS REQ'D
- 7. ALTIMETER SET

NOTE

ALTIMETER should be set to 29.92 passing through FL180 (18000ft)

COMBAT ENTRY

- MASTER ARM switch ARMED
- 2. LASER switch AS REQ'D
- 3. MFD Configuration SET
- 4. Stores Configuration SET
 - a. LEFT/RIGHT HDPT AS REQ'D
 - b. AG ARMAMENT Initialized (AS REQ'D)
- 5. RADIOS SET
- 6. FCR MODE AS REQ'D
- 7. Target Package Reviewed
- 8. DEPR RET AS REQ'D
- 9. AIRCRAFT LIGHTING SET
- 10. EWS SET

COMBAT EXIT

- 1. AIRCRAFT LIGHTING SET
- 2. MASTER ARM switch SAFE
- 3. LASER ARM switch OFF
- 4. LEFT/RIGHT HDPT OFF
- 5. CMDS OFF

BEFORE LANDING

- 1. FUEL panel CHECKED
- 2. RADIOS SET
- 3. ALTIMETER SET
- 4. ALT switch BARO
- 5. Approach Plate REVIEWED
- 6. T-ILS SET
 - a. TACAN Channel SET
 - b. TACAN MODE T/R
 - c. ILS FREQ SET (AS REQ'D)
 - d. CRS SET
- 7. TACAN BACKUP CONTROL SET
- 8. HSI CONFIGURED
- LANDING LIGHTS ON

WARNING

Damage may occur to Landing Gear if speeds exceed 300 KIAS while gear are extended

- LANDING GEAR DOWN
- 11. MASTER ARM switch VERIFIED SAFE
- 12. GND JETT ENABLE switch OFF

LANDING

- LANDING GEAR CHECKED
 - a. LANDING GEAR handle DOWN
 - b. WHEEL INDICATOR lights 3 Green
- 2. Approach Speed SET

CAUTION

Excessive use of speed brakes may cause brake failure. Air Brakes should be used to maximum extent possible. NWS system should not be activated above 60 knots

AFTER LANDING

- SPEED BRAKES CLOSED
- 2. Nose Wheel System ACTIVATED
- 3. CANOPY AS REQ'D

NOTE

Canopy may remain closed until completion of the Engine Shutdown checklist or during Hot Fuel operations

ENGINE SHUTDOWN

- ANTI SKID/BRAKE switch PARKING BRAKE
- 2. CHOCKS INSERTED
- 3. RWR PWR OFF
- 4. AVTR OFF
- 5. ECM/CMDS OFF
- SYMBOLOGY knob OFF
- 7. AVIONICS POWER panel OFF (ALL)
- INS MODE SEL knob OFF
- 9. SNSR PWR panel OFF (ALL)
- 10. PROBE HEAT switch OFF
- 11. EJECTION SEAT HANDLE DISARMED
- 12. CNI knob BACKUP
- 13. THROTTLE IDLE
- 14. ENGINE FEED knob OFF
- 15. FUEL MASTER switch OFF
- 16. AIR SRC knob OFF
- 17. MAIN PWR switch OFF

HOT FUELING

- 1. GND JETT ENABLE switch OFF
- MASTER ARM switch SAFE
- 3. ANTI SKID/BRAKE switch PARKING BRAKE
- 4. A/R DOOR switch OPENED
- 5. HOT FUEL Requested
- 6. FUEL Transfer Monitored
- 7. A/R DOOR switch CLOSED
- 8. ANTI SKID/BRAKE switch OFF

AIR REFUELING

- MASTER ARM switch SAFE
- 2. LASER ARM switch OFF
- 3. CMDS STDBY
- AIRSPEED switch CAS
- 5. TACAN, PRIMARY/BACKUP SET
 - a. TCN MODE AA T/R
 - b. TACAN CHANNEL SET
 - c. INSTR MODE knob TCN NAV
- PRE CONTACT
 - a. A/R DOOR switch OPEN
 - i. AR RDY light illuminated
 - b. PRE CONTACT POSITION Established
 - Tanker SHOULD maintain 310-315 KIAS

- ii. Maintain altitude 60-75 ft below tanker
- iii. Maintain position aft of tanker centerline approx. 100-200 ft
- c. FUEL Requested

CONTACT

- a. Maintain maximum overtake speed of 3 knots
- b. Maintain altitude 40-60 ft below tanker
- c. Verify AR Light Illuminated during fueling

8. DISCONNECT

- a. A/R DISC Button PRESSED
- b. Re-establish CONTACT
- REFUELING COMPLETE
 - a. A/R DISC button PRESSED
 - b. Observation Position AS REO'D
 - i. Maintain altitude 50 ft below tanker
 - ii. Maintain position aft and right of tanker

POST AIR REFUELING

- 1. A/R DOOR switch CLOSED
- 2. MASTER ARM switch AS REQ'D
- 3. CMDS AS REQ'D
- 4. AIRSPEED switch AS REQ'D
- 5. INSTR MODE knob AS REQ'D