

CHECKLISTS

FOR

NAVY MODEL **F/A-18C**

FOR FALCON BMS

TABLE OF CONTENT

- 1 NORMAL PROCEDURES
- 2 CARRIER BASED PROCEDURES
- 3 SPECIAL PROCEDURES
- 4 EMERGENCY PROCEDURES
- 5 PERFORMANCE DATA

1 NORMAL PROCEDURES

- 1.0 PRESENTATION COCKPIT
- 1.1 INTERIOR CHECKS
- 1.2 BEFORE ENGINES START
- 1.3 ENGINES START
- 1.4 AFTER ENGINES START
- 1.5 BEFORE TAXI
- 1.6 TAXI
- 1.7 BEFORE TAKE OFF
- 1.8 TAKE OFF
- 1.9 AFTER TAKE OFF

1 : NORMAL PROCEDURES 1.0 : PRESENTATION COCKPIT

1. Lock shoot lights

2. HUD

- 3. AOA indexer lights
- 4. Left engine fire/warning light
- 5. Master caution light
- 6. Left warning/caution advisory lights
- 7. HUD vidéo bit panel

8. Right warning/caution advisory lights

9. APU fire warning light

10.Right engine fire/warning light

11. Canopy internal jettisson handdle

- 12.Master arm panel
- 13.Left digital display indicator (DDI)

14.Upfront control display (UFC)

DED et ICP dans BMS

15.Right digital display indicator (DDI)

16.Map gain/spin recovery panel HMCS et CAT I-III dans BMS

- 17. Emergency jettison button
- 18.HUD control panel
- 19.Standby attitude reference indicator
- 20.Station jettison select Non actif dans

Falcon BMS

- 21.Landing gear and flaps position lights
- 22. Integrated fuel/engine indicator (IFEI)
- 23.HUD video recorder panel + DED affiché sur HUD dans BMS
- 24.Multipurpose color display (MPCD) HSI + CMDS + PA dans BMS
- 25.Standby airspeed indicator
- 26.Standby altimeter

27.Standby rate of climb

indicator

28.RWR

29.RWR control indicator

Gestion RWR et EWS dans

BMS

30.Dispencer/emc panel Gestion

EWS et ECM dans BMS

31.Clock

32.Cockpit altimeter





- 33.Select jettison button + Flaps et Landing light dans BMS
- 34.Landing gear handle and warning tone silence button
- 35.Brake accumulator pressure gage
- 36.Emergency and parking brake handle
- 37.Radar altimeter
- 38.Hyd 1 and Hyd pressure indicator
- 39. Arresting hook handle and light
- 40.Aircraft bureau number
- 41.Wing fold switch
- 42.Flight computer cool switch
- 43.Caution lights panel

HDPT dans BMS 45.Environement control system panel Probe Heat and Air source dans BMS 46. Interior lights panel Instrument and interior lights dans BMS 47.AMAC control 48.Sensor panel FCR et INS et LASER dans BMS 49.Night vision goggle storage 50.Map and data case 51.Defrog panel + up case canopy switch Canopy dans BMS 52. Fire test panel MAL&IND dans BMS 53. Ground power panel SMS et FCC et Master fuel et ALT switch dans BMS 54. Exterior lights panel Formation lights et Wings lights et Anti col Master lights dans BMS 55. Fuel panel Fuel dump et fuel trans et Fuel door dans BMS 56. Auxiliaire power unit EPU et JFS start dans BMS 57.Flight control system panel Trim yaw et Eng cont et FLCS power dans BMS 58.Communication panel 1 Missile volume et intercom volume dans BMS 59.Antenna select panel 60.Communication panel 2 UHF fonction et UHF mode et UFC et Channel backup dans BMS

44. Electrical control panel Main Power and

61. Mission computer and hydraulic isolate panel 62.Obogs



50

MAP 6 DATA

1.1 : INTERIOR CHECKS

[] Number of the PANELS or INSTRUMENTS

Left console and auxiliairie

- 1. [11] Manual Canopy Handdle STOWED
- 2. [62] Oxygen supply OFF
- 3. [60] COMM panel
 - GXMIT on COMM2
 - UFC on MAN
 - Volume TCN-RWR-WPN AS DESIRED
- 1. [55] PROBE switch RETRACT
- 2. [55] DUMP switch OFF
- 3. [54] INTR WING switch NORM
- 4. [] Throttles OFF
- 5. [33] LDG/TAXI LIGHT switch OFF
- 6. [34] LDG GEAR handle DOWN
- 7. [54] Radar altimeter OFF

Front panel

- 1. [12] MASTER ARM switch SAFE
- 2. [10] FIRE and APU warning lights NOT PRESSED IN
- 3. [12] L(R) DDI, HI/MPCD, and HUD knobs OFF
- 4. [18] Altitude source SELECT
- 5. [14] COMM 1 and 2 knobs OFF
- 6. [30] ECM mode OFF
- 7. [29] Dispenser CHAFF and FLARE OFF
- 8. [31] Clock CHECK AND SET
- 9. [19] Standby attitude reference indicator CAGE/LOCK
- 10. [16] SPIN switch GUARD DOWN/OFF

Right Console and auxiliairie

- 1. [39] HOOK handle UP
- 2. [41] WING FOLD handle SAME AS WING POSITION
- 3. [44] BATT switch OFF
- 4. [45] BLEED AIR knob OFF
- 5. [46] INTR LT panel AS DESIRED
- 6. [48] Sensors OFF

Engine Start. With a battery start, power is available to operate the APU and engine fire warning systems, the intercom system between the pilot and the ground, the cockpit utility light and EMI/IFEI. For external air start, ensure that bleed air knob is OFF to avoid ATS damage.



When the engine crank switch is on, the air turbine starter control valve (ATSCV) opens and the air turbine starter (ATS) rotates the engine thru the AMAD. Engine rotation is apparent almost immediately and can be seen on the tachometer. During operation below flight idle, the nozzles may go closed or oscillate. After the engine lights-off and accelerates to approximately 60% rpm, the engine crank switch returns to OFF. After both generators are on the line, the APU runs for 1 minute, and then shuts down.



To prevent engine damage during start, if an engine was not idled for 5 minutes prior to shutdown and a restart must be made between 15 minutes and 4 hours after shutdown, the engine must be motored for 1 minute at 24% N2.

1.2 BEFORE ENGINES START

- 1. [44] BATT switch **ORIDE**
 - E BATT voltage CHECK After battery switch in ORIDE for minimum of 5 seconds, check for minimum voltage of 23.5 volts.
- 2. [36] PARK BRK handle SET
- 3. [52] FIRE switch TEST
 - Hold until all lights and aural warnings indicate test has beensuccessfully passed
- 4. [51] CANOPY UP CASE CLOSE

PROCEDURE of Squadron

- [60] Set CANAL Backup UHF set as Briefing
- [60] G XMIT COMM1
- [14] Vol COMM1 ON VOLUME AS DESIRED
- [14] Vol COMM2 ON VOLUME AS DESIRED
- [] RADIO COMMS PROCEDURE
- 5. [56] APU START ENG CRANK on L
 - READY light within 30 seconds If fire or overheat condition is detected, the APU shuts down.
 - Check 25 % RPM 136° TEMP

1.3 ENGINES START

- 1. [22] EGINE FEED NORM Press MODE
- 2. [45] BLEED AIR knob L OFF
- 3. [] THROTTLE Advance to IDDLE and **PRESS DETENT**
- 4. [] ENG CRANK switch confirm OFF at 60 % RPM
- 5. [] Check all ALARM LIGHTS OFF, only SEAT ON

Ground idle

F404-GE-400	F404-GE-402
61 to 72%	63 to 70%
190° to 590°C	190° to 590°C
420 to 700 pph	420 to 900 pph
73 to 84%	73 to 84%
45 to 110 psi	45 to 110 psi
	F404-GE-400 61 to 72% 190° to 590°C 420 to 700 pph 73 to 84% 45 to 110 psi

1.4 AFTER ENGINES START

- 1. [54] INTR WING Switch INHIBIT and SET EXT LIGHTS
- 2. [21] GEAR Lights ON 3 whites
- 3. [13] DDI / MPCD ON Digital Display Indicator
- 4. [16] HUD ON Head Up Display
- 5. [14] DED ON Display Entry Data
- 6. [53] FCC / MMC 4 A ON Fire Control Computer / Modular Mission Controler
- 7. [53] SMS 2 A ON Store Management System
- 8. [53] GPS 3 A ON Ground Positionning System
- 9. [14] DL Press DL Data Link

- 10. [48] INS **GROUND** Initial Navigation System 8 minutes for perfect alignement or RDY flash after 4 minutes for minimum alignement.
- [48] RADAR FCR OPR Fire Control Radar Check visual sequence of FCR test on Left DDI
- 11. [53] RDR ALT EXT PWR sur NORM Radar ALT Standby
- 12. [44] HDPT L/R LGEN / RGEN sur ON
- 13. [60] CNI sur UFC Communication Navigation IFF
- 14. [15] DTC On DDI press OSB highlighted and OSB DTE and OSB LOAD
- 15. [15] MFL On DDI press OSB highlighted and OSB TEST and OSB CLEAR
- 16. [06] IF STORES LIGHT is ON CHECK CAT1/3 on Button IR COOL on panel 16
- 17. [] RADIO COMMS PROCEDURE
- 18. [] SPEED BRAKES **TEST CYCLE** on brakes in Throttle bouton
- 19. [] RUDDER PEDAL CYCLE 30° Left and right
- 20. [41] WINGFOLD SPREAD
- 21. [33] FLAP switch AUTO
- 22. [] CONTROL STICK CYCLE Left, right, up, down
- 23. [] APU VERIFY OFF
- 24. [22] FUEL quantity Press QTY and CHECK all and SET BINGO
- 25. [25] ALTIMETER SET QFE with Knob
- 26. [25] STORES page **ON DDI** Verify proper store inventory and station status
- [48] INS NAV Check after 8 minutes for perfect alignement or RDY flash after 4 minutes for minimum alignement on page INS on UFC LIST 6.
- 28. [29] RWR Press POWER Radar Warning Receiver

- 29. [30] EWS-RWR ECM on XMIT
- 30. [30] EWS-JAMMER Dispenser on BYPASS Jammer
- 31. [29] CHAFF Click on ANALR DMR
- 32. [29] FLARE Click on DIS TYPE
- 33. [24] MODE MPCD OSB 19 As desired
- 34. [24] PGRM MPCD OSB 20 As desired
- 35. [30] ECM AUX REL on NORMAL Set as required
- 36. [29] HANDOFF Short press ENABLE OFFSET Diamond float mode
- 37. [58] AUDIO SET volume all and CHECK
- 38. [14] DED-UFC CHECK Bingo, MSL, ALOW, TACAN, IDM
- 39. [55] PROBE EXTEND TEST
- 40. [] RADIO COMMS PROCEDURE INS READY TAXI

1.5 BEFORE TAXI

- 1. [15] WAYPOINT CHECK Flight plan on HSD
- 2. [01] NWS **ON**
- 3. [] CHOCKS Contact tower and REMOVE CHOCKS

<u>1.5 TAXI</u>

- 1. [] RADIO COMMS PROCEDURE
- 2. [] SEAT **ARM** Outside Hangar or Bunker
- 3. [36] PARK BRK handle FULLY STOWED
- 4. [] WHEEL BRAKES CHECK Press Rudders pedals
- 5. [] NOSEWHEEL STEARING CHECK

When using brakes, apply firm, steady brake pedal pressures. Use nosewheel steering whenever possible, minimizing differential braking. Avoid dragging brakes or light brake applications except as necessary for drying wet brakes. Wet brakes can have as much as 50% reduced braking capacity. Hard momentary braking with wet brakes during taxi can reduce drying time.

Taxi. As aircraft starts to roll, apply brakes to check operation. When clear, check nosewheel steering in both directions in the high mode to ensure proper operation. At high gross weight, make all turns at minimum practicable speed and maximum practicable radius.

1.6 BEFORE TAKE OFF

On holding point of the runway

- 1. [] SQUADRON RADIO COMMS PROCEDURE
- 2. [36] PARK BRK handle SET
- 3. [53] RDR ALT EXT PWR sur RESET Radar ALT ON
- 4. [] FCR OSB STBY AND CRM
- 5. [33] FLAP switch HALF OR FULL
- 6. [] CROSS-CHECK
- 7. [] SQUADRON RADIO COMMS PROCEDURE Ready to lineup on runway
- 8. [36] PARK BRK handle FULLY STOWED

Line-up on RUNWAY with check wind and take the position as set in briefing or by the leader.

1.7 TAKE OFF

Normal Takeoff

Ensure the speedbrake is retracted. The aircraft should be aligned with the centerline of the runway for individual takeoffs. When in position, roll forward slightly to center the nose wheel. As the takeoff roll is begun, advance throttles to MIL power. If an afterburner takeoff is desired, afterburner is selected by moving both throttles into the afterburner range and advancing smoothly to MAX power. If one afterburner fails to light or blows out during takeoff, the resulting power loss is significant. Sufficient directional control is available with the rudder and nosewheel steering to continue the takeoff with asymmetric power. The decision to abort or continue the takeoff depends on existing circumstances: external stores configuration, runway remaining, and the characteristics of the afterburner failure since it may indicate problems with the basic engine. Nosewheel steering is used to maintain directional control throughout the takeoff roll. Differential braking alone may not be adequate to maintain directional control on takeoff. Also, the drag of the brakes increases the length of the takeoff roll.

The location of the main landing gear well aft of the CG does not allow the aircraft to be rotated early in the takeoff roll.

The normal rotation technique is to position the stick aft of neutral approaching nosewheel lift-off speed. Nosewheel lift-off speed depends on weight and CG, however, hold the aft stick until 6° to 8° nose high attitude (waterline symbol) is reached. Main gear lift-off follows shortly, and a forward adjustment of stick is necessary to maintain the desired attitude.

For a minimum run takeoff, use full afterburner power. Approaching nosewheel lift-off speed, apply full aft stick until the aircraft begins to rotate. Adjust the stick to maintain a 10° to 12° nose high attitude (waterline symbol). Once a positive climb rate is

established, ensure the gear handle light is out and retract the gear. Accelerate to the appropriate climb speed.

• Crosswind Takeoff.

The initial portion of the crosswind takeoff technique is the same as the normal takeoff. Aft stick pressure should not be applied until approaching liftoff speed.

Do not assume an immediate wing low attitude in order to counteract for wind drift; the pilot cannot properly judge the wing tip ground clearance on a swept wing aircraft.

1.8 AFTER TAKE OFF

When definitely airborne

- 1. [34] LDG GEAR handle UP
- 2. [33] FLAP switch AUTO
- 3. [] SQUADRON RADIO COMMS PROCEDURE Leave tower frequencies and switch to UHF 13

Optimum cruise and maximum endurance should be found in the Performance Data, and is attained by flying the correct Mach number for configuration and altitude. Maximum range cruise is approximated by establishing 4.2°, but no faster than Mach 0.85. Maximum endurance is approximated by establishing 5.6° AOA.