

| 1. Electrical Startup                                  |  |   |
|--|--|---|
| Controls   | Operation  | Panel   |
| Ejection Seat  | Set switch to ON   | Left side of Pilot Seat                       |
| BATTERY switch   | Set switch to ON   | Right console, electrical power control panel |
| AC Inverter (INVERTER) switch                          | Set to STBY  | Right console, electrical power control panel |
| SIGNAL LIGHTS lamp test                                | Press button and check light illuminations                               | Left console, auxiliary lighting panel        |
| APU power (APU) switch                                 | Set to START   | Left console, throttle quadrant area          |
| Engine group instruments, APU indicators               | Monitor that APU EGT stabilizes between 400 and 450c and APU RPM at 100% | Front dash                                    |
| Intercom Control PNL                                   | HM, IM, AM, FM, VHF, UHF - adjust frequencies as needed                  | Left console, Intercom Control PNL            |
| Fuel quantity pointers                                 | Totalizer should be 6,000 with main tanks full                           | Front dash, fuel quantity panel               |
| FUEL PUMP switches (Main, Wing)                        | Set switches to ON   | Left console, fuel system control panel       |
| Pinky switch   | AFT  | Throttle HOTAS                                |
| Light switches and dials                               | Position Lights, FLASH   | Left Console, Light System                    |
| Auxiliary Power Unit generator switch (APU GEN) switch | Set to PWR   | Right console, electrical power control panel |
| Control Display Unit (CDU) switch                      | Set to ON  | Right console, Auxiliary Avionics Panel       |
| Embedded GPS INS (EGI) switch                          | Set to ON  | Right console, Auxiliary Avionics Panel       |
| Radio, ATC   | Request Engine Start   | # - Button on Keyboard                        |

| 2. Left Engine Startup               |   |                                      |
|--------------------------------------|---|--------------------------------------|
| Controls                             | Operation   | Panel                                |
| Left throttle                        | Move from OFF to IDLE position                            | Left console, throttle quadrant area |
| Engine group instruments             | Monitor that the left engine core speed normalized at 56% | Front dash                           |
| Left hydraulic system pressure gauge | Monitor that pressure is between 2,800 and 3,350 psi      | Front dash, fuel quantity panel      |
| Primary Flight Controls              | Cycle PFC to verify all working with left hydraulic power | Flightstick, Rudder                  |

\*) Implement CICU, IFFCC (to Test) , UFC (Bit Test --> ENT), JTRS, SBY ATT IND (uncage) while engine is starting up

| 3. Right Engine Startup               |  |   |
|---------------------------------------|--|---|
| Controls                              | Operation  | Panel   |
| Right throttle                        | Move from OFF to IDLE position                             | Left console, throttle quadrant area          |
| Engine group instruments              | Monitor that the right engine core speed normalized at 56% | Front dash                                    |
| Right hydraulic system pressure gauge | Monitor that pressure is between 2,800 and 3,350 psi       | Front dash, fuel quantity panel               |
| Speed brakes                          | Cycle speed brakes open and closed                         | Flightstick, Speed brakes                     |
| AC generator (AC GEN) switches        | Confirm switches set to PWR                                | Right console, electrical power control panel |
| APU power (APU) switch                | Set to OFF   | Left console, throttle quadrant area          |

\*) Implement exit from IFFCC Bit Test and switching to normal mode here, while engine is starting up

| 4. Pre-Flight Checks and Set Up                            |  |                         |
|--|--|-------------------------|
| Controls   | Operation  | Panel                   |
| Central Interface Control Unit (CICU) switch               | Set to ON  | Front dash, AHCP        |
| Integrated Flight and Fire Control computer (IFFCC) switch | Set to TEST  | Front dash, AHCP        |
| Up Front Controller (UFC)                                  | Press ENT  | Front dash, UFC         |
| Joint Tactical Radio System (JTRS) switch                  | Set to ON  | Front dash, AHCP        |
| Standby Attitude Indicator                                 | Uncage, set to horizon   | Front dash              |
| IFFCC Bit Check Complete                                   | EXIT, ENT to main menu   | Front dash, UFC         |
| IFFCC  | Set to ON  | Front dash, AHCP        |
| Yaw & SAS  | ENGAGE   | Left console, SAS panel |
| Takeoff trim (T/O) button                                  | Press for 2 seconds  | Left console, SAS panel |
| Emergency pitch/roll trim (PITCH/ROLL TRIM)                | Switch to EMER and test manual setting and then switch back to | Left console, EFC panel |
| Left MFCD  | Load all (ensure all green dots appear again)                  | Front dash              |

|                                 |  |                                 |
|---------------------------------|--|---------------------------------|
| Right MFCD                      | CDU  | Front dash                      |
| Left MFCD                       | NET, DSMS, TAD - configure ID and Weapon PROFILES                      | Front dash                      |
| Targeting Pod (TGP) switch      | Set to ON  | Front dash, AHCP                |
| Counter measures Panels         | Set to AUTO, the four switches to RDY and change profiles (front dash) | Right console and front dash    |
| Right MFCD, Alignment           | Select <b>NAV when alignment complete</b> (T=4.0 0.8)                  | Right console, CDU              |
| Steerpoint, Flight Plan         | Load Flight Plan from FPM FSK  | Right console, CDU              |
| Control Display Unit (CDU)      | Set to Waypoint, WP  | Right console, CDU              |
| Embedded GPS INS (EGI)          | Choose as navigation mode  | Front dash                      |
| Enhanced Attitude Control (EAC) | Set to ARM   | Left console, throttle quadrant |
| Radar ALT                       | Set to NRM   | Left console, throttle quadrant |

| 5. Final Checks and Taxi  |  |                                  |
|---------------------------|--|----------------------------------|
| Controls                  | Operation  | Panel                            |
| Anti Skid                 | Set to ON  | Front dash, AHCP                 |
| Flap lever                | Set to DN at 7 degrees   | Front dash, AHCP                 |
| Nosewheel steering button | Engage   | Control stick                    |
| Canopy switch             | Move switch to down position   | Right console                    |
| Oxygen flow switch        | Set to NORMAL  | Right console, environment panel |
| Oxygen Warning Light      | Ensure Caution light panel illuminates   | Right console, environment panel |
| Engine chop check         | Move from IDLE to MAX and back to IDLE within 2 seconds.<br>Core RPM should not exceed 70% | Left console, throttle quadrant  |
| Radio, ATC                | Ready to Taxi  | # - Button on Keyboard           |

| 6. Engine Run Up Checks  |  |                                  |
|--------------------------|--|----------------------------------|
| Controls                 | Operation  | Panel                            |
| Light switches and dials | Anti-Collision Lights - ON, Position Lights - STEADY | Right console, lighting panel    |
| Pitot Heat switch        | Set to ON  | Right console, environment panel |
| Radio, ATC               | Ready for Takeoff                                    | # - Button on Keyboard           |

| 7. Takeoff                       |  |                                     |
|----------------------------------|--|-------------------------------------|
| Controls                         | Operation  | Panel                               |
| Rudder pedals                    | Hold down toe brakes                                       | Rudders                             |
| Throttles                        | Advance to 80% core RPM                                    | Left panel, throttle quadrant       |
| Engine indicator gauges          | Monitor for normal engine operation                        | Front dash, engine instrument group |
| Rudder pedals                    | Release toe brakes   | Rudders                             |
| Engine indicator gauges          | Monitor for normal engine operation                        | Front dash, engine instrument group |
| <b>Nosewheel steering button</b> | Disengage over 50 knots                                    | Control stick                       |
| Control stick pitch              | Pull back to 10 degrees at 10 knots prior to takeoff speed | Control stick                       |