

## PRE-START-UP

1. Set Ejection Seat Lever – DOWN & ARMED Set Harness Lever – FWD
2. Parking Brake Lever – ENGAGED
3. MASTER ARM switch – SAFE
4. Battery Switch – ON (Right Click) Note: This will power the engine igniters, canopy and IFEI (Integrated Fuel / Engine Indicator) panel.
5. Check that hydraulic brake pressure gauge displays at least 3000 psi
6. Right click and hold Fire & Bleed Air Test switch to the “Channel A” (Forward) position to start the Fire/Bleed Air Test for Detection Loop A.
  - a. Wait for the aural warnings sequence to finish before releasing the switch. The switch will be sprung back to the middle position on release. You should hear “Engine Fire Left, Engine Fire Left, Engine Fire Right, Engine Fire Right, APU Fire, APU Fire, Bleed Air Left, Bleed Air Left, Bleed Air Right, Bleed Air Right!”
  - b. Left and right engine bleed air switches will be automatically closed during and after the test. We will have to re-open them later on.
7. (Optional) Cycle Battery switch to OFF (left click), then back to ON (right click) to rewind test audio tape. Alternatively, you can wait 10 seconds for the tape to rewind.
8. (Optional) Left click and hold Fire & Bleed Air Test switch to the “Channel B” (Aft) position to start the Fire/Bleed Air Test for Detection Loop B. Wait for the aural warnings sequence to finish before releasing the switch. The switch will be sprung back to the middle position.

## START-UP PROCEDURE

9. Verify that no APU ACC (Auxiliary Power Unit Accumulator) caution is visible on the Standby Caution Panel.
10. Left click on the APU switch to set it to ON (FWD) to start the APU (Auxiliary Power Unit)
11. Verify that the APU ACC caution is visible on the Standby Caution Panel and that the APU starts spooling up. In real life, the Plane Captain (PC) would give you this confirmation, but in DCS you can just listen for the APU spooling sound.
12. Once APU green light illuminates, the APU is now running. The APU will provides air pressure for the F404 engines' pneumatic ATS (Air Turbine Starter).
13. Start right engine first by setting Engine Crank switch – R (RIGHT) using right-click. Note: It's good practice to start the right engine since it provides most of the hydraulic pressure available for the brakes.
14. Right Engine cranking will begin as the AMAD (Airframe Mounted Accessory Drive), which is pneumatically connected to the APU's starter, transmits power from the ATS to the engine. Engine RPM will rise to approx. 25 % RPM.
15. When Right Engine RPM reaches 25 %, press RSHIFT+HOME to move the right throttle from the OFF detent to the IDLE detent to open the fuel valves and introduce fuel. Igniters will kick in and trigger an engine lightoff.
16. Verify that EGT (Exhaust Gas Temperature) does not exceed 750 deg C until engine stabilizes at.
17. Wait for Right Engine RPM to stabilize around 60-65 % RPM. Confirm that right generator is running by checking that the R GEN caution is extinguished.
18. During engine start, the GPWS (Ground Proximity Warning System) and Flight Controls voice alert system will do a BIT (Built-In Test). Don't worry, that's normal. You will hear "Roll Left, Roll Left! Flight Controls, Flight Controls!" and a "Deedle deedle" sound.
19. Reset MASTER CAUTION pushbutton by pressing it.