

# Cowan Simulation 500E for MSFS

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## INTERIOR & PRESTART CHECK

- ✓ DOORS - **SECURED**
- ✓ ROTOR BRAKE - **OFF**
- ✓ SEATS & BELTS - **FASTENED / ADJUSTED / SECURED**
- ✓ BATTERY switch - **ON**
- ✓ COCKPIT INTERIOR lights - **OFF/ON** Adjust as required.
- ✓ FLIGHT CONTROLS - Check freedom of movement of pedals and cyclic then center the controls.
- ✓ LDGLT switch - **OFF** (on collective)
- ✓ THROTTLE - Rotate past the idle stop and fully open. Rotate back to idle stop, click the idle stop ring and fully close the throttle.
- ✓ FUEL QUANTITY gauge - **CHECK**
- ✓ INSTRUMENTS - **STATIC POSITIONS**
- ✓ ALTIMETER - **SET**
- ✓ CLOCKS - **SET & RUNNING**
- ✓ MAGNETIC COMPASS - **CHECK**
- ✓ CAUTION PANEL TEST button - **PRESS** check that all caution panel and warning lights remain illuminated while pressed.

- ✓ FUEL **VALVE** - **PUSH IN (open)**
- ✓ START **PUMP** switch – **ON for 5 seconds then OFF**
- ✓ GEN switch - **OFF**
- ✓ ANTI ICE switch - **OFF**
- ✓ PITOT HTR switch - **OFF**
- ✓ POSN LT switch - **OFF**
- ✓ INTERIOR LIGHTING - **Adjust as required.**
- ✓ INST LTS - **Adjust as required.**
- ✓ ROTOR BRAKE - **OFF**

## ENGINE START

FAMILIARIZE YOURSELF WITH THIS SECTION BEFORE BEGINNING AS THINGS NEED TO HAPPEN IN SEQUENCE WITH APPROPRIATE TIMING.

- ✓ ANTI COLL LT switch - **ON**
- ✓ POSN LT switch - **ON**
- ✓ ROTOR BLADES - **Clear**
- ✓ **CAUTION** - **ENSURE ROTOR BRAKE IS RELEASED BEFORE STARTING ENGINE.**
- ✓ STARTER button (Located on tip of collective(click spot floating in front))  
**PRESS ONCE** ensure  $N_1$  indicates rotation.
- ✓ **CAUTION** - **DO NOT open the throttle before 12%  $N_1$**
- ✓ THROTTLE - Roll the throttle to the idle stop to introduce fuel at **12-15%  $N_1$**
- ✓ **CAUTION** - **DO NOT** exceed 810°C MGT for more than 10 seconds with a peak of 927°C for no more than 1 second.
- ✓ If engine fails to start within 15 seconds then close the throttle.
- ✓ ENG OUT - Warning light should extinguish above ~55%  $N_1$
- ✓ ENG OIL gauge - **Temperature and pressure indicating normal.**
- ✓ GEN switch - **ON**; Check that the GEN caution light extinguished and ammeter indicating a load.

# ENGINE RUNUP

- ✓ ALL gauges - **Indicating normal.**
- ✓ THROTTLE - SLOWLY open throttle to full. Observe  $N_2$  stabilizes @ 103%.
- ✓ PITOT HTR switch - **ON (when OAT is below 5°C (41°F))**
- ✓ ANTI ICE switch - **ON (when OAT is below 5°C (41°F))**

# BEFORE TAKEOFF

- ✓ DOORS – **SECURED (If Installed)**
- ✓ PASSENGER SEAT BELTS - **FASTENED**
- ✓ CAUTION AND WARNING lights - **EXTINGUISHED**
- ✓ FUEL QUANTITY - **CHECK**

# TAKEOFF

- ✓ INSTRUMENTS - **Normal Operating ranges.**
- ✓ AREA - **Clear**
- ✓ HOVER POWER - **Check**

# BEFORE LANDING

- ✓ INSTRUMENTS - **Normal Operating ranges**
- ✓ PASSENGER SEAT BELTS – **Fastened**

# ENGINE SHUTDOWN

- ✓ COLLECTIVE - **FULL DOWN**
- ✓ CYCLIC - **CENTERED**
- ✓ THROTTLE - **ROTATE** to idle stop to turn off governor then Idle @ (~64%  $N_1$  for 2 minutes.
- ✓ ANTI ICE switch - **OFF**
- ✓ PITOT HTR switch - **OFF**
- ✓ GEN switch - **OFF**

- ✓ IDLE STOP RING - **POP OUT (click it)**
- ✓ THROTTLE - **CLOSE**
- ✓ ROTOR BRAKE - **APPLY below 55% N<sub>R</sub>**
- ✓ FUEL VALVE - **PULL (close)**
- ✓ ANTI COLL LT switch - **OFF**
- ✓ POSN LT switch - **OFF**
- ✓ INTERIOR LIGHT switches - **OFF**
- ✓ BATTERY switch - **OFF**