Cowan Simulation 500E for MSFS
www.CowanSim.com

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**
- ✔ INSTRUEMTNS - **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 SECITON BEFORE BEGINNING AS THINGS NEED TO HAPPEN IN SEQUENCE WITH APPROPRATE TIMING.

- ✔ ANTI COLL LT switch - **ON**
- ✔ POSN LT switch - **ON**
- ✔ ROTOR BLADES - **Clear**
- ✔ IGNITION KEY - **ON**
- ✔ <u>**CAUTION**</u> - **ENSURE ROTOR BRAKE IS RELEASED BEFORE STARTING ENGINE.**
- ✔ STARTER button (Located on tip of collective(click spot floating in front)) <u>**PRESS ONCE**</u> ensure N_1 indicates rotation.
- ✔ <u>**CAUTION**</u> - **DO NOT open the throttle before** <u>**12%**</u> **N_1**
- ✔ THROTTLE - Roll the throttle to the idle stop to introduce fuel at <u>**12-15%**</u> **N_1**
- ✔ <u>**CAUTION**</u> - **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

- ✔ INTRUMENTS - **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$_R$**
- ✔ FUEL VALVE - **PULL (close)**
- ✔ ANTI COLL LT switch - **OFF**
- ✔ POSN LT switch - **OFF**
- ✔ INTERIOR LIGHT switches - **OFF**
- ✔ BATTERY switch - **OFF**