

## INTERIOR

GPS \_\_\_\_\_ INSTALL  
HOBBS \_\_\_\_\_ RECORD  
A.R.O.W. DOCUMENTS \_\_\_\_\_ CHECK  
FUEL VALVE \_\_\_\_\_ ON  
MAGS \_\_\_\_\_ OFF  
CONTROLS \_\_\_\_\_ FREE  
AVIONICS MASTER \_\_\_\_\_ OFF  
MASTER (KEY) \_\_\_\_\_ ON  
FUEL QUANTITY GAUGE & VISUAL \_\_\_\_\_ CHECK  
LIGHTS: ALL EXTERIOR \_\_\_\_\_ CHECK/OFF  
AVIONICS MASTER \_\_\_\_\_ ON  
TACH (ENGINE MONITOR) \_\_\_\_\_ NOTE  
AVIONICS AND MASTER (KEY) \_\_\_\_\_ OFF  
FLAPS \_\_\_\_\_ EXTEND 15°

## EXTERIOR — START AT PILOT'S DOOR

WING LEADING EDGE & PITOT TUBE \_\_\_\_\_ INSPECT  
TIE DOWN \_\_\_\_\_ REMOVE  
WING: AILERON, FLAP, WING TIP & ROOT \_\_\_\_\_ INSPECT  
TIRE (26-36PSI) WHEEL & BRAKE \_\_\_\_\_ INSPECT  
CHOCKS \_\_\_\_\_ PLACE BEHIND WHEEL  
INSPECTION PANNEL \_\_\_\_\_ INSPECT INTERIOR  
FUSELAGE (INCLUDING ANTENNAS) \_\_\_\_\_ INSPECT  
ELEVATOR/RUDDER/TRIM \_\_\_\_\_ INSPECT  
FUSELAGE AND BELLY \_\_\_\_\_ INSPECT  
FUEL \_\_\_\_\_ SUMP & CHECK CAP  
TIRE (26-36PSI) WHEEL & BRAKE \_\_\_\_\_ INSPECT  
WING: AILERON, FLAP, WING TIP & ROOT \_\_\_\_\_ INSPECT  
TIE DOWN \_\_\_\_\_ REMOVE

## **ENGINE / PROP / NOSE WHEEL INSPECTION**

NOSE WHEEL (22-26 PSI) / STRUT \_\_\_\_\_ INSPECT  
COOLANT \_\_\_\_\_ CHECK LEVEL  
PROP SECURE **NO SCRATCHES** \_\_\_\_\_ INSPECT  
OIL (IF LOW PULL PROP -3-4) \_\_\_\_\_ CHECK LEVEL

**DO NOT TURN PROP IN REVERSE**

FLAPS \_\_\_\_\_ RETRACT

**REMOVE AIRCRAFT FROM HANGAR**

## ENGINE START

SEATBELTS \_\_\_\_\_ ON  
PASSENGER BRIEFING \_\_\_\_\_ COMPLETE  
BRAKES \_\_\_\_\_ SET  
CARB HEAT \_\_\_\_\_ OFF  
STROBE LIGHT \_\_\_\_\_ ON  
FUEL PUMP \_\_\_\_\_ ON

### **"CLEAR" AREA**

MAGS SWITCHS \_\_\_\_\_ UP/ON  
MASTER SWITCH (KEY) \_\_\_\_\_ ON  
CHOKE (NO CHOKE IF WARM) \_\_\_\_\_ PULL OUT  
THROTTLE \_\_\_\_\_ AFT/IDLE

### **PRESS RED START BUTTON- RELEASE CHOKE AFTER START**

*COLD ENGINE START MAY REQUIRE HOLDING CHOKE OUT*

AVIONICS MASTER \_\_\_\_\_ ON

### ENGINE MONITOR CHECK

RPM \_\_\_\_\_ 2 MIN 2000 - 2500  
OIL PRESSURE (NORMAL 29- 72.5 PSI) \_\_\_\_\_ RISING  
OIL TEMP \_\_\_\_\_ RISING  
FUEL PUMP \_\_\_\_\_ OFF  
EFIS \_\_\_\_\_ SET ALTIMETER/ PRESSURE  
NAV LIGHTS \_\_\_\_\_ ON  
WARNING LAMP (OIL TEMP RISING) \_\_\_\_\_ MONITOR  
OIL TEMP NORMAL \_\_\_\_\_ 50° TO 110°C  
CHARGING LAMP (ALTERNATOR) \_\_\_\_\_ OFF  
RADIO & XPONDER \_\_\_\_\_ SET/ SBY

## TAXI

RADIO FRQUENCY \_\_\_\_\_ (CTAF/ ATIS/GROUND) AS REQ  
THROTTLE IDLE & BRAKES RELEASE  
WIND \_\_\_\_\_ DIRECTION & SPEED/CONTROLS SET  
CONTROLS SET \_\_\_\_\_ AS REQ FOR WIND

**BEFORE TAKEOFF**

**BRAKES** \_\_\_\_\_ SET FULL ON  
**GAS** \_\_\_\_\_ ON  
**CONTROLS** \_\_\_\_\_ FREE & CORRECT  
**INSTRUMENT** \_\_\_\_\_ SET & CHECK  
**ATTITUDE TRIM** \_\_\_\_\_ 1 STEP ABOVE NEUTRAL  
**RADIOS/GPS** \_\_\_\_\_ SET/VOL/PROGRAM  
**TRANSPONDER** SET 1200 OR AS DIRECTED \_\_\_\_\_ ALT  
**RUN-UP - OIL TEMP MIN 50° WARNING LAMP OFF**  
**RPM /THROTTLE: 3500 OR AS APPROPRIATE**  
**MAG CHECK (MAXIMUM DROP 200 RPM)**  
**#1 MAG** \_\_\_\_\_ CHECK (OFF / ON)  
**#2 MAG** \_\_\_\_\_ CHECK (OFF / ON)  
**CARB HEAT** \_\_\_\_\_ PULL ON /OFF  
**OIL PRES** \_\_\_\_\_ 29- 72.5 PSI  
**OIL TEMP** \_\_\_\_\_ **MIN 50° BEST 90°- 110°C**  
THROTTLE IDLE CHECK THEN BACK TO 2000  
**FUEL PUMP** \_\_\_\_\_ ON  
**SAFETY** \_\_\_ LANDING LIGHT ON / DOORS CLOSED / BELTS ON  
FLAPS 1ST NOTCH (15°) \_\_\_\_\_ IF DESIRED  
BRAKES \_\_\_\_\_ RELEASE

**360°—VISUALLY CLEAR BASE/FINAL**

**AT HOLD LINE REVIEW & ANNOUNCE**

**RECHECK**

FLAPS / INSTRUMENTS / TRIM / FUEL PUMP / CARB HEAT OFF

ANNOUNCE INTENTIONS

FINAL AND BASE - FOR APPROACHING AIRCRAFT

TIME- START

HEADING CHECK WITH RUNWAY

TAKEOFF \_\_\_\_\_ V<sub>R</sub> 26 KIAS (30-44 MPH)

CLIMB V<sub>Y</sub> \_\_\_ 60 KIAS W/15°FLAPS OR **66-70 KIAS NO FLAPS**

V<sub>X</sub> (15° FLAPS) \_\_\_ 48 KIAS (55 MPH)

**AFTER TAKEOFF & CRUISE CLIMB**

FLAPS \_\_\_\_\_ UP  
ACCELERATE \_\_\_\_\_ **70 - 90** KIAS (80 – 105 MPH)  
SCAN ENGINE INSTRUMENTS  
CHECK HEADING  
1000 FEET AGL  
**LANDING LIGHT OFF** -- -SCAN FOR TRAFFIC  
**FUEL PUMP OFF**  
OPEN FLIGHT PLAN WITH FSS /CONTACT ATC - AS REQ  
CRUISE CLIMB 70-90 KIAS (80-105 MPH)

**TOP OF CLIMB CRUISE**

THROTTLE \_\_\_\_\_ 4500RPM OR ADJUST AS REQ  
ECONOMIC CRUISE \_\_\_\_\_ **83 KIAS** (95 MPH)  
MAX SPEED \_\_\_\_\_ 103 KIAS (118 MPH)  
**TURBULANT AIR** \_\_\_\_\_ **V<sub>A</sub> 84 KIAS (97 MPH) OR LESS**

**APPROACH TO LANDING**

**IN RANGE (10 MILES FROM AIRPORT)**

**RADIO SET - MONITOR CTAF/ UNICOM/ATIS/ASOS**  
**PASSENGER BRIEFING**  
**LANDING LIGHT ON**

**BEFORE LANDING -5 MILES OUT (C.G.L.U.P.S)**

**CARB HEAT** \_\_\_\_\_ ON-IF REQ  
**GAS** \_\_\_\_\_ ON  
**LANDING LIGHT** \_\_\_\_\_ ON  
**UNDERCARRIAGE** \_\_\_\_\_ BRAKES OFF  
**SAFETY** \_\_\_\_\_ SEATBELTS/TRAFFIC  
**FUEL PUMP** \_\_\_\_\_ ON

### DOWNWIND/MID FIELD

CARB HEAT \_\_\_\_\_ ON  
FUEL PUMP \_\_\_\_\_ ON  
AIRSPEED (3800-4300 RPM) \_\_\_\_\_ **60-80 KIAS** (92 MPH)

### ABEAM END OF RUNWAY / BASE / FINAL

REDUCE POWER \_\_\_\_\_ 2100-2500 RPM OR AS REQ.  
AIRSPEED \_\_\_\_\_ WHITE ARC  
FLAPS \_\_\_\_\_ 15° OR AS REQ  
15° FLAPS \_\_\_\_\_ **58 KIAS** (67 MPH)  
40° FLAPS YELLOW ARROW \_\_\_\_\_ 48- **55 KIAS** (63MPH)  
CARB HEAT \_\_\_\_\_ OFF

### AFTER LANDING CLEAR OF RUNWAY

FLAPS \_\_\_\_\_ RETRACT  
FUEL PUMP \_\_\_\_\_ OFF  
LANDING LIGHT \_\_\_\_\_ OFF  
TRANSPONDER \_\_\_\_\_ SBY  
RADIOS \_\_\_\_\_ AS REQ

**REFUEL IF TANK IS 8 GAL OR LESS**

### ENGINE SHUT DOWN

BRAKES \_\_\_\_\_ SET  
THROTTLE SET RPM TO 2000 \_\_\_\_\_ CHECK MAGS  
THROTTLE \_\_\_\_\_ IDLE  
FUEL PUMP \_\_\_\_\_ OFF  
TACH TIME \_\_\_\_\_ NOTE  
TRANSPONDER \_\_\_\_\_ SBY  
AVIONICS MASTER \_\_\_\_\_ OFF  
LIGHTS (EXCEPT STROBE) \_\_\_\_\_ OFF  
MAGS \_\_\_\_\_ OFF  
MASTER \_\_\_\_\_ KEY OFF/REMOVE  
BRAKES/GPS \_\_\_\_\_ RELEASE & REMOVE

### RETURN TO HANGAR OR TIE DOWN—POST-FLIGHT

HOBBS & TACH TIMES \_\_\_\_\_ NOTE IN BOOK  
SEAT BELTS \_\_\_\_\_ FASTENED  
CLEAN WINDSCREEN/ REMOVE PERSONAL ITEMS/LOCK DOORS

**REFUEL IF TANK IS 8 GAL OR LESS**

## LOCAL RADIO FREQUENCIES

CRESWELL — 122.7  
COTTAGE GROVE — 122.8  
EUG ATIS — 125.22  
CASCADE APP—119.6  
EUG TWR —118.9  
EUG GRND—121.7  
EUG VOR —112.9

## **V SPEEDS (CAS)**

**V<sub>s1</sub>** 0° Flaps **44 KTS** (50 MPH)  
**V<sub>s2</sub>** 15° Flaps **40 KTS** (46 MPH)  
**V<sub>s0</sub>** 40° Flaps **35 KTS** (40 MPH)  
**V<sub>FE</sub>** \_\_\_\_\_ **63 KTS** (70 MPH) White Arc  
**V<sub>A</sub>** \_\_\_\_\_ **84 KTS** (97 MPH) Yellow Arc  
**V<sub>H</sub>** \_\_\_\_\_ **105 KTS** (121 MPH)  
**V<sub>NE</sub>** \_\_\_\_\_ **121 KTS** (139 MPH)

### **Engine RPM'S**

5800 rpm (5 minutes max)  
5500 rpm max continuous

**Oil Pressure:** 29 – 72.5 psi (Normal)

### **Oil Temperature Celsius**

50°MIN / Max 130°  
Preferred Range 90 - 110°  
Maximum Coolant Temp. 115°

**Maximum CHT Temp:** 135°C

## **ENGINE FAILURE AT ALTITUDE (A-B-C-D-E)**

**AVIATE** \_\_\_\_\_ FLY THE AIRPLANE

**BEST GLIDE SPEED** \_\_\_\_\_ **58 KIAS** (67 MPH) (TRIM)

### **BEST LANDING SITE**

LOOK AROUND / BELOW OR BEHIND YOU

CHECK WIND DIRECTION

### **CHECKS**

1. FUEL SELECTOR VALVE \_\_\_\_\_ ON
2. FUEL PUMP \_\_\_\_\_ ON
3. CARB HEAT \_\_\_\_\_ ON
4. CHOKE \_\_\_\_\_ OFF
5. MAGS: CHECK #1 / #2 (BEST MAG IF REQ).
6. OIL PRESSURE: 29 – 72.5 psi)
7. Oil TEMP: 50°MIN / Max 130°

**COMMUNICATE:** **ATC /121.5 / XPONDER: 7700**

### **DECIDE: TAKE ACTION**

**EVALUATE:** **ENGINE SHUT DOWN?**

**ALTERNATE COURSE OF ACTION?**

### **OFF FIELD LANDING - WHEN LANDING IS ASSURED**

AIRSPD NORMAL LANDING SPEED

FLAPS 15° TO 40° - AS REQUIRED

SEAT BELTS TIGHT

PASSENGERS BRIEFING: SEAT BELTS / HOW TO EXIT

THROTTLE \_\_\_\_\_ OFF

MASTER KEY \_\_\_\_\_ OFF

FUELPUMP \_\_\_\_\_ OFF

FUEL SELECTOR VALVE \_\_\_\_\_ OFF

**AFTER EXIT MOVE 50 FEET FROM AIRCRAFT**

## **ENGINE RESTART**

MASTER KEY \_\_\_\_\_ ON  
MAGS \_\_\_\_\_ ON  
FUEL SELECTOR VALVE \_\_\_\_\_ ON  
FUEL PUMP \_\_\_\_\_ ON  
CHOKE \_\_\_\_\_ OFF  
THROTTLE \_\_\_\_\_ 1/4 OPEN  
START BUTTON \_\_\_\_\_ PRESS

## **ENGINE FIRE IN FLIGHT**

THROTTLE \_\_\_\_\_ CLOSED  
FUEL VALVE \_\_\_\_\_ OFF  
FUEL PUMP \_\_\_\_\_ OFF  
FULL THROTTLE -TO BURN REMAINING OFF FUEL FAST  
THROTTLE OFF  
HEATER/DEFROSTER \_\_\_\_\_ OFF  
AIRSPEED. \_\_\_\_\_ **103 KIAS OR GREATER** (118 MPH)

## **RADIO MAYDAY 121.5 OR TALK TO ATC**

IF FIRE IS NOT EXTINGUISHED INCREASE AIRSPEED TO PROVIDE INCOMBUSTIBLE MIXTURE. LAND IMMEDIATELY

## **PROCEED WITH EMERGENCY DESCENT & LANDING**

## **RADIO / AVIONICS / EFIS / EMS / FAILURES**

FREQUENCY CORRECT ?  
KEY & AVIONICS MASTER \_\_\_\_\_ CHECK ON  
CIRCUIT BREAKERS \_\_\_\_\_ CHECK / RESET 1X ONLY  
RADIO VOL. AND HEADSET CONNECTIONS \_\_\_\_\_ CHECK  
TRY ANOTHER FREQUENCY OR HANDHELD RADIO  
**TOWER AIRPORT - SQUAWK 7600** (IF XPONDER WORKING): LOOK FOR LIGHT GUN SIGNALS.  
**EFIS OR ENGINE MONITOR INOP:** CHECK CIRCUIT BREAKERS – LAND AT NEXT PRACTICAL AIRPORT