

**PREFLIGHT**

WX/WEIGHT/FP/AROW.....COMPLETE  
 TIES, LOCKS, CHOCKS.....REMOVED  
 PARKING BRAKE.....SET  
 IGNITION SWITCH.....OFF  
 MASTER.....ON  
 • FUEL GAUGES.....CHECK  
 • FLAPS.....EXTEND  
 • PITOT HEAT SWITCH.....ON/CHECK (IFR)  
 • STROBES/NAVS/LANDING.....ON/CHECK  
 PITOT/LIGHTS/MASTER.....OFF  
 TRIM.....TAKE OFF  
 FIRE EXTINGUISHER.....SECURE/GREEN  
 FUSELAGE / ANTENNAS.....CHECK  
 EMPENNAGE.....MOVEMENT & SECURITY  
 FLAPS: HINGES,PINS,NUTS.....SECURED  
 AILERONS: HINGES/MOVEMENT.....CHECK  
 WING SURFACES/LEADING EDGE.....CHECK  
 TIRES, LINES, BRAKES.....CHECK  
 STRUT.....MAINS: 4.5".....NOSE 3.25"  
 FUEL.....SUPPLY, SUMP, STRAIN  
 OIL.....6-8 QUARTS  
 PROP CLEAN FROM NICKS & CUTS.....CHECK  
 ENGINE COMPARTMENT.....CLEAR  
 AIR FILTER.....CLEAR  
 STATIC/PITOT/DRAIN.....CLEAR  
 STALL WARNING VENT.....CLEAR  
 STORAGE.....LOCKED  
 HOBBS.....LOGGED

**PASSENGER BRIEF: SAFEST**

Seatbelts, Air vents, Fire extinguisher,  
 Exits, Sick, Talking

**PRE-START**

SEAT BACK, TRACK & BELTS.....LOCK / ON  
 FUEL SELECTOR VALVE.....FULLEST TANK  
 BRAKES.....SET  
 CIRCUIT BREAKERS.....IN  
 RADIOS / AVIONICS.....OFF  
 CARB HEAT.....OFF  
 BEACON.....ON  
 MASTER.....ON

**ENGINE START**

	COLD	HOT	FLOODED
THROTTLE	1/4"	1/2"	FULL
F.PUMP	ON	ON	OFF
MIXTURE	RICH	RICH	IDLE OFF
STARTER	ENGAGE	ENGAGE	ENGAGE
MIXTURE	-----	-----	ADVANCE
THROTTLE	ADJUST	ADJUST	RETARD
OIL PRESS.	CHECK	CHECK	CHECK

*If the engine does not engage within 5-10 seconds,  
 disengage the starter, prime, then restart*  
 FUEL PUMP OFF.....LEAN FOR TAXI.....TIME NOTED

**PRE-TAXI / TAXI**

FLAPS.....RETRACTED  
 RADIO/AVIONICS/TRANSPONDER.....ON/ALT  
 FREQ/ATIS/ALTIMETER.....SET.ALT W/IN 75'  
 LIGHTS.....AS REQUIRED  
 TAXI CALL.....RADIO TEST  
 BRAKES.....TEST  
 INSTRUMENTS (TURN, BALL,HEADING, COMPASS).....CK

**RUN UP**

BRAKES.....SET/HOLD  
 LIGHTS.....AS REQ'D  
 CABIN DOORS.....LATCHED  
 INSTRUMENTS.....SET  
 FLIGHT CONTROLS.....FREE & CORRECT  
 AUTOPILOT.....ENGAGE, CHECK, DISENGAGE  
 TRIM.....TAKE OFF  
 FUEL PUMP.....ON  
 MIXTURE.....RICH  
 THROTTLE.....2000 RPM  
 MAGS TEST.....DROP <175.....DIFF B/T MAGS <50  
 CARB HEAT.....RPM DROP  
 VACUUM.....5" +/-1  
 ANNUNCIATOR PANEL.....PRESS/CHECK  
 OIL PRESS/TEMP.....CHECK  
 VOLTMETER.....ABOUT 17 day; 30 NIGHT  
 FUEL TANKS/FLOW.....CHECK  
 THROTTLE/LOCK.....IDLE CK / 1000

**ABORT PLAN READY**

ROLL BEFORE ROTATION: Any Anomaly  
 • Throttle Idle, Brake, Exit RWY  
 AFTER ROTATION W/USABLE: Engine Fail/Fire  
 • Throttle Idle, Land straight ahead  
 AFTER ROTATION, W/O USABLE, <1000: Vg 76 KTS, best  
 spot 30° of nose, communicate, shut down, emrg. landing  
 AFTER ROTATION >1000: Vg 76 KTS standard rate to the field

**PRE-TAKE OFF**

BOOST PUMP & MIXTURE.....ON/RICH  
 LIGHTS.....AS REQUIRED  
 INSTRUMENTS.....SET  
 TRANSPONDER.....ALT  
 TIME.....NOTED  
 TRIM.....SET FOR T/O  
 SEAT BELTS, DOORS, WINDOWS.....SECURED  
 BRAKE.....RELEASE

**TAKE OFF**

FLAPS.....UP  
 CARB HEAT.....OFF  
 THROTTLE.....FULL OPEN  
 INSTRUMENTS.....GREEN  
 AIRSPEED.....ALIVE  
 V<sub>R</sub>.....48-53 KTS  
 V<sub>Y</sub>.....76 KTS

**ENROUTE**

CLIMB.....87 KTS  
 MIXTURE.....LEAN FOR ALTITUDE  
 CRUISE.....75%  
 ELEVATOR TRIM.....ADJUST  
 HEADING INDICATOR.....ALIGN TO COMPASS

**PRE-DESCENT/LANDING**

WX.....OBTAINED  
 ALTIMETER.....SET  
 RADIOS.....SET  
 NAV/GPS.....TUNE  
 FUEL PUMP.....ON  
 MIXTURE.....RICH  
 SELECTOR.....FULLEST TANK  
 CARBURETOR HEAT.....AS REQUIRED  
 DIRECTIONAL GYRO.....ALIGN TO COMPASS  
 SEAT BELTS.....SECURE  
 FLAPS: EXTEND BELOW.....102 KTS  
 FINAL APPR SPEED W/FLAPS 40.....66 KTS

**OPERATING SPEEDS: KTS**

VNE	154	VG	76
VNO	121	VSO	49
VA 2550 / 1634	113 / 89	VS1	55
VR	48-53	VFE	102
VX	64	SH. FLD APPR	66
VY	76	XWIND	17
CLIMB ENR	87		

**GO AROUND**

THROTTLE.....FULL OPEN  
 CARB HEAT.....OFF  
 FLAPS.....Retract to 20°  
 AIRSPEED.....76 KTS  
 FLAPS.....INCREMENTS W/POS. RATE OF CLIMB  
 TRIM.....AS REQUIRE

**CLEAR RUNWAY**

FUEL PUMP.....OFF  
 MIXTURE.....LEAN FOR TAXI  
 CARB HEAT.....OFF  
 FLAPS.....RETRACTED  
 LIGHTS.....AS REQUIRED  
 TRANSPONDER.....ALTITUDE  
 TRIM.....SET FOR T/O

**SHUTDOWN**

LIGHTS ~ CAMERA ~ ACTION

LIGHTS (EXCEPT BEACON).....OFF  
 AVIONICS.....OFF  
 MIXTURE, MAGS, MASTER, BEACON.....OFF

**POST FLIGHT CHECK**

HOBBS/TACH.....LOGGED  
 SQUAWKS.....LOGGED  
 WINDOWS.....CLEAN  
 CONTROL LOCK/BELTS.....SET  
 SHADE.....SET  
 TRASH/ITEMS.....REMOVED  
 TIES, LOCKS, CHALKS.....SECURE  
 DOORS.....LOCKED

**A/C INFORMATION**

MAX GROSS: 2550	BAGGAGE: 200
FUEL: 100LL BLUE CAPACITY P/TANK: 25 USEABLE P/TANK: 24 TABS: 17	ELECTRICAL: 14v DC BATTERY: 12V ALTERNATOR: 60 AMP
OIL CAPACITY: 6-8 QTS OIL WEIGHT: SAE 30 OR 50 VACUUM: 5" +/- .1	TIRE PRESSURE NOSE: 18 PSI MAINS: 24 PSI SERVICE CLG: 13,650 ABSOLUTE CLG: 15,750

**EFFECTIVE 03-30-24**

**POWER LOSS IN FLIGHT / EMERGENCY LANDING**

A: AIRSPEED: 76 KTS  
 B: BEST SPOT TO LAND WIND DIR/VELOCITY  
 C: CHECK ENGINE  
 • CARB HEAT.....ON  
 • FUEL SELECTOR.....BOTH  
 • MIXTURE.....RICH  
 • PRIMER.....IN/LOCKED  
 • MAGS.....CHECK  
 D: DECLARE EMERGENCY  
 • TWR, APP, Unicom.....121.5  
 • SQUAWK.....7700  
 • E.L.T.....ON  
 E: ENGINE SECURE  
 • FUEL SELECTOR.....OFF  
 • MIXTURE.....FULL CUT-OFF  
 • THROTTLE.....IDLE  
 • AVIONICS, MASTER, MAGS.....OFF  
 • SEAT BELTS/HARNESS.....SECURE  
 • FULL FLAPS.....FIELD ASSURED  
 • DOORS.....UNLATCH/PROP  
 • FORCE LAND.....PROTECT BODY

**ENGINE FIRE: START UP  
 NOT STARTED**

THROTTLE.....OPEN  
 MIXTURE / FUEL / SELECTOR.....OFF  
 MAGS.....TURN 5 SECONDS & SHUTDOWN  
**STARTED**

RUN A FEW MINUTES @ 1700 RPM  
 • DRAW FLAMES IN CYLINDER  
 MIXTURE / FUEL / SELECTOR.....OFF  
 EXTERNAL EXTINGUISHER

**ENGINE FIRE: IN FLIGHT**

MIXTURE.....CUTOFF  
 FUEL SELECTOR.....OFF  
 SLIP OR EMERGENCY DESCENT.....EXT.FLAMES  
 MASTER/MAGS/ELECTRICAL.....OFF  
 CABIN HEAT/AIR.....OFF  
 IF FIRE NOT EXTINGUISHED.....INCREASE SPEED  
 FORCED LANDING (W/O POWER).....EXECUTE

**ELECTRICAL**

MASTER/ELECTRICAL.....OFF  
 CABIN HEAT/AIR.....OFF  
 DEFROSTER.....OFF  
 LAND AS SOON AS PRACTICAL

IF FIRE OUT, TEST EACH ELECT. DEVICE  
 ONE AT A TIME  
 IF FIRE EXTINGUISHED, VENTILATE CABIN  
 IF NOT EXTINGUISHED: USE EXTINGUISHER, VENTILATE,  
 EMERGENCY LANDING

**ENGINE**

FUEL SELECTOR.....OFF  
 THROTTLE/MIXTURE.....IDLE/CUT-OFF  
 VENTS.....CLOSE  
 HEATER.....OFF

**RADIO FAILURE**

AUDIO PANEL.....ON  
 CIRCUIT BREAKERS.....IN  
 VOLUME.....CHECK  
 ALT. SWITCH.....RECYCLE