

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
 ALERONS: 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	¼"	½"	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, emg. 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_R.....48-53 KTS
 V_Y.....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
V _R	48-53	VFE	102
V _X	64	SH. FLD APPR	66
V _Y	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	TIRE PRESSURE NOSE: 18 PSI MAINS: 24 PSI
VACUUM: 5" +/- .1	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