

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, STRUT.....CHECK
 FUEL.....SUPPLY, SUMP, STRAIN
 STRAINER.....PULL 4-6 SECS
 OIL.....4-6 QUARTS

• 6 IF LONG FLIGHT IS PLANNED
 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.....ON/BOTH
 LIGHTS/ELECTRICAL/RADIOS.....OFF
 PARKING BRAKES.....TEST/SET
 CIRCUIT BREAKERS.....IN

ENGINE START

MIXTURE.....RICH
 CARB HEAT.....COLD (IN)
 PRIME.....AS REQUIRED
 THROTTLE.....OPEN 1/2 INCH
 PROP.....CLEAR
 MASTER.....ON
 BEACON.....ON
 IGNITION SWITCH.....START
 ENGINE ENGAGES.....THROTTLE TO 1000 RPM
 OIL PRESSURE.....IN THE GREEN
 TIME.....NOTED

PRE-TAXI / TAXI

FLAPS.....RETRACTED
 MIXTURE.....LEAN
 RADIO/AVIONICS/TRANSPONDER.....ON/ALT
 ATIS / ALTIMETER.....WITHIN 75'
 LIGHTS.....AS REQUIRED
 TAXI CALL.....RADIO TEST
 BRAKES.....TEST
 INSTRUMENTS.....CHECK

RUN UP

BRAKES.....SET/HOLD
 LIGHTS.....AS REQ'D
 CABIN DOORS.....LATCHED
 INSTRUMENTS.....SET
 FLIGHT CONTROLS.....FREE & CORRECT
 TRIM.....TAKE OFF
 MIXTURE.....RICH
 THROTTLE.....1700 RPM
 MAGS TEST.....DROP <125.....B/T MAGS <50
 CARB HEAT.....RPM DROP
 AMMETER....."ZERO" +/- 1
 SUCTION.....4.6-5.4 in. Hg
 OIL PRESS/TEMP.....CHECK
 FUEL TANKS.....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 60-65 KTS, best
 spot 30° of nose, communicate, shut down, emg. landing
 AFTER ROTATION >1000: Vg 60-65 KTS, standard rate turn
 back to the field

PRE-TAKE OFF

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.....COLD (IN)
 THROTTLE.....FULL OPEN
 INSTRUMENTS.....GREEN
 AIRSPEED.....ALIVE
 V_R.....55 KTS
 V_Y.....70-80 KTS

ENROUTE

CLIMB.....75-85 KTS
 MIXTURE.....LEAN FOR ALTITUDE
 CRUISE.....POWER 2000 to 2700 RPM (< 75%)
 ELEVATOR TRIM.....ADJUST
 MIXTURE.....LEAN

PRE-DESCENT/LANDING

WX.....OBTAINED
 ALTIMETER.....SET
 RADIOS.....SET
 NAV/GPS.....TUNE
 SEATBELTS/DOORS/WINDOWS.....SECURE
 MIXTURE.....RICH

GO AROUND

THROTTLE.....FULL OPEN
 CARB HEAT.....COLD
 FLAPS.....RETRACT TO 20°
 AIRSPEED.....60-70 KTS
 FLAPS.....10 UNTIL OBSTACLE CLEARED
 RETRACT AFTER SAFE ALTITUDE, PROC, 60 KTS
 TRIM.....AS REQUIRED

OPERATING SPEEDS: KTS

VNE	NEV.EXCEED	160	VG T/O FLAPS UP	65
VNO	CRUISE	128	VG T/O FLAPS DN	60
VA	MANEUVER	97	VSO STALL DIRTY	44
VR	ROTATE	55	VS1 STALL	50
VX		59	APPR FL.DOWN	55-65
VY		70-80	APPR FL. UP	60-70
CLIMB ENROUTE		75-85	SH FLD APP CLIMB	57
VFE	10° - 40°	85	XWIND	15

CLEAR RUNWAY

LIGHTS.....AS REQUIRED
 CARB HEAT.....COLD
 MIXTURE.....LEAN FOR TAXI
 FLAPS.....RETRACTED
 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: 2300	BAGGAGE: 120
FUEL: 100LL BLUE CAPACITY P/TANK: 26 USEABLE P/TANK: 24	ELECTRICAL: 14v DC BATTERY: 12V ALTERNATOR: 60 AMP
OIL CAPACITY: 8 QTS OIL WEIGHT: 10W30 OR SAE 30 OR SAE 50	TIRE PRESSURE NOSE: 31PSI MAINS: 29 PSI
VACUUM: 4.5 - 5.4 in. Hg.	SERVICE CEILING: 13,100

EFFECTIVE 03-30-24

POWER LOSS IN FLIGHT / EMERGENCY LANDING

A: AIRSPEED: 60 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 CUT-OFF
- FULL FLAPS.....WHEN FIELD ASSURED
- AVIONICS, MASTER, MAGS.....OFF
- SEAT BELTS/HARNESS.....SECURE
- 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
 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