

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 OIL.....6-8 QUARTS

• 8 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 1/4 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.....DIFF <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 75 MPH, best spot 30° of nose, communicate, shut down, emg. landing
AFTER ROTATION >1000: Vg 75 MPH, standard rate turn back to the field

PRE-TAKE OFF

LIGHTS.....AS REQUIRED
 INSTRUMENTS.....SET
 TRANSPONDER.....SET
 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.....60 MPH
 V_Y.....75-85 MPH

ENROUTE

CLIMB.....80-90 MPH
 MIXTURE.....LEAN FOR ALTITUDE
 CRUISE.....POWER 2200 to 2700 RPM (< 75%)
 ELEVATOR TRIM.....ADJUST

PRE-DESCENT/LANDING

WX.....OBTAINED
 ALTIMETER.....SET
 RADIOS.....SET
 NAV/GPS.....TUNE
 SEATBELTS/DOORS/WINDOWS.....SECURE
 MIXTURE.....RICH
 AIRSPEED FLAPS UP.....70-80 MPH
 FLAPS DOWN.....65-75 MPH

GO AROUND

THROTTLE.....FULL OPEN
 CARB HEAT.....COLD
 FLAPS.....Retract to 20°
 AIRSPEED.....65-75 MPH
 FLAPS.....RETRACT INCREMENTS.....65 & POS. RATE
 TRIM.....AS REQUIRED

OPERATING SPEEDS: MPH

VNE	NEV.EXCEED	182	VG GLIDE	80
VNO	CRUISE	145	VSO STALL DIRTY	49
VA	MANEUVER	112	VS1 STALL	57
VR	ROTATE	60	VFE	70-80
VX	68	VFE	10° - 40°	65-75
VY	75-85	SHORT FLD	40°	70
CLIMB ENROUTE	80-90	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.....CLEAR
 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		ELECTRICAL: 14v DC	
CAPACITY P/TANK: 26		BATTERY: 12V	
USEABLE P/TANK: 24		ALTERNATOR: 60 AMP	
OIL CAPACITY: 8 QTS		TIRE PRESSURE	
OIL WEIGHT: 10W30 OR		NOSE: 31PSI	
SAE 30 OR SAE 50		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: 80 MPH
 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 (120 MPH).....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