

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
 • 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.....4-6 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.....ON/BOTH
 LIGHTS/ELECTRICAL/RADIOS.....OFF
 PARKING BRAKES.....TEST/SET
 CIRCUIT BREAKERS.....IN

ENGINE START

MIXTURE.....RICH
 CARB HEAT.....COLD (IN)
 PRIME.....WARM WX 1-2 ; COLD WX UP TO 6
 • BLACK SMOKE: OVER PRIMED/FLOODED
 • FLOODED: MIX LEAN, THROTTLE OPEN,
 CRANK SEV TIMES; REPEAT W/O PRIMING

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 WITHIN 30 SEC'S
 • WINTER: 1 MINUTE
 TIME.....NOTED

PRE-TAXI / TAXI

FLAPS.....RETRACTED
 MIXTURE.....LEAN
 RADIO/AVIONICS/TRANSPONDER.....ON/ALT
 FREQ/ATIS/ALTIMETER.....SET
 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.....SLIGHT DROP.....DIFF <75
 CARB HEAT.....RPM DROP
 AMMETER....."ZERO" +/- 1
 • NIGHT: LOAD ALL LIGHTS 3-5 SEC'S
 • NEEDLE WIDTH OF 0
 SUCTION.....4.6-5.4 in. Hg
 OIL PRESS/TEMP.....CHECK
 FUEL TANKS.....CHECK
 THROTTLE/LOCK.....IDLE CK / 1000

ABORT PLAN READY

TAKE OFF ROLL: Throttle Idle, Brake, Exit RWY
 AFTER ROTATION W/USABLE: Throttle Idle, Land
 AFTER ROTATION, W/O USABLE, <1000: Vg 65 MPH, best
 spot 30° of nose, communicate, shut down, emg.
 landing
 AFTER ROTATION >1000: Vg 65 MPH, standard rate turn
 back to the field

PRE-TAKE OFF

LIGHTS.....AS REQUIRED
 INSTRUMENTS.....SET
 TRANSPONDER.....ALT
 TIME.....NOTED
 SEAT BELTS, DOORS, WINDOWS.....SECURED
 BRAKE.....RELEASE

TAKE OFF

FLAPS.....UP
 CARB HEAT.....COLD (IN)
 THROTTLE.....FULL OPEN
 INSTRUMENTS.....GREEN
 AIRSPEED.....ALIVE
 V_R.....55-60 MPH
 V_Y.....73 MPH

ENROUTE

CLIMB.....75-85 MPH
 CRUISE.....POWER 2000 to 2750 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
 CARB HEAT.....ON
 FLAPS.....EXTEND <100 MPH
 APPROACH AIRSPEED FLAPS UP.....65-75 MPH
 FLAPS DOWN.....60-70 MPH

GO AROUND

THROTTLE.....FULL OPEN
 CARB HEAT.....COLD
 FLAPS.....Retract to 20°
 AIRSPEED.....73 MPH
 FLAPS.....RETRACT IN INCREMENTS

OPERATING SPEEDS: MPH

VNE NEV.EXCEED	162	VG GLIDE	65
VNO CRUISE	120	VSO (1600 LBS)	48
VA MANEUVER	109	VS1 (1600 LBS)	55
VR ROTATE	50	SH. FLD APPR	62
VX	57	VFE Range	50-100
VY	73	XWIND	12
NORMAL CLIMB	75-80		

CLEAR RUNWAY

LIGHTS.....AS REQUIRED
 CARB HEAT.....COLD
 MIXTURE.....LEAN FOR TAXI
 FLAPS.....RETRACTED
 TRANSPONDER.....ALTITUDE
 TRIM.....SET FOR TAKE OFF

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: 1600 BAGGAGE:
 AREA 1 (behind seat): 120

FUEL: 100LL BLUE
 CAPACITY P/TANK: 13
 USEABLE P/TANK: 11

ELECTRICAL: 14v DC
 BATTERY: 12V
 ALTERNATOR: 60 AMP

OIL CAPACITY: 4-6 QTS
 SERVICE TO 5 QTS
 OIL WEIGHT:
 SAE 40 OR 50

TIRE PRESSURE
 NOSE: 30 PSI
 MAINS: 21 PSI

SERVICE CEILING:
 12,650

EFFECTIVE 03-30-24

POWER LOSS IN FLIGHT / EMERGENCY LANDING

A: AIRSPEED: 65 MPH
 B: BEST SPOT TO LAND WIND DIR/VELOCITY

C: CHECK ENGINE
 • CARB HEAT.....ON
 • MIXTURE.....RICH
 • FUEL.....BOTH
 • 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
 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