

PREFLIGHT (CABIN)
 Inspections CURRENT
 AROWS documents .. ON BOARD
 Compass corr. card LEGIBLE
 Hobbs RECORD
 Parking brake SET
 Ignition OFF
 Mixture IDLE CUT-OFF
 Avionics/electrical switches .OFF
 Circuit breakers IN
 Pitot-static system DRAIN
 Windows CLEAN
 Flight controlsFREE & CORRECT
 Battery master switch.....ON
 Fuel quantity gauges CHECK
 Electric fuel pump CHECK
 External lights CHECK
 Stall warning CHECK
 Pitot heat CHECK
 Battery master switch..... OFF
 Flaps..... 40°

PREFLIGHT (EXTERIOR)
 Right flap, aileron, wing .. CHECK
 Tie-down & chocks REMOVE
 Fuel vent CHECK
 Fuel sump(s) DRAIN
 Fuel quantity CHECK
 Right main tire 24psi CHECK
 Right main gear strut infl. 4.5"
Right air inlet CLEAR
 Oil level 6-8 QTS.
 Propeller & spinner CHECK
 Induction air inlet CHECK
 Alternator belt CHECK
 Nose wheel tire 30psi CHECK
 Nose gear strut inflation..... 3.25"
 Brake reservoir CHECK
 Fuel strainer DRAIN
 Left air inlet CHECK
 Fuel sump(s) DRAIN
 Fuel quantity CHECK
 Left main tire 24psi CHECK
 Left main gear strut infl. 4.5"
 Fuel vent CHECK
 Pitot head CHECK
 Tie-down & chocks REMOVE
Left flap, aileron, wing CHECK
 Left side of fuselage CHECK
 Antennae SECURE
 Empennage CHECK
 Tail tie-down REMOVE
 Right side of fuselage..... CHECK
 Baggage SECURE
 Baggage door LOCKED
 General inspectionWALK AROUND

BEFORE ENGINE START
 Flaps RETRACT
 Crew & passengers..... BRIEF
 Seats ADJUST & LOCK
 Seat belts & harnesses...FASTEN
 Parking brake SET
 Avionics OFF
 Carburetor heat OFF
 Fuel selector DESIRED TANK
 Anti-collision light.....ON

STARTING ENGINE
 Throttle 1/4" OPEN
 Master switchON
 Electric fuel pumpON
 Primer AS REQUIRED
 Mixture..... RICH
 Propeller area CLEAR
 Starter ENGAGE

STARTING ENGINE HOT
 Throttle 1/2" OPEN
 Master switchON
 Electric fuel pumpON
 Mixture..... RICH
 Propeller area CLEAR
 Starter ENGAGE

STARTING ENGINE FLOODED
 Throttle FULL OPEN
 Master switchON
 Electric fuel pump OFF
 Mixture..... IDLE
 Propeller area CLEAR
 Starter ENGAGE
 Mixture..... RICH

AFTER ENGINE START
 Throttle 1000 RPM
 Oil pressure CHECK
 Fuel pump OFF
 Fuel pressure..... CHECK
 Mixture..... AS REQUIRED
 Avionics master/radios.....ON
 GTN 750 Check:
 Database Date CHECK
 LCDI, LFLG, VCDI, VFLG . CHECK
 To/From, RMI, OBS, DTK. CHECK
 ATIS/Clearance RECORD
 Flight instruments... SET/CHECK

TAXIING
 Parking brake RELEASE
 Brakes/flight instruments CHECK

ENGINE RUNUP
 Parking brake SET
 Check area CLEAR
 Mixture RICH
 Fuel selector SWITCH TANK
 Throttle 2000 RPM
 Magnetos... max 175 drop/50 diff.
 Engine gauges..... CHECK
 Load meter CHECK
 Carb. heat ON CHECK DROP
 Throttle idle.. SMOOTH RUNNING
 Carb. heat OFF... RPM INCREASE
 Throttle 1000 RPM

BEFORE TAKEOFF
 Seat backs.....ERECT
 Seat belts & harnesses .. FASTEN
 Trim SET
 Flaps SET
 Carburetor heat OFF
 Mixture..... SET
 Primer LOCKED
 Magnetos..... BOTH
 Fuel selector PROPER TANK
 Window..... CLOSED
 Flight controlsFREE & CORRECT
 Engine gauges..... CHECK
 Flight instruments..... CHECK
 Annunciator PRESS TO TEST
 Avionics / Transponder SET
 Circuit breakers IN
 Cabin door LATCHED
 Takeoff briefing GIVEN

HOLDING SHORT / LINEUP
 Flaps SET
 Window / Door CLOSED
 Takeoff Time NOTED
 Mixture SET
Fuel pump ON
Landing light ON
Transponder ALT

AFTER TAKEOFF / CLIMB
500 ft AGL
 Flaps UP
 Engine gauges..... CHECK

1000 ft AGL
 Fuel pump OFF
 Fuel pressure CHECK
 Cruise climb 87 KIAS

CRUISE CHECK
 Power SET
 Mixture..... ADJUST
 Landing light OFF

PRE-MANEUVER CHECK
 Altitude CHECK
 Landing light ON
 Fuel pump ON
 Mixture RICH
 Primer LOCKED
 Magnetos BOTH
 Fuel selector PROPER TANK
 Seat belts & harnesses .. FASTEN
 Cockpit area SECURED
 Clearing turns EXECUTE

POST-MANEUVER CHECK
 Landing light OFF
 Fuel pump OFF
 Mixture..... SET

DESCENT
 Power SET
 Mixture ENRICHEN
 Carburetor heat... AS REQUIRED

APPROACH & LANDING
 ATIS RECORD
 Approach briefing..... GIVEN
 Mixture SET
 Landing light ON
 Fuel pump ON
 Fuel selector PROPER TANK
 Seat backs ERECT
 Seat belts & harnesses .. FASTEN

AFTER LANDING
 Flaps RETRACT
 Fuel pump OFF
 Landing light OFF

ENGINE SHUTDOWN
 Avionics master/radios OFF
 Throttle CLOSED
 Mixture IDLE CUT-OFF
 Magnetos OFF
 Electrical switches OFF
 Master switch OFF

PARKING
 Hobbs RECORD
 Control wheel..... SECURED
 Window CLOSED
 Master switch OFF
 Door LOCKED
 Tie-downs/chocks SECURE
 Fuel ORDERED
 Cabin cover INSTALLED

ENGINE FIRE DURING START
 Starter CRANK ENGINE
 Mixture IDLE CUT-OFF
 Throttle OPEN
 Fuel pump OFF
 Fuel selector OFF

ENGINE POWER LOSS IN FLIGHT
 Fuel selector SWITCH TANKS
 Fuel pump ON
 Mixture RICH
 Carburetor heat..... ON
 Engine gauges .CHECK for cause
 Primer LOCKED
 Ignition switch L, R, BOTH

When power is restored:
 Carburetor heat..... OFF
 Fuel pump OFF

If power is not restored, proceed with power off landing

POWER OFF LANDING
 Flaps 40°
 Final approach speed..... 63 KIAS
 Magnetos OFF
 Master switch OFF
 Fuel selector OFF
 Mixture IDLE CUT-OFF
 Seat belts & harnesses TIGHT
 Door WEDGE OPEN

ENGINE ROUGHNESS
 Carburetor heat..... ON
 If roughness continues after 1 min:
 Carburetor heat..... OFF
 Mixture Adjust for max. smoothness
 Fuel pump ON
 Fuel selector SWITCH TANKS
 Engine gauges CHECK
 Magnetos L, R, BOTH
 If operation is satisfactory on either one, continue on that magneto at reduced power and FULL RICH Mixture.
 Prepare for power off landing.

LOSS OF FUEL PRESSURE
 Fuel Pump ON
 Fuel Selector PROPER TANK

ELECTRICAL FIRE
 Master switch OFF
 Cabin heat & defroster OFF
 Vents OPEN
 Land as soon as practicable.

ENGINE FIRE
 Fuel selector..... OFF
 Throttle CLOSED
 Mixture IDLE CUT-OFF
 Fuel pump..... CHECK OFF
 Heater & defroster OFF
 Proceed with POWER OFF LANDING procedure.

ELECTRICAL FAILURES
 ALT Annunciator light illuminated:
 Ammeter Check to verify inop. alternator.

If ammeter shows zero:
 ALT switch..... OFF

Reduce electrical load to minimum:
 ALT circuit breaker ... CHECK and reset as required
 ALT switch..... ON

If power not restored
 ALT Switch OFF
 Land as soon as practicable.
 Anticipate complete electrical failure.

ELECTRICAL OVERLOAD
 (Alt. 20 amps above known load)
 Electrical load REDUCE
 If alternator loads are reduced:
 ALT Switch OFF
 Land as soon as practicable.
 Anticipate complete electrical failure.

OPEN DOOR
 Airspeed 89 KIAS or less
 Cabin vents CLOSE
 Storm window OPEN
 If upper latch is open..... LATCH

If side latch is open, pull on arm rest while moving latch handle to latched position

If both latches are open, latch side latch then top latch

Airspeeds (KIAS)	V _{BEST GLIDE} 73	V _{R,SH.FLD} 52	V _A (2,325lbs) 111	V _{NE} 160
	V _{S0} 44	V _X 63	(1,531lbs) 88	V _{I,APP} 70
	V _{S1} 50	V _Y 79	V _{FE} 103	V _{FE,APP (NORM&SH.FIELD)} 63
	V _{R,NORM} 45-55	V _{ENROUTE CLIMB} 87	V _{NO} 126	

Usable Fuel:
 Full tanks: 2 x 24 gal = 48 gal
 To filler neck indicator tab:
 2 x 17 gal = 34 gal

Max. gross weight: 2,440 lbs
 Max. baggage weight: 200 lbs
 Max crosswind: 17 kts