

STATS

Full fuel40 gal useable
 Oil4-6 qts
 Gross wt (nl).....2300 lb
 Gross wt (utility).....2000 lb

POWER SETTINGS

Please refer to POH for thorough pre-flight planning

Altitude	Power(%)	Fuel flow (GPH)	RPM	KTIAS
2000(11°C)	75	8.4	2500	116
2000(11°C)	67	7.5	2400	111
2000(11°C)	60	6.7	2300	105
4000(7°C)	75	8.4	2550	118
4000(7°C)	71	8.8	2500	115
4000(7°C)	64	7.1	2400	110
6000(3°C)	75	8.4	2600	120
6000(3°C)	67	7.6	2500	115
6000(3°C)	60	6.8	2400	109
8000(-1°C)	75	8.4	2650	122
8000(-1°C)	71	8.0	2600	120
8000(-1°C)	64	7.2	2500	114
10000(-5°C)	71	8.0	2650	122

LIGHT GUN SIGNALS

TOWER SIGNALS	ON GROUND	IN FLIGHT
Steady Green	Cleared for takeoff	Cleared to land
Flashing Green	Cleared to taxi	Return for landing
Steady Red	Stop	Yield and circle
Flashing Red	Taxi clear of area	Unsafe-Do not land
Flashing White	Return to start	N/A
Alt Red and Green	Use extreme caution	Use extreme caution

PREFLIGHT

Required Certificates (AROW).....LOCATE
 Control LockREMOVE
 Pitot Tube REMOVE COVER
 Master Switch..... ON
 Pitot Heat..... ON
 Fuel GaugesCHECK
 Flaps LOWER
 Nav/Landing Lights/StrobesCHECK
 Circuit Breakers.....CHECK
 Beacon.....ON
 Pitot TubeCHECK/WARM
 Master Switch.....OFF
 Mag SwitchOFF

INTERIOR ITEMS

Circuit Breakers.....CHECKED
 Alternate Static.....CHECKED
 Tach log COMPLETE
 VOR checkCURRENT

EXTERIOR ITEMS

FRONT

Static Air Source (pilot side).....CHECK
 Air Filter IntakeCHECK
 Front CowlCHECK
 Prop And Spinner.....CHECK
 Nose Wheel Assembly.....CHECK
 Oil Level 4-6 Qt'sCHECK
 Fuel Strainer..... DRAIN

RIGHT/LEFT WING

Fuel Qty & Cap.....CHECK
 Wing Sump DRAIN
 Wing Leading Edge.....CHECK
 Wing Tie-Down.....UNTIE
 Wing Tip and Fuel Vent (left wing).....CHECK
 Aileron and FlapCHECK
 Gear Assembly.....CHECK

EMPENNAGE

Rudder and Elevator.....CHECK
 Tail Tie-down.....UNTIE

FUSELAGE

Baggage DoorCHECKED

STARTING

Tow Bar..... STOWED
 Passenger Brief.....COMPLETED
 Seats & Seat Belts ADJUST & LOCK
 Doors..... SECURE
 Fuel SelectorBOTH
 Mixture RICH
 Throttle Want 800rpm after start)....Full then OPEN 1/8"
~~Cab In~~ COLD
 Electrical SwitchesRotating Beacon ON, Rest OFF
 BrakesSET
 Prime(3 times engine cold, 1 time warm engine)
 Avionics Master.....OFF
 Master/Alternator Switch ON
 Prop..... CLEAR
 Mag SwitchSTART
 EngineIDLE@800 RPM
 Engine Oil Pressure.....CHECK

WARM-UP AND TAXI

Avionics Power ON
Flaps UP
Garmin 430W Self-test COMPLETE.... Database CURRENT
Radios TUNED
Directional Gyro NORMAL
Turn Coordinator NORMAL
Attitude Indicator NORMAL

BEFORE TAKEOFF

Run-UP Position TAXI INTO WIND
Brakes SET
Fuel Selector BOTH
Elevator Trim CHECKED & SET
Flaps CHECKED & SET
Controls FREE & CORRECT
Primer IN AND LOCKED
Engine SET @ 1700 RPM
Engine Instruments CHECKED
Ammeter CHECKED
Suction If Installed IN GREEN
Mags MAX. DROP 125 RPM
Carb Heat COLD OR AS REQUIRED
Engine IDLE @ 800 RPM
Mixture RICH
DG, A/I, Altimeter CHECKED & SET
Clock SET
Fuel Gauges CHECKED
Seat/Shoulder Belts SECURE

Before Take Off

Strobe/Landing/Nav Lights AS REQUIRED
Transponder/ADSB ALT SETTING/ON
Takeoff Time NOTED
Brakes RELEASE
Doors SECURE

CRUISE

Engine Power (See power settings) SET
Fuel Selector PROPER TANK
Mixture LEAN
Landing Light OFF

APPROACH/LANDING

Carb Heat ON
Fuel Selector BOTH
Mixture RICH
Landing Lights ON
Flaps NONE
Seat/Shoulder Belts SECURE

AFTER LANDING

Time On NOTED
Carb Heat OFF
Flaps UP
Strobe Lights OFF
Transponder Set 1200
Pitot Heat OFF
Landing Lights OFF OR AS REQ'D

SHUT DOWN

Transponder SET TO 1200
Avionics Master, Lights, Pitot Heat. OFF except Beacon/ADSB
Engine 800 RPM
Mixture FULL LEAN
Throttle FULL CLOSED
Mag Switch OFF
Master Switch OFF
Gust Lock INSTALLED

*** EMERGENCY PROCEDURES ***

POWER LOSS IN FLIGHT

Best glide 65 KIAS
Landing site (note wind) CHOOSE
Fuel selector BOTH
Carb Heat Pulled Out for ON
Mixture FULL RICH
Magnetos CHECK

ELECTRICAL FIRE IN FLIGHT

Master OFF
Electrical loads OFF
Vents, heat, air CLOSED/OFF
If fire out, master ON

ENGINE FIRE DURING START

Engine CRANK
If start RUN A FEW SECONDS, SHUTDOWN
If no start IDLE CUTOFF, FUEL SELECTOR OFF
Throttle FULL OPEN
Engine CONTINUE CRANKING
Master OFF
Mags OFF

EVACUATE AND TAKE FIRE EXTINGUISHER

ENGINE FIRE IN FLIGHT

Mixture FULL LEAN
Fuel selector OFF
Master OFF
Cabin heat and air OFF
Airspeed INCREASE TO EXTINGUISH

V SPEEDS (KIAS)

Vx sea level.....60	Best glide(2400 lb).....65
Vx 10,000'.....61	Normal TO.....Vr59
Vy sea level.....73	Soft field TO.....59
Vy 10,000'.....68	Climb75-85
Va (2300 lb).....97	Approach(flaps ↑).....60-70
Va (1950 lb).....89	Approach(flaps 30°).....60-65
Va (1600 lb).....80	Short field app(flaps 40°)...53-60
Vfe (flaps 10°).....110	Max x-wind.....15
Vfe (full flaps).....85	
Vne.....158	
Red line.RPM.....2700	