SAFETY AND INSPECTION

2. 3.	Fuel and Oil Quantity Exterior Inspection Maintenance Status Passenger Briefing	CHECKED
4.	Passenger Briefing	COMPLETED
5.	Weight and Balance	COMPLETED

BEFORE STARTING THE ENGINE

Seats and Seat Belts.....ADJUST AND LOCK

2.	Flight ControlsCHECK
3.	BrakesTEST AND SET
4.	Master SwitchON
5.	Landing GearHANDLE NEUTRAL AND
	DOWN LIGHT GREEN
6.	Landing Gear Lights and Horn PUSH TO TEST
7.	Cowl FlapsOPEN
8.	Trip TabsSET
9.	Fuel SelectorFULLEST TANK

STARTING ENGINE

1.	MixtureRICH
2.	PropellerHIGH RPM
3.	ThrottleCRACKED (ONE INCH)
4.	Starter Circuit SwitchCHECK "ON"
5.	Auxiliary Fuel Pump Switch"LOW PRIME
6.	Ignition SwitchSTART
	(when fuel flow is steady at 2 to 4 gal/hr) Hold
	until engine fires, but not longer than 30 sec.
7.	Ignition SwitchRELEASE TO "BOTH"
	(immediately after engine fires)
8.	Auxiliary Fuel Pump SwitchOFF
	(after engine starts)

AFTER START / TAXI

1.	Oil Pressure	CHECK
2.	Warm Up	900-1000 RPM
3.	Avionics	ON
4.	Interior Lights	AS REQUIRED
5.	Exterior Lights	AS REQUIRED
6.	Air Vents / Heater	AS REQUIRED
7.	Accessory Switches	
8.	Mixture	SET
9.	Radios	SET
10.	Navigation Equipment	CHECK AND SET
11.	Instruments	CHECK
12.	Altimeter	SET
13.	DG	SET

BEFORE TAKEOFF

1.	Induction AirCOLD
	Throttle Setting1700 RPM
3.	Engine InstrumentsWITHIN GREEN ARC
4.	GeneratorLIGHT OUT
5.	MagnetosCHECK (125 RPM maximum drop)
6.	Propeller ControlCHECK
7.	Flight ControlsRECHECK
8.	Wing Flaps0° to 20°
9.	Cowl FlapsFULL OPEN
10.	Trim TabsTAKE-OFF
11.	Cabin DoorsCLOSED AND LOCKED
12.	Flight Instruments and RadiosSET

TAKEOFF

NORMAL TAKEOFF

	Power	FULL TH	ROTTLE
2	Flevator Control	LIFT NOSEWHEEL	AT 60 MP

- 3. Brakes....APPLY MOMENTARILY (when
- 4. Landing Gear.....RETRACT (in climb-
- 5. Wing Flaps.....RETRACT (if extended)

MAXIMUM PERFORMANCE

1.	Wing Flaps20°
	BrakesAPPLY
3.	Power FULL THROTTLE
4.	MixtureLEAN FOR FIELD ELEVATION
5.	BrakesRELEASE
6.	Elevator ControlSLIGHTLY TAIL LOW
7.	Climb Speed70 MPH
8.	Landing Gear and FlapsRETRACT AFTER
	OBSTACLES ARE CLEARED

CLIMB

NORMAL CLIMB

1.	Air Speed	120 to 140 MPH
	Power24 IN	
3.	Mixture	LEAN
	(high fuel flow side of cru	ise fuel flow range for
	power being used)	· ·

4. Cowl Flaps.1/2 OR FULL OPEN, AS REQUIRED

MAXIMUM PERFORMANCE CLIMB

- 1. Air Speed......104 MPH (sea level) 99 MPH (10,000 feet)
- 2. Power......FULL THROTTLE AND 2625 RPM
- 3. Mixture.....LEAN FOR ALTITUDE
- 4. Cowl Flaps......FULL OPEN

CRUISING

1.	Normal Power23 inches and 2300 RPM
2.	Maximum Power24 inches and 2450 RPM
3.	Cowl FlapsADJUST to maintain
	normal cylinder head temperature
4.	Trim TabsADJUST
5.	MixtureLEAN low fuel flow side
	of cruise fuel flow range for power being used

LET-DOWN

1.	Mixture	RICH
2.	Power	AS DESIRED

BEFORE LANDING

1.	Fuel SelectorFULLEST TANK
2.	Landing GearDOWN (below 160 MPH)
3.	Landing Gear LightGREEN
4.	FlapsDOWN 10° (below 160 MPH)
5.	MixtureRICH
6.	Airspeed85-95 MPH (flaps retracted)
7.	PropellerHIGH RPM
	FlapsDOWN 10° - 40° (below 110 MPH
9.	Airspeed75 - 85 MPH (flaps extended)
10.	Trim TabsADJUST

NORMAL LANDING

1.	Touch Down	MAIN WHEELS FIRST
2.	Landing RollLOWER	NOSEWHEEL GENTLY
3.	Braking	MINIMUM REQUIRED

AFTER LANDING

1.	Cowl Flaps	OPEN
2.	Wing Flaps	RETRACT
3.	Mixture	AS REQUIRED
4.	Trim	TAKOFF
5.	Lights	AS REQUIRED

SHUTDOWN

1.	Radios	OFF
2.	Lights	AS REQUIRED
3.	Mixture	DLE CUT-OFF
4.	Ignition Switch	OFF
5.	Master Switch	OFF

AIRSPEEDS FOR SAFE OPERATION

VX	74 M	MPH
Vy	104 ľ	MPH
	130 M	
VIo & VIe	e160 I	MPH
Vfe	10 = 160>10 to 40 = 110 i	MPH

ENGINE

Continental TSIO 470-E Oil Capacity 12 Quarts Useable Fuel 55 Gallons

TIRE PRESSURES

Mains 53 psi Nose 45 psi

WEIGHT & BALANCE DATA

MAX TAKEOFF WT2900USEFUL LOAD995MAX BAGGAGE120

LIGHT GUN SIGNALS

In Eliabt

STEADY GREEN	On Ground Cleared for Takeoff	In Flight Cleared to land
FLASHING GREEN	Cleared for Taxi	Return for Landing
STEADY GREEN	STOP	Give Way and Continue Circling
FLASHING GREEN	Taxi clear of runway in use	Airport Unsafe Do Not Land
FLASHING WHITE	Return to starting point on airport	

Alternating RED and GREEN

Exercise Extreme Caution