

ENGINE START

- Master Switch ON
- Gear Light GREEN
- Fuel Quantity CHECK
- Cowl Flaps OPENED
- Trim Tabs SET
- Throttles OPEN ½ IN.
- Propellers controls FORWARD
- Mixture RICH
- Fuel Pump** **ON/PRIME (+/- 5s)**
- Mixtures IDLE
- Magneto Switches ON
- Propellers CLEAR
- Starters*** **ENGAGE (10s max)**

*Cranking periods should be limited to 30 SECONDS with a 2 MINUTE INTERVAL.

- Mixtures ADVANCE
- Oil/Fuel Pressure** **CHECK (30s)**

FLOODED START

- Magneto Switches ON
- Throttles OPEN
- Mixture IDLE
- Fuel Pump OFF
- Starter* ENGAGE

When engine fires, retard throttle and advance mixture.

TAXIING

- Parking Brake RELEASE
- Brakes TEST
- Instruments CHECK
- Taxi lights ON

WARM UP & GROUND CHECK

- Warm Up at 1000-1400RPM MAX 2'W/4'C
- AVOID PROLONGED IDLING AT LOW RPM
- Parking Brake ON
- Flight Controls CHECK
- Mixture FORWARD
- Propeller FORWARD
- Throttle 1500 RPM
- Propeller (Not More Than 500) . EXERCISE
- Throttle 2200 RPM
- Magnetos L&R (175/50)
- Engine Gauges CHECK
- Ammeter CHECK
- Throttle REDUCE
- Lights/Pitot Heat AS REQUIRED
- Instruments CHECK/SET
- Generators ON
- Fuel Selectors ON MAIN FUEL CELLS
- Door/Windows LOCK
- COM/NAV/Lights/Transponder . SET
- Flaps/Trim SET
- Clearance OBTAIN
- Take Off Briefing COMPLETED

LINING UP

- Parking Brake OFF
- Fuel Pumps ON
- Transponder ON/ALT
- Strobe Lights ON
- Landing Lights AS REQUIRED

ROLLING

- Power (Take OFF) SET
- Man. Press./RPM/Fuel Flow CHECK
- Speed RISING
- Accelerate to Vmc Prior Climb .. 90 MPH

AFTER TAKEOFF

- Gear (Vlo 150MPH) POS. CLIMB/UP
- Vy 112 MPH
- Power (Climb) SET (24/2400)
- Flaps (Vfe 125 MPH) RETRACT
- Landing Lights OFF
- Fuel Pumps OFF

SHORT & SOFT FIELD TAKEOFF

- Flaps SET FOR T/O
- Brakes SET
- Power MAXIMUM
- Instruments CHECK

If airborne before Vmc fly low level to reach Vmc 90MPH.

Before Vmc be ready to reduce power promptly.

- Vx 90 MPH
- Landing Gear RETRACT
- Vy (clear of obstacle) 112 MPH
- Flaps RETRACT

CLIMB

- Throttles/Props** **SET CLIMB (24/2400)**
- Enroute Climb 130 MPH

CRUISE

- Throttles-Props** **SET/TABLE (18/2100)**
- Mixture ADJUST
- Tanks AS NEEDED
- Instruments AS NEEDED

Under ONE Engine Flight Conditions Maintain IAS ABOVE 97 MPH

STALL SPEED TABLE (CAS)		
Angle of Bank	Gear & Flaps Up	Gear & Flaps Down
0°	76	98
20°	79	79
40°	87	71
60°	108	69

V SPEEDS (MPH)	Vmc	90	Vx	90	Vfe	125	Vne	205
	Vyse	105	Vy	112	Vlo	150	Crosswind	20

APPROACH/LANDING

ATIS/AWOS/ASOS..... OBTAIN
 Brief/Seat Belts..... CHECK
 Mixture..... RICH
 Props..... 2400 RPM
 Fuel Pumps..... ON
 Fuel Selectors **ON MAIN FUEL CELLS**
 Landing Lights..... AS REQUIRED
 Gear (Vlo 150MPH)..... GREEN
 Flaps (Vfe 125 MPH)..... SET
 Final Approach 100 MPH

GO AROUND

Power FULL
 Gear (Positive Climb)..... UP
 Flaps RETRACT SLOW
 Vy..... 112 MPH

MANUAL GEAR EXTENSION

Master/Gear Circuit Breakers IN
 Master ON
 Navigation Lights OFF Day
 Emergency Disengage Control REMOVE COVER
 Airspeed 100 MPH
 Landing Gear Switch..... OFF
 Disengage Motor..... FULL FORWARD
 Gear Extension Handle R Socket FULL FORWARD
 Gear Extension Handle L Socket.... FULL FORWARD
 Gear Lights..... GREEN

DON'T RETRACT WITH HANDLE IN SOCKET
DON'T RE-ENGAGE MOTOR IN FLIGHT

AFTER LANDING

Flaps RETRACT
 Cowl Flaps..... OPEN
 Fuel Pumps..... OFF
 Props..... FORWARD
 Transponder STBY
 Strobe/Landing Lights OFF

COMPLETE STOP

Radio/Elec. Equip. OFF
 Heater..... OFF
 Mixture/Ignition/MASTER..... OFF
 Parking Brake..... ON
 Chocks/Chains/Papers..... COMPLETE

CLOSE FLIGHT PLAN
LOST COM

Check: Freq., Volume, Squelch, Phones
 Transponder 7600
 Pattern..... Enter/Lights

ENGINE FAILURES
DURING TAKE OFF OR AFTER LIFT OFF

During Run..... STOP
 After Lift Off With Adequate Landing
 Distance LAND

DURING CLIMB AFTER TAKE OFF

Vyse 105 MPH
 Mixture/Props/Throttles FORWARD
 Flaps..... UP
 Gear DECIDE

IDENTIFY DEAD ENGINE

Propeller (Dead Engine)..... FEATHER
 Rudder Trim..... USE

RETURN TO AIRPORT FOR LANDING
DURING CRUISE FLIGHT

Mixture/Props/Throttles ADVANCE

IDENTIFY DEAD ENGINE

Rudder Trim..... USE
 Cause Of Engine Failure..... DETERMIN
 Propeller (Dead Engine)..... FEATHER
 Mixture (Dead Engine) IDE/CUT OFF
 Ignition (Dead Engine)..... OFF
 Operating Engine..... SET POWER
 Electrical Load..... REDUCE

SINGLE ENGINE APPROACH

Power..... REDUCE
 Rudder Trim..... USE
 Reaching Airport..... ASSURED
 Gear DOWN
 Additional Altitude/Speed MAINTAIN
 Final Approach Speed..... 105 MPH
 Flaps..... AVOID
 Go Around... FLAPS/GEAR UP

FEATHERING POSSIBLE OVER 1000 RPM
UNFEATHERING

Ignition..... ON
 Mixture RICH
 Throttle OPEN ½ IN.
 Prop CRUISE
 Starter ENGAGE
Power 1000-1500 rpm Until Oil Temp Rise

DON'T FEATHER A PROP FOR PRACTICE:

- if you think engine may be difficult to start
- at a low altitude AGL
- with a low charged battery
- unless you are within reasonable distance of an airport
- in conditions that may prevent single engine flight at altitude well above the ground