PRE-STARTING:

- 1. Emergency Fuel Cutoff in off position. (Handle pushed In or TOWARD pilot seat)
- 2. Flap and Gear Handles FORWARD.
- 3. Tab set according to No. of Passengers. (One full turn forward of full back tab, for every passenger)
- 4. Reverse Propeller Control (overhead) forward and LOCKED.
- 5. Propeller control (on dash) full forward.
- 6. Tail wheel unlocked for taxiing.
- 7. Check fuel (Gauge operates when BATTERY & MASTER switches are on).
- 8. All lighting switches in OFF position. (Navigation, Anchor, Instrument Lights, etc.)
- 9. Parking Brake ON.

STARTING: (in this order)

- 1. Mixture Control FULL IN.
- 2. Ignition Key on BOTH.
- 3. Battery Switch FULL IN.
- 4. Master Switch ON.
- 5. Carburetor Heat OFF. (full in)
- 6. Pump throttle two times (four to six times in cold weather).
- 7. Crack throttle 1/2 inch, Yell out "CLEAR". (Propeller)
- 8. Press starter button. (Hold Brakes if Parking Brake not on.)
- 9. When engine starts <u>CHECK OIL PRESSURE IMMEDIATELY</u>. (If needle does not indicate in GREEN range after 30 seconds, <u>IMMEDIATELY STOP ENGINE</u>.)
- 10. Allow engine to idle at 800 RPM

CHECKING ENGINE: (normally this check made only before first flight)

- 1. ALLOW OIL TEMPERATURE TO REACH 60 degrees (in green range) before starting any engine check.
- 2. Rev up to 1500 RPM and move Propeller Control (on dash) in and out several times. Then return control
- to forward position.
- 3. Open throttle fully and check RPM and Manifold Pressure. MP should read approx. 28 inches at Sea level, and RPM's 2200-2300.
- 4. With Throttle wide open, pull out Propeller control all the way and note drop off in RPM (should be at least 500 RPM drop)
- 5. Throttle back to 2000 RPM's and check magnetos. (no more than 100 drop off on each one)
- 6. Pull out Carburetor Heat Control at 2000 RPM. Should have at least 100 RPM dropoff.
- 7. Check fuel pressure. Needle should indicate in green range.
- 8. Set RPM at 1000-1200 and check operation of reverse control..
- 9. Before taxiing out for takeoff, check OIL TEMP, OIL PRESS., AMPMETER.

^{**}Note: - Engine should not normally idle lower than 500 RPM. If idling lower, check idle adjustment on carburetor. (Only qualified mechanics should do such work)

TAKEOFF: (Land or Water)

- 1. Flaps down
- 2. Tail Wheel LOCKED
- 3. PROPELLER FULL FORWARD
- 4. Reverse Propeller Control LOCKED.
- 5. Tab set for takeoff. (BACK TAB)

LANDING: WATER

- 1. Gear Up.
- 2. Mixture Control, FULL IN.
- 3. Flaps DOWN.
- 4. Prop. control FULL IN.
- 5. Tab set for Glide
- 6. Carburetor heat if necessary.

LANDING: LAND

- 1. Gear Down.
- 2. Mixture Control FULL IN
- 3. Flaps DOWN
- 4. Prop control FULL IN.
- 5. Tab set for Glide.
- 6. Carburetor Heat if Necessary.
- 7. Tail Wheel LOCKED

PROCEDURE AFTER WHEELS LEAVE GROUND ON LAND TAKEOFF

- 1. Adjust tab.
- 2. Pull flap and gear handle back.
- 3. Cut throttle to 27" (Manifold Pressure)
- 4. Pull back prop to 2400 RPM.
- 5. Pump flaps up, and gear up.
- 6. Trim again to hold 80 MPH in climb.

PROCEDURE AFTER TAKING OFF FROM WATER

- 1. Adjust tab.
- 2. Pull flap lever back.
- 3. Cut throttle to 27" (Manifold Pressure)
- 4. Pull back prop to 2400 RPM
- 5. Pump flaps up.
- 6. Trim again to hold 80 MPH in climb.

Note:

Flaps **DOWN** get you off the land or water in the shortest run.

Flaps <u>UP</u> gives you the best <u>RATE OF CLIMB</u>.

<u>THEREFORE</u>: Take off with flaps <u>down</u>, but upon becoming airborne, allow flaps to come up as slowly as possible. This is accomplished by allowing <u>air pressure</u> to push your flaps up most of the way and then finishing their upward movement with smooth slow strokes on the hydraulic pump handle.