SECTION 3 - FLIGHT/EMERGENCY PROCEDURES

Before Take-Off Checklist - C.I.G.A.R.T.I P.

C - Controls free
I - Interior - doors latched, seatbelts fastened, cargo lashed, etc.
G - Gas - fuel quantity OK, appropriate valves open.
A - Altimeter - set
R - Run-up - ignition check
T - Trim - flaps as required
I - Instruments - coolant temp. 140°F minimum
P - Pattern - check traffic

Flight Procedures

Normal Take-Off

1. Wing flaps -- UP to 1/2
2. Carburetor Heat -- OFF (912 only)
3. Throttle -- full OPEN
4. Apply forward pressure on control stick to lift tailwheel at 15-20 mph. (Anticipate a pull to the right (582 Engine) or left (912 Engine).
5. Apply slight back pressure at 35-40 mph to lift main wheels and get airborne.
6. Climb speed -- 55-65 mph flaps up.

Maximum Performance Take-Off

1. Wing flaps -- FULL DOWN
2. Brakes -- HOLD
3. Throttle -- Full OPEN
4. Brakes -- RELEASE
5. Elevator Control Stick -- Slight back pressure until airborne.
6. Establish positive climb at best angle of climb speed (45 mph)
7. Lower the nose and maintain climb at best rate of climb speed (55-65 mph)

Enroute Climb - Throttle -- Full OPEN at 70-80 mph.

Normal Landing

1. Maintain airspeed 50-60 mph on final.
2. Wing flaps on final -- as desired.
3. Touchdown -- 3-point landing
4. Landing Roll -- maintain alignment with rudder and steerable tailwheel.
5. Braking -- minimum required

Balked Landing (Go-Around)

1. Throttle -- Full OPEN
2. Upon reaching an airspeed of approximately 40 MPH retract flaps slowly.

AFTER LANDING

(1) Wing Flaps -- UP
(2) Carburetor Heat -- OFF (912 ONLY)

SECURING AIRCRAFT

(1) Radios, Electrical Equipment -- OFF
(2) Ignition Switch -- OFF
(3) Master Switch -- OFF

EMERGENCY PROCEDURES

Emergencies caused by aircraft or engine malfunctions are extremely rare if proper pre-flight inspections and maintenance are practiced. En-route weather emergencies can be minimized or eliminated by careful flight planning and good judgement when unexpected weather is encountered. However, should an emergency arise the basic guidelines described in this section should be considered and applied as necessary to correct the problem.

ENGINE FAILURE

ENGINE FAILURE AFTER TAKE-OFF

Prompt lowering of the nose to maintain airspeed and establish a glide attitude is the first response to an engine failure after take-off. In most cases, the landing should be planned straight ahead with only small changes in direction to avoid obstructions. Altitude and airpseed are seldom sufficient to execute a 180^0 gliding turn necessary to return to the runway. The following procedures assume that adequate time exists to secure the fuel and ignition systems prior to touchdown.

(1) Airspeed -- 50 MPH
(2) Fuel Shutoff Valve -- OFF
(3) Ignition Switch -- OFF
(4) Wing Flaps -- AS REQUIRED
(5) Master Switch -- OFF

ENGINE FAILURE DURING FLIGHT

While gliding toward a suitable landing area, an effort should be made to identify the cause of the failure. If time permits, and an engine restart is feasible, proceed as follows:

(1) Airspeed -- 55 MPH
(2) Carburetor Heat -- ON (912 only)
(3) Fuel Shutoff Valve -- ON
(4) Ignition Switch -- BOTH (or START if propeller is not windmilling)
(5) Primer -- IN and LOCKED

If engine cannot be restarted, a forced landing without power must be executed. A recommended procedure for this is given in the following paragraph.

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

If all attempts to restart the engine fail and a forced landing is imminent, select a suitable site and prepare for the landing as follows:

(1) Airspeed -- 50 MPH (flaps UP)
(flaps DOWN as necessary for approach speeds)
(2) Fuel Shutoff Valve -- OFF
(3) Ignition Switch -- OFF
(4) Wing Flaps -- AS REQUIRED
(5) Master Switch -- OFF
(6) Doors -- UNLATCH PRIOR TO TOUCHDOWN
(7) Touchdown -- SLIGHTLY TAIL LOW

INTENTIONALY LEFT BLANK