

**Preflight Check  
Pages 4-4 to 4-6 of  
Pilot's Operating Handbook**

**STARTING**

- 1. Seats & Belts – ADJUST & LOCK**
- 2. Flight Controls – FREE**
- 3. Fuel Selector Valve – BOTH**
- 4. Cowl Flaps – OPEN**
- 5. Radios & Switches – OFF**
- 6. Circuit Breakers – CHECK**
- 7. Carburetor Heat – COLD**
- 8. Mixture – RICH**
- 9. Propeller – FULL IN (high RPM)**
- 10. Brakes – TEST & SET**
- 11. Master Switch – ON**
- 12. Fuel Quantities – CHECK**
- 13. Prime – as required, then LOCK**
- 14. Throttle – CRACKED**
- 15. CLEAR Area**
- 16. START**
- 17. IDLE – 800-1000 RPM**
- 18. Oil Pressure – CHECK**
- 19. Radios, Beacon, etc. – ON**

**RUN UP CHECK**

- 1. Brakes – SET**
- 2. Flight Controls – CHECK**
- 3. Fuel Selector Valve - BOTH**
- 4. Mixture – RICH**
- 5. Flaps – CHECK & SET for takeoff**
- 6. Trim Tabs – SET**
- 7. Cowl Flaps – OPEN**
- 8. Throttle – 1700 RPM**
- 9. Engine Instruments & Ammeter – CHECK**
- 10. Suction – CHECK**
- 11. Carburetor Heat – CHECK then OFF**
- 12. Magnetos – CHECK**
  - Max drop – 150 RPM
  - Max diff – 50 RPM
- 13. Propeller – CYCLE then FULL IN**
- 14. IDLE**
- 15. Flight Instruments – SET**
- 16. Radios – SET**
- 17. Autopilot – OFF**
- 18. Cabin Doors & Windows – LATCHED**

**19. Seat Belts – CHECK**

**20. Brakes – RELEASE**

**21. CLEAR Area**

## **TAKEOFF**

- 1. Rotation 55 KIAS**
- 2. Best rate of climb 78 KIAS (S.L.)**
- 3. Best angle of climb 57 KIAS (S.L.)**  
Flaps 20°
- 4. Cruise climb 85-95 KIAS**  
**V<sub>a</sub> – 111 KIAS V<sub>glide</sub> – 70 KIAS**

## **SHUT DOWN**

- 1. Cowl flaps – OPEN**
- 2. IDLE – 1200 RPM**
- 3. All electrical switches – OFF**
- 4. Mixture – LEAN to cutoff**
- 5. Master & Ignition – OFF**
- 6. Controls – LOCKED**
- 7. Secure Aircraft – Close Flight Plan**

## **ENGINE OUT EMERGENCY**

- 1. Establish best glide – 70 KIAS**
- 2. Note wind – Select landing field**
- 3. Carb Heat – ON**
- 4. Mixture – RICH**
- 5. Fuel selector valve – ON**
- 6. Primer – LOCKED**
- 7. Magnetos – CHECK**  
IF RESTART IMPOSSIBLE  
MAYDAY on 121.5  
Report position  
Belt & harnesses – TIGHTEN  
Passengers – WARN  
Throttle – CLOSE  
Fuel Selector Valve – OFF  
On Short Final  
Doors – OPEN  
Master & Ignition – OFF