

BEFORE STARTING ENGINE.

- Exterior inspection complete.
- Doors & windows secure.
- Seats and seatbelts adjust and set.
- Time:Hobbs record.
- All electrical switches off.
- Circuit breakers in.
- Fuel on.
- Brakes on.
- Mixture rich.
- Carburetor heat set cold.

STARTING ENGINE.

- key in ignition.
- Master switch on.
- Anti-collision on.
- Throttle pump & set 1/2.
- Prime as required.
- Clear & engage starter.
- Trottle idle (800-1000 rpm).
- Check oil pressure (30 seconds).
- Electrical switches on.

TAXI FOR RUN-UP.

- AWOS 119.55.
- Flight instruments check & set.
- Flaps up.
- Brake test.

ENGINE RUN-UP.

- Brakes set.
- Seats, seatbelts adjust and set.
- Flight controls free and correct.
- Trim set in neutral position.
- Flaps check & set.
- Fuel selector valve on.
- Mixture rich.
- Carburetor heat cold.
- Throttle set 1700 RPM.
- Mags check R & L (150 max drop/75 max dif)
- Mags both.
- Carburetor heat check then cold.
- Engine instruments:
 - Suction 4.6 to 5.4 Hg.
 - Ammeter check charge.
 - Oil temperature check.
 - Oil pressure check.
- Throttle idle (800-1000 RPM).
- Fuel gauges check.
- Flight instruments check and set.
- Circuit breakers in.
- Cabin door close & windows.
- V-speeds review.
- Radio Call for taxi: 121.60.

BEFORE TAKE-OFF.

- Time off.
- Instruments check.
- Transponder ~~on~~ and check squawk code.
- Switches on, switch to tower 118.0.
- Safety, engine gauges check, seatbelt on.

C-LINE #62058
8 1/2 x 5 1/2 TOP-R



TAKE OFF

- Flaps SET (0°-10°).
- Trim tap SET.
- Throttle -- FULL OPEN.
- Rotate 50 KIAS (normal condtns).
- Climb speed 65-75 KIAS
- See owners manual for performance takeoff technique.

CLIMB

- Vx.....54 KN
- Vy.....67 KN
- Cruise climb..65-75 KN

CRUISE

- Normal max power 75% (6.1 gph).
@ 2400 RPM at 2000'
- Power --1900 to 2550 RPM(no more than 75%).
- Trim AS REQUIRED.
- Engine instruments MONITOR.
- Mixture ADJUST.

DESCENT

NORMAL DESCENT

- Throttle 1900 RPM.
- Airspeed 60-70 kn.
- Mixture RICH as required.
- Carburetor heat ON.

POWER OFF DESCENT

- Carburetor heat ON if required.
- Throttle CLOSE.
- Airspeed AS REQUIRED.
- Mixture AS REQUIRED.
- Power verify with throttle every 30 seconds.

APPROACH AND LANDING (GUMPS)

- Fuel selector ON.
- Seat backs ERECT.
- Belts/harness FASTEN.
- Mixture SET.
- Carburetor heat ON.
- Flaps SET (85 Kn max).
- Airspeed--60-70 Kn (flaps up).
- Airspeed--55-65 Kn (flaps down).

AFTER LANDING

- Cross HOLD line.
- Flaps RETRACT.
- Transponder STANDBY.
- Landing light OFF.
- Carburetor heat OFF.
- Radio CALL for taxi 121,60.

ENGINE SHUTDOWN (SLIM)

- Trim tab SET.
- Electrical equipment OFF.
- Throttle IDLE.
- Mixture IDLE CUT-OFF.
- Magnetos OFF.
- Master switch OFF.

PARKING

- Parking brake OFF.
- Control wheel SECURE.
- Flaps FULL UP.
- Wheel chocks IN PLACE.
- Tie downs SECURE.
- Hobbs time RECORD.
- Discrepancies RECORD as required.
- CLOSE YOUR FLIGHT PLAN!

C-LINE #62098
8 1/2 x 5 1/2 COVER

SECTION 3
EMERGENCY PROCEDURES

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Airspeed -- 60 KIAS
2. Mixture -- IDLE CUT-OFF
3. Fuel Shutoff Valve -- OFF
4. Ignition Switch -- OFF
5. Wing Flaps -- AS REQUIRED
6. Master Switch -- OFF

ENGINE FAILURE DURING FLIGHT (RESTART PROCEDURES)

1. Airspeed -- 60 KIAS
2. Carburetor Heat -- ON
3. Primer -- IN and LOCKED
4. Fuel Shutoff Valve -- ON
5. Mixture -- RICH
6. Ignition Switch -- BOTH (or START if propeller is stopped)

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Seats, Seat Belts, Shoulder Harnesses -- SECURE
2. Airspeed -- 65 KIAS (flaps UP)
3. Mixture -- IDLE CUT-OFF
4. Fuel Shutoff Valve -- OFF
5. Ignition Switch -- OFF
6. Wing Flaps -- AS-REQUIRED (30° recommended)
7. Master Switch -- OFF
8. Doors -- UNLATCH PRIOR TO TOUCHDOWN
9. Touchdown -- SLIGHTLY TAIL LOW
10. Brakes -- APPLY HEAVILY

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Seats, Seat Belts, Shoulder Harnesses -- SECURE
2. Airspeed -- 60 KIAS
3. Wing Flaps -- 20°
4. Selected Field -- FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
5. Radio and Electrical Switches -- OFF
6. Wing Flaps -- 30° (on final approach)
7. Airspeed -- 55 KIAS
8. Master Switch -- OFF
9. Doors -- UNLATCH PRIOR TO TOUCHDOWN

SECTION 3
EMERGENCY PROCEDURES

INTRODUCTION

Section 3 provides checklist and amplified procedures for coping with emergencies that may occur. Emergencies caused by airplane or engine malfunctions are extremely rare if proper preflight inspections and maintenance are practiced. Enroute weather emergencies can be minimized or eliminated by careful flight planning and good judgment with 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. Emergency procedures associated with ELT and other optional systems can be found in Section 9.

AIRSPEEDS FOR EMERGENCY OPERATION

Engine Failure After Takeoff	60 KIAS
Maneuvering Speed:	
1670 Lbs	104 KIAS
1500 Lbs	98 KIAS
1350 Lbs	93 KIAS
Maximum Glide	60 KIAS
Precautionary Landing With Engine Power	55 KIAS
Landing Without Engine Power:	
Wing Flaps Up	65 KIAS
Wing Flaps Down	60 KIAS

OPERATIONAL CHECKLISTS

Procedures in the Operational Checklists portion of this section shown in bold-faced type are immediate-action items which should be committed to memory.

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

1. Throttle -- IDLE.
2. Brakes -- APPLY.
3. Wing Flaps -- RETRACT.
4. Mixture -- IDLE CUT-OFF.
5. Ignition Switch -- OFF.
6. Master Switch -- OFF.