

DETERMINING INOPERATIVE ENGINE

The following checks will help determine which engine has failed:

1. **DEAD FOOT - DEAD ENGINE.** The rudder pressure required to maintain directional control will be on the side of the operative engine.
2. **THROTTLE.** Partially retard the throttle for the engine that is believed to be inoperative; there should be no change in control pressures or in the sound of the engine if the correct throttle has been selected. **AT LOW ALTITUDE AND AIRSPEED THIS CHECK MUST BE ACCOMPLISHED WITH EXTREME CAUTION.**

Do not attempt to determine the inoperative engine by means of the tachometers or the manifold pressure gages. These instruments often indicate near normal readings.

ONE-ENGINE-INOPERATIVE PROCEDURES

ENGINE FAILURE DURING GROUND ROLL

1. **Throttles - IDLE**
2. **Braking - MAXIMUM**
3. **Fuel Selectors - OFF**
4. **Battery, Alternator, and Magneto/Start Switches - OFF**

NOTE

Braking effectiveness is improved if the brakes are not locked.

ENGINE FAILURE AFTER LIFT-OFF AND IN FLIGHT

An immediate landing is advisable regardless of take-off weight. Continued flight can not be assured if take-off weight exceeds the weight determined from the TAKE-OFF WEIGHT graph. Higher take-off weights will result in a loss of altitude while retracting the landing gear and feathering the propeller. Continued flight requires immediate pilot response to the following procedures:

1. Landing Gear and Flaps - UP
2. Throttle (inoperative engine) - IDLE
3. Propeller (inoperative engine) - FEATHER
4. Power (operative engine) - AS REQUIRED
5. Airspeed - AT OR ABOVE THE 50-FT TAKE-OFF SPEED (80 KNOTS)

After positive control of the airplane is established:

6. Secure inoperative engine:
 - a. Mixture Control - IDLE CUT-OFF
 - b. Fuel Selector - OFF
 - c. Aux Fuel Pump - OFF
 - d. Magneto/Start Switch - OFF
 - e. Alternator Switch - OFF
 - f. Cowl Flap - CLOSE
7. Airspeed - ESTABLISH 85 KTS
8. Electrical Load - MONITOR (Maximum load of 100% on remaining engine)

NOTE

The most important aspect of engine failure is the necessity to maintain lateral and directional control. If airspeed is below 65 knots, reduce power on operative engine as required to maintain control. Refer to the SAFETY INFORMATION section for additional information regarding pilot technique.