
EMERGENCY PROCEDURES

1. Engine Failure In Flight And Feathering Procedure:

As the engine loses power, a slight yaw in the direction of the dead engine will occur, which can be corrected easily with the rudder or the rudder trim tab. While the plane is slowing down to the single engine cruising speed of about 138 MPH at low altitudes and at moderate power settings, the propeller on the dead engine should be feathered by pulling the throttle to idling position and the prop pitch control back fully: then the mixture should be set at idle cut-off, cowl flap closed and the ignition off. The cowl flap on the operative engine should be adjusted to maintain proper cylinder head temperature. Best single engine performance will be obtained with the dead engine wing held up about 5 degrees higher than level. This helps counteract the tendency to turn in that direction.

NOTE

If vacuum operated copilot gyros are installed, turn copilot gyro switch off during single engine operation or in event of vacuum pump failure.

CAUTION

If the left engine has failed, the hydraulic pump will not be functioning. If it is necessary to lower the landing gear or flaps with the left engine dead, the hydraulic hand pump located in the pedestal is used. (See 5, this section.)

2. Engine Failure During Take-Off:

The Hartzell feathering propellers can only be feathered while the failed engine is rotating, and not if the engine drops below 1000 RPM. The loss of centrifugal force due to slow RPM count will activate a stop pin that keeps the propeller from feathering each time the engine is shut down on the ground. If an engine freezes up, it will be impossible to feather its propeller. Single engine flight can be maintained with the dead engine propeller unfeathered, although a noticeable decrease in single engine performance will take place.

If an engine failure occurs during take-off run, the power on the good engine should be cut and the airplane stopped straight ahead. If it occurs after leaving the ground, but with sufficient landing area still ahead, a landing should be effected immediately. If no landing can be made directly after the failure, the following steps should be followed:

- a. Apply full power to good engine.
- b. Feather dead engine.
- c. Retract landing gear and flaps, if extended (using hand pump if left engine is out). If enough altitude has been reached for reaching the airport with the gear extended, leave the landing gear in the down position.
- d. Maintain a best rate of climb airspeed.
- e. Trim directionally with rudder trim.
- f. As the airport is approached for landing, reduce power on the good engine and gradually retrim with the rudder tab. When it is obvious that the airport can be reached easily, lower the landing gear and check the indicators to make sure it is down and locked. Maintain a little extra altitude and speed during the approach, keeping in mind that the landing should be made right the first time, and that either undershooting or overshooting may require the use of full power on the good engine, making control more difficult. Lower the flaps at the last moment if desired.

AZTEC E

