

**ENGINE FAILURE:**

An engine failure has different symptoms than the case of engine flame-out. Engine failure symptoms could include any or all of the following indications:

- (a) Loud noises followed by heavy vibrations and loss of power.
- (b) Rapid loss of power with unusual noises, vibrations, or sudden increase in ITT.
- (c) Loss of power following drop in oil pressure below redline or increase in oil temperature above redline or both.
- (d) Loss of power following overspeed of gas generator (Ng).
- (e) Engine explosion.

If it is clearly perceptible that the engine has failed, proceed as follows:

- 1. Prop Control Lever "P" - Pull aft to feather stop "F".
- 2. Start Control Lever "S" - Pull aft to fuel cut-off "C".
- 3. Power Lever - Idle Position.
- 4. Fuel valve lever - OFF
- 5. All switches - OFF
- 6. Prepare for a forced landing and if terrain is rough turn battery Switch "Batt" ON and extend flaps as desired, then turn "Batt" switch OFF.

**WARNING:** Caution is mandatory during a suspected engine failure on take-off or landing in order to avoid shutting down the engine un-necessarily. Do not attempt to restart an engine which is definitely known to have failed.

**ENGINE FLAME-OUT:**

The symptoms of an engine flame-out will be the same as those of an engine failure only as regards a drop in ITT, Torque pressure, and Ng speed. The flame-out may result from the engine running out of fuel, or possibly may be caused by unstable engine operation. Severe turbulence can cause a flame-out by creating a temporary fuel interruption. Once the fuel supply has been restored to the engine or the cause of unstable operations eliminated, the engine may be restarted in the manner described under AIR STARTS.

**CAUTION:** Do not attempt a re-light if the Ng tachometer indicates zero rpm.

Remember that turbine engines seldom fail so long as fuel is being provided. An important procedure in this respect is to know the location of the fuel boost pump switch and the CONTINUOUS position for the ignitor switch. You should have a solid reaction to do two things anytime there is an indication of a power loss:

- 1. Put the ignitor on CONTINUOUS
- 2. Turn ON the fuel boost pump switch.

At the same time you should be pushing the stick forward to get the nose down to make sure the airplane doesn't stall while you are in the process of finding out what is wrong.