

## T-44 Emergency Phrases

Getting through emergency procedures requires fluency in the speech portion, which directs the appropriate actions. Something typed in *italics* indicates something that is *happening*, or that you should be *doing*. The phrases in quotes are to be spoken... say all of it, and say it accurately.

\*\* NOTE: The following procedures are for engine flame-outs and fires. If it's a fuel leak or jammed power lever, start with condition lever. Prop malfunctions are different, and are detailed at the end of this document. \*\*

### **Dynamic Engine Cut or Case 1**

*After rotate, when the engine fails.....*

PF: "Power as required, Gear up, Airspeed 102/110."

PF: "This will be an emergency shutdown of the left/right engine."

PF: "Left/Right power lever idle, concur?"

PM: "Concur."

PF: "Left/Right prop feather, concur?"

PM: "Concur/Simulate."

PF: "Left/Right condition lever fuel cut off, concur?"

PM: "Concur/Simulate."

*While pulling props to 1900, resetting max power, adjusting rudder, and starting the crosswind turn...*

PF: "Did the prop feather?"; If no: Prop fails to feather checklist

If yes: Continue below

PF: "Is it a fire or fuel leak?"

#### **If YES:**

PF: "Left/Right firewall valve close, concur?"

PM: "Concur/Simulate."

PF: "Left fire extinguisher discharge, concur?"

PM: "Concur/Simulate."

*or*

LS: "Discharge the right fire extinguisher."

RS: "Right fire extinguisher discharge, concur?"

LS: "Concur."

*or*

PF: "Fire extinguisher not required. Concur?"

PM: "Concur."

LS: "Close the left/right bleed air valve."

RS: "Left/Right bleed air valve close, concur?"

LS: "Concur."

PF: "Did the fire go out?"

PM: "Yes."

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*). Continue climb at 102/110 KIAS.

#### **If NO:**

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*). Continue climb at 102/110 KIAS.

## **Case 2 Power Loss**

*Roll out of turn, Set Max Power on Operating Engine, Apply proper rudder*

PF: "Gear up, flaps up."

*Roll back into turn*

PF: "This will be an emergency shutdown of the left/right engine."

PF: "Left/Right power lever idle, concur?"

PM: "Concur."

PF: "Left/Right prop feather, concur?"

PM: "Concur/Simulate."

PF: "Left/Right condition lever fuel cut off, concur?"

PM: "Concur/Simulate."

### **If YES:**

PF: "Left/Right firewall valve close, concur?"

PM: "Concur/Simulate."

PF: "Left fire extinguisher discharge, concur?"

PM: "Concur/Simulate."

*or*

LS: "Discharge the right fire extinguisher."

RS: "Right fire extinguisher discharge, concur?"

LS: "Concur."

*or*

PF: "Fire extinguisher not required. Concur?"

PM: "Concur."

LS: "Close the left/right bleed air valve."

RS: "Left/Right bleed air valve close, concur?"

LS: "Concur."

PF: "Did the fire go out?"

PM: "Yes."

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*).

### **If NO:**

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*).

*Approaching the 180...*

PF: "Airspeed checks, flaps approach."

PM: "Airspeed checks, flaps approach."

PF: "Airspeed checks, gear down, landing checklist."

PM: "Airspeed checks, gear down, landing checklist."

**Case 2 Non-Power Loss**

Continue the crosswind turn...

PF: "Gear up, flaps up."

Once wings level on downwind...

PF: "This will be an emergency shutdown of the left/right engine."

PF: "Left/Right power lever idle, concur?"

PM: "Concur."

PF: "Left/Right prop feather, concur?"

PM: "Concur/Simulate."

PF: "Left/Right condition lever fuel cut off, concur?"

PM: "Concur/Simulate."

**If YES:**

PF: "Left/Right firewall valve close, concur?"

PM: "Concur/Simulate."

PF: "Left fire extinguisher discharge, concur?"

PM: "Concur/Simulate."

*or*

LS: "Discharge the right fire extinguisher."

RS: "Right fire extinguisher discharge, concur?"

LS: "Concur."

*or*

PF: "Fire extinguisher not required. Concur?"

PM: "Concur."

LS: "Close the left/right bleed air valve."

RS: "Left/Right bleed air valve close, concur?"

LS: "Concur."

PF: "Did the fire go out?"

PM: "Yes."

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*).

**If NO:**

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (*as time permits*).

Approaching the 180...

PF: "Airspeed checks, flaps approach."

PM: "Airspeed checks, flaps approach."

PF: "Airspeed checks, gear down, landing checklist."

PM: "Airspeed checks, gear down, landing checklist."

### **Case 3**

*Add power on Operating Engine, Apply proper rudder, Clean Up (if necessary)*

PF: “Gear up, flaps up.” *(If unable to maintain altitude and airspeed, or in accordance with FTI)*

PF: “This will be an emergency shutdown of the left/right engine.”

*Everything else is the same. If you can get to the 180 at 800 feet and 120 KIAS with the gear down and flaps at approach, you don't have to raise them. From midfield downwind it generally works, but usually requires that you immediately go to max power on the operable engine. Chances are, you won't be able to hold parameters in the case of a deep downwind power loss (i.e. you were extended upwind). In which case, it's a safer bet to just clean up to avoid dropping below 120KIAS, but should be dictated by your ability to hold 800' and 120KIAS.*

*Approaching the 180...*

PF: “Airspeed checks, flaps approach.”

PM: “Airspeed checks, flaps approach.”

PF: “Airspeed checks, gear down, landing checklist.”

PM: “Airspeed checks, gear down, landing checklist.”

### **Case 4**

*Increase power as required, Apply proper rudder, Do not clean up*

PF: “This will be an emergency engine shutdown of the left/right engine.”

*The FTI requires that you only complete the first three steps of the shutdown. If you go to firewall valve, fire extinguisher, and bleed air valve, you risk getting off pattern profile. If you have good control of the A/C, and feel comfortable completing steps 4-6 go ahead, but DO NOT complete steps 4-6 at the expense of airwork and normal procedures (i.e. Props - Full Forward). If you elect to only complete the first three steps of the EES, and then have to waveoff, do not forget to complete the remaining steps after the waveoff.*

### **Case 5**

*Increase power as required to maintain at least 110KIAS, Apply proper rudder, Do not clean up*

PF: “Declare an emergency, we'll handle the EP on the deck.”

*The FTI does not require you to complete any of the steps of the shutdown. If you waveoff, do not forget the shutdown after the waveoff. Do not attempt to complete any steps of the shutdown at the expense of airwork and normal procedures. (i.e. Props - Full Forward).*

**Prop Malfunctions**

Prop malfunctions are usually simulated by the IP pushing a prop lever forward to 2200, but may be announced verbally, or presented otherwise. NATOPS strongly discourages that you not land with an overspeeding propeller. In the contact phase it will be expected that you comply with this advice, meaning wave off if necessary, and then feather the prop.

PF: "What is it reading and can I adjust it?"

**If the prop is reading anything over 2248 RPM and cannot be adjusted then an OVERSPEED condition exists:**

*You are about to lose thrust on an operable engine. Anticipate this by increasing power on the good engine, applying rudder as necessary, and cleaning-up based on normal Case 1-5 guidelines.*

PF: Left/Right power lever idle concur?  
PM: Concur.

PF: Left/Right prop lever feather concur?  
PM: Concur/Simulate.

PF: "Did the prop feather?"

**If YES:**

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (as time permits).

**If NO:**

PF: "Alternate prop feathering checklist."

When complete

PF: "Declare an emergency; this will be a full-stop landing. Continue/Hold the checklist." (as time permits).

**The prop is reading 1900 or 2200 RPM, and cannot be adjusted. Prop Linkage Malfunction:**

**If 1900:**

*Match the prop levers.*  
PF: "This will be a full-stop landing. We will not use reverse"

**If 2200:**

*Match the prop levers.*  
PF: "This will be a full-stop landing with reverse."