

# Cessna 414A RAM VII EMERGENCY CHECKLIST

Procedures in bold are immediate-action items and should be committed to memory.

Refer to Cessna AFM for the remainder of the emergency procedures checklist items.

## ENGINE FAILURE DURING TAKEOFF

(Speed Below 92 KIAS Or Gear Down)

1. Throttles.....**CLOSE IMMEDIATELY**
2. Brake Or Land And Brake .....**AS REQ'D**

NOTE: The distance required for the airplane to be accelerated from a standing start to 92 KIAS on the ground, and to decelerate to a stop with heavy braking, is presented in the Accelerate Stop Distance chart in Section 5 of AFMS\_RAM\_7 for various combinations of conditions.

## ENGINE FAILURE AFTER TAKEOFF

(Speed Above 92 KIAS With Gear Up Or In Transit)

1. Mixtures .....**FULL RICH**
2. Propellers .....**FULL FORWARD**
3. Throttles .....**FULL FORWARD**
4. Landing Gear .....**CHECK UP**
5. Inoperative Engine:
  - a. Throttle .....**CLOSE**
  - b. Mixture .....**IDLE CUT-OFF**
  - c. Propeller .....**FEATHER**

6. Establish Best Performance Bank and Yaw: Bank - 3° toward operative engine and apply rudder for a slip indication of ½ ball out-of-center toward operative engine.

7. Climb To Clear 50-Foot Obstacle - 92 KIAS
8. Climb At One Engine Inoperative Best Rate-of-Climb Speed - 110 KIAS
9. Trim Tabs -ADJUST
10. Cowl Flap - CLOSED on inoperative engine
11. **Inoperative Engine - SECURE** as follows:
  - a. Fuel Selector Inoperative Engine OFF (Feel For Detent)
  - b. Auxiliary Fuel Pump Inoperative Engine - OFF
  - c. Magneto Switches Inoperative Engine - OFF
  - d. Alternator Inoperative Engine - OFF
12. As Soon As Practical - LAND.
13. Electrical Load - DECREASE to minimum required.

Schedule fuel use such that an adequate amount of fuel is available in the operative engine main tank for landing. Crossfeed as required to maintain **lateral balance within 120 pounds per side**. When **crossfeeding**, maintain level flight, maintain **altitude greater than 1000 feet AGL** and position inoperative engine auxiliary fuel pump to LOW.

## ENGINE INLET AIR SYSTEM ICING EMERGENCY PROCEDURES

(AIR INLET OR FILTER ICING)

NOTE: See Cessna Model 414A Airplane Flight Manual for amplified procedure.

1. Alternate Air Control(s).....**PULL OUT**
2. Propeller(s)..... **INCREASE**  
(2650 rpm for normal cruise)

Mixtures(s)..... **LEAN** as required

- Pressurization Air Control(s)..... PULL LH and/or RH as necessary
- A. With Both Pressurization Air Sources Dumped:
    1. Cabin Vent Control.....PULL
    2. Cabin Pressurization Switch.....DEPRESSURIZE
  - b. Above 10,000 ft with Both Pressurization Air Sources Dumped:
    1. If Supplementary Oxygen Not Available....**EMERGENCY DESCENT** to 10,000 ft
    2. If Supplementary Oxygen Available:
      - (a) Oxygen Knob .....PULL ON
      - (b) Assure each occupant is using oxygen.
      - (c) Descend as soon as practical to 10,000 ft.

## **ENGINE INOPERATIVE LANDING**

1. Fuel Selector - MAIN TANK (Feel Detent).
2. Auxiliary Fuel Pump - ON (Operative Engine).
3. Alternate Air Control - IN.
4. Mixture - FULL RICH or lean as required for smooth operation.
5. Propeller Synchrophaser - OFF (Optional System).
6. Propeller - FULL FORWARD.
7. Approach - 108 KIAS with excessive altitude.
8. Landing Gear - DOWN within gliding distance of field.
9. Wing Flaps - DOWN when landing assured.
10. Speed - DECREASE below 94 KIAS only if landing is assured.
11. Air Minimum Control Speed - 79 KIAS.

## **ENGINE INOPERATIVE GO-AROUND (Speed Above 92 KIAS)**

**WARNING: Level flight may not be possible for certain combinations of weight, temperature and altitude. In any event, do not attempt an engine inoperative go-around after wing flaps have been extended beyond 15.**

1. Throttle - FULL FORWARD
2. Wing Flaps - UP (If Extended)
3. Positive Rate-of-Climb - ESTABLISH
4. Landing Gear - UP
5. Cowl Flap - OPEN
6. Climb at One Engine Inoperative Best Rate-of-Climb Speed - 110 KIAS.
7. Trim Tabs - ADJUST Bank - 3° toward operative engine and apply rudder for a slip indication of ½ ball out-of-center toward operative engine.

## **CABIN OVERPRESSURE (Over 5.3 PSI)**

### **1. Pressurization Air Controls - PULL**

2. If Above 10,000 Feet and Supplementary Oxygen is Not Available -EMERGENCY DESCENT TO 10,000
3. If Above 10,000 Feet and Supplementary Oxygen is Available:
  - a. Oxygen Knob - PULL ON.
  - b. Assure each occupant is using oxygen

## **LOSS OF PRESSURIZATION ABOVE 10,000 FEET**

1. Without Supplementary Oxygen -  
**EMERGENCY DESCENT TO 10,000 FEET**
2. With Supplementary Oxygen:
  - a. Oxygen Knob - PULL ON
  - b. Assure each occupant is using oxygen
  - c. Descend as soon as practical to 10,000 Feet

## **PRESSURIZATION AIR CONTAMINATION**

### **1. Pressurization Air Control(s) - PULL LH and/or RH as necessary**

- a. With Both Air Sources Dumped:
  - (1) Cabin Vent Control - PULL
  - (2) Cabin Pressurization Switch - DEPRESSURIZE
- b. Above 10,000 Feet with Both Air Sources Dumped:
  - (1) If Supplementary Oxygen is Not Available -  
EMERGENCY DESCENT TO 10,000 FEET.
  - (2) If Supplementary Oxygen is Available:
    - a. Oxygen Knob - PULL ON.
    - b. Assure each occupant is using oxygen.
    - c. Descend as soon as practical to 10,000 Feet.

During engine inoperative takeoff procedures over an obstacle, only one condition presents any appreciable advantage; this is headwind. A decrease of approx. 6% in ground distance required to clear a 50-foot obstacle can be gained for each 10 knots of headwind. Excessive speed above one engine inoperative best rate-of-climb speed at engine failure is not nearly as advantageous as one might expect since deceleration is rapid and ground distance is used up quickly at higher speeds while the airplane is being cleaned up for climb. However, the extra speed is important for controllability.

The following facts should be used as a guide at the time of engine failure during takeoff:

- (1) discontinuing a takeoff upon engine failure is advisable under most circumstances;
- (2) altitude is more valuable to safety after takeoff than is airspeed in excess of the one engine inoperative best rate-of-climb speed since excess airspeed is lost much more rapidly than is altitude;
- (3) climb or continued level flight at moderate altitude is improbable with the landing gear extended and the propeller windmilling;
- (4) in no case should the airspeed be allowed to fall below the intentional one engine inoperative speed, even though altitude is lost, since this speed will always provide a better chance of climb, or a smaller altitude loss, than any lesser speed; and
- (5) if the requirement for an immediate climb is not present, allow the airplane to accelerate to the one engine inoperative best rate-of-climb speed as this is the optimum climb speed and will always provide the best chance of climb or least altitude loss.