ERCOUPE 415-E EMERGENCY PROCEDURES

TAKEOFF

ENGINE FAILURE ON TAKEOFF ROLL (OR PAST ROTATE POINT)

- 1. Throttle POWER IDLE
- 2. Brakes APPLY
- 3. Mixture IDLE CUTOFF (pull full out)
- 4. FUEL Pump Switch OFF
- 5. Magnetos Switch OFF
- 6. Master Switch OFF
- 7. Exit runway onto Taxiway

ENGINE FAILURE AFTER ROTATE (REMAINING RUNWAY AHEAD)

- 1. Airspeed 75 MPH (best glide speed)
- 2. Mixture IDLE CUTOFF (pull full out)
- 3. FUEL Valve OFF (push forward under left side instrument panel)
- 4. FUEL Pump Switch OFF
- 5. Magnetos Switch OFF
- 6. Master Switch OFF
- 7. Seatbelts SECURE
- 8. Canopy OPEN
- 9. Land on remaining runway
- 10. Exit runway onto Taxiway

ENGINE FAILURE ON CLIMBOUT (NO REMAINING RUNWAY AHEAD)

1. Airspeed - 75 MPH (best glide speed)

- 2. Mixture IDLE CUTOFF (pull full out)
- 3. FUEL Pump Switch OFF
- 4. FUEL Valve OFF (push forward under left side instrument panel)
- 5. Magnetos Switch OFF
- 6. MAYDAY call on 121.5 and SQUAWK 7700
- 7. Master Switch OFF
- 8. Seatbelts SECURE
- 9. Canopy OPEN
- 10. Land straight ahead

IN-FLIGHT

ENGINE FALURE ENROUTE

1. Airspeed - 75 MPH (best glide speed)

2. FUEL Valve - ON (pull down vertical under left side instrument panel)

- 3. FUEL PUMP Switch ON
- 5. Mixture Control RICH (if restart has not occurred)

6. MAGNETOS Switch - BOTH (hold PUSH TO START button if propeller is stopped)

7. IF RESTART FAIL - MAYDAY call on 121.5 and SQUAWK 7700

NOTE

If the propeller is windmilling, engine will restart automatically within a few seconds. If propeller has stopped (possible at low speeds), press and hold PUSH TO START button, advance throttle slowly from idle and lean the mixture from full rich as required to obtain smooth operation.

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

- 1. Seat Belts SECURE
- 2. Airspeed 75 MPH
- 3. Mixture Control IDLE CUTOFF (pull full out)
- 4. FUEL Pump Switch OFF
- 5. FUEL Valve OFF (push forward under left side instrument panel)
- 6. MAGNETOS Switch OFF
- 7. MASTER Switch OFF (when landing is assured)
- 8. Canopy OPEN PRIOR TO TOUCHDOWN
- 9. Touchdown SLIGHTLY TAIL LOW
- 10. Brakes APPLY HEAVILY

FORCED LANDINGS (Continued)

PRECAUTIONARY LANDING WITH ENGINE POWER

- 1. Seat Belts SECURE
- 3. Airspeed 75 MPH
- 4. Selected Field FLY OVER (noting terrain and obstructions)
- 5. Airspeed 75 MPH
- 6. MASTER Switch OFF (when landing assured)
- 7. Canopy OPEN PRIOR TO TOUCHDOWN
- 8. Touchdown SLIGHTLY TAIL LOW
- 9. Mixture Control IDLE CUTOFF (pull full out)
- 10. FUEL Pump Switch OFF
- 11. MAGNETOS Switch OFF
- 12. Brakes APPLY HEAVILY

FIRES

DURING START ON GROUND

1. MAGNETOS Switch - START (continue cranking to start the engine) *IF ENGINE STARTS*

- 2. Power 1700 RPM (for a few minutes)
- 3. Engine SHUTDOWN (inspect for damage)

IF ENGINE FAILS TO START

- 1. Throttle Control FULL (push full in)
- 2. Mixture Control IDLE CUTOFF (pull full out)
- 3. PUSH TO START Button PRESS AND HOLD (continue cranking)
- 4. FUEL Valve OFF (push forward under left side instrument panel)
- 5. FUEL PUMP Switch OFF
- 6. MAGNETOS Switch OFF
- 7. MASTER Switch OFF
- 8. Engine SECURE
- 9. Parking Brake RELEASE
- 10. Fire Extinguisher OBTAIN (have ground attendants obtain)

11. Airplane - EVACUATE Fire - EXTINGUISH (using fire extinguisher, wool blanket, or dirt)

12. Fire Damage - INSPECT (replace damaged components)

ENGINE FIRE IN FLIGHT

- 1. Mixture Control IDLE CUTOFF (pull full out)
- 2. FUEL Valve OFF (pull forward under left side instrument panel)
- 3. FUEL PUMP Switch OFF
- 4. MASTER Switch OFF
- 5. Canopy CLOSED (as needed)
- 6. CABIN HT Control Knob OFF (push full in) (to avoid drafts)
- 7. Airspeed 100 MPH (If fire is not extinguished, increase glide speed to find an airspeed, within airspeed limitations, which will provide an incombustible mixture)

8. Forced Landing - EXECUTE (refer to EMERGENCY LANDING)

ELECTRICAL FIRE IN FLIGHT

- 1. MASTER Switch OFF
- 2. Canopy CLOSED (to avoid drafts)
- 3. CABIN HT Control Knob OFF (push full in) (to avoid drafts)
- 4. Fire Extinguisher ACTIVATE (if available)
- 5. AVIONICS Switch OFF
- 6. All Other Switches (except MAGNETOS switch) OFF

WARNING

AFTER THE FIRE EXTINGUISHER HAS BEEN USED, MAKE SURE THAT THE FIRE IS EXTINGUISHED BEFORE EXTERIOR AIR IS USED TO REMOVE SMOKE FROM THE CABIN.

- 7. Canopy OPEN (when sure that fire is completely extinguished)
- 8. CABIN HT Control Knob ON (pull full out)

IF FIRE HAS BEEN EXTINGUISHED AND ELECTRICAL POWER IS NECESSARY FOR CONTINUED FLIGHT TO NEAREST SUITABLE AIRPORT OR LANDING AREA

- 9. Circuit Breakers CHECK (for OPEN circuit(s), do not reset)
- 10. MASTER Switch ON
- 11. AVIONICS Switch ON

FIRES (Continued)

CABIN FIRE

- 1. MASTER Switch OFF
- 2. Canopy CLOSED (to avoid drafts)
- 3. CABIN HT Control Knob OFF (push full in) (to avoid drafts)
- 4. Fire Extinguisher ACTIVATE (if available)

WARNING

AFTER THE FIRE EXTINGUISHER HAS BEEN USED, MAKE SURE THAT THE FIRE IS EXTINGUISHED BEFORE EXTERIOR AIR IS USED TO REMOVE SMOKE FROM THE CABIN

5. Canopy - OPEN (when sure that fire is completely extinguished)

6. CABIN HT Control Knob - ON (pull full out) (when sure that fire is completely extinguished)

7. Land the airplane as soon as possible to inspect for damage.

WING FIRE

1. LAND Light Switch - OFF

2. NAV Light Switch - OFF

INADVERTENT ICING ENCOUNTER DURING FLIGHT

1. Turn back or change altitude (to obtain an outside air temperature that is less conducive to icing)

- 2. CABIN HT Control Knob ON (pull full out)
- 3. CARB HT Control Knob ON (pull full out)

4. Watch for signs of induction air filter icing. A loss of engine RPM could be caused by ice blocking the air intake filter. Adjust the throttle as necessary to hold engine RPM. Adjust mixture as necessary for any change in power settings.

5. Plan a landing at the nearest airport. With an extremely rapid ice buildup, select a suitable off airport landing site.

6. With an ice accumulation of 0.25 inch or more on the wing leading edges, be prepared for significantly higher power requirements, higher approach and stall speeds, and a longer landing roll.

7. Open canopy and, if practical, scrape ice from a portion of the windshield for visibility in the landing approach.

8. Approach at 75 to 80 MPH depending upon the amount of ice accumulation.

9. Perform landing in level attitude. (higher stall speed)

10. Missed approaches should be avoided whenever possible because of severely reduced climb capability.

ELECTRICAL

<u>AMMETER SHOWS EXCESSIVE HIGH RATE OF CHARGE OR</u> <u>DISCHARGE</u>

1. MASTER Switch - OFF

2. FLIGHT - LAND as soon as practical

INADVERTENT IFR

INADVERTENT FLIGHT INTO IFR CONDITIONS

- 1. DIRECTION Note heading
- 2. FLIGHT Turn 180 from current heading

HIGH CARBON MONOXIDE (CO) LEVEL ADVISORY

CO LVL HIGH ANNUNCIATOR COMES ON

- 1. CABIN HT Control Knot OFF (push full in)
- 2. Canopy OPEN

CO LVL HIGH ANNUNCIATOR REMAINS ON

3. Land as soon as practical.