EMERGENCY PROCEDURES

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T-41 C

NON-CRITICAL ACTION

1. **Maintain aircraft control.**
2. **Analyze the situation and take proper action.**
3. **Land as soon as conditions permit**

GROUND OPERATION EMERGENCIES

Emergency Engine Shutdown on the Ground

1. MIXTURE ---------- IDLE CUTOFF
2. FUEL SHUTOFF VALVE ---------- PULL OUT
3. IGNITION ---------- OFF
4. MASTER SWITCH ---------- OFF

TAKEOFF EMERGENCIES

ABORT

1. THROTTLE ---------- IDLE
2. BRAKES ---------- AS REQUIRE

IN-FLIGHT EMERGENCIES

Engine Failure Immediately After Takeoff

1. GLIDE ---------- ESTABLISH
   - Flaps up 85 mph
   - Flaps up to 20 80 mph
   - Flaps over 20 75 mph
2. MIXTURE ---------- IDLE CUTOFF
3. FUEL SHUTOFF KNOB ---------- PULL OUT
4. IGNITION SWITCH ---------- OFF
5. FLAPS ---------- AS REQUIRED
6. MASTER SWITCH ---------- OFF

ENGINE FAILURE IN FLIGHT - RESTART

NOTE: If Engine is stalled due to abrupt throttle input or an over rich mixture consider the following.

1. THROTTLE----------IDLE THEN SLOWLY OPEN

-------- **IF ENGINE FAILS TO START** ----------

2. GLIDE ---------- ESTABLISH
   - Flaps up 85 mph
   - Flaps up to 20 80 mph
   - Flaps over 20 75 mph
3. MIXTURE ---------- RICH
4. THROTTLE---------- IN HALFWAY
5. FUEL SELECTOR ---------- BOTH
6. FUEL SHUTOFF KNOB ---------- IN
7. IGNITION SWITCH ---------- BOTH
8. MASTER SWITCH ---------- ON
9. AUX FUEL PUMP ---------- LOW

-------- **IF ENGINE FAILS TO START** ----------

- MAYDAY CALL
- CURRENT FREQ OR 121.5, TRANSPONDER 7700
- SELECT TOUCH DOWN POINT
- FLAPS AS REQUIRED (FULL DOWN)

10. IF RESTART FAILS - SECURE ENGINE

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- Clear engine every 30 seconds
- 500 feet AGL minimum
- Execute the "GO-AROUND PROCEDURE"

Engine Fire During Flight

1. MIXTURE ---------- IDEL CUTOFF
2. FUEL SHUTOFF VALVE ---------- PULL OUT
3. IGNITION SWITCH ---------- OFF
4. GLIDE ---------- ESTABLISH
   - Flaps up 85 mph
   - Flaps up to 20 80 mph
   - Flaps over 20 75 mph
5. FLAPS AS REQUIRED
6. MASTER SWITCH ---------- OFF

Electrical Fire / High Ammeter

1. MASTER SWITCH ---------- OFF

Negative Ammeter Reading

1. ELECTRICAL LOAD ---------- REDUCE
   - Radios & Lights -- Off

Smoke and Fume Elimination

1. CABIN HEAT KNOB---------- IN
2. CABIN AIR KNOB---------- IN
3. UPPER AIR VENTS ---------- OPEN
   - Pilot's window open as required

Oil System Malfunction

1. THROTTLE ---------- AS REQUIRED
2. MIXTURE ---------- RICH
   - A rich running engine runs cooler

Structural Damage or Controllability Check

CAUTION

Do not reset flaps if significant structural damage is located in the wings.

1. Climb to at least 1500' AGL if practical, at a controllable airspeed
2. Simulate a landing approach and determine the airspeed at which the aircraft becomes difficult to control. This is the minimum controllable airspeed
3. Plan to fly a straight-in approach. Fly the normal approach airspeed for your flap setting, or 10kts above the minimum controllable airspeed, whichever is higher. For asymmetrical flaps, use your minimum flap setting for approach airspeed. Plan to touch down at no less than the minimum controllable airspeed. Do not begin to reduce to final approach airspeed until the aircraft is very close to the runway.

Recall

1. Eagle initiates a recall with a blanket radio call that is not acknowledged.
2. Individual aircraft are then contacted separately to minimize confusion and radio congestion
3. Do not leave the area until instructed by Eagle.
4. Do not call Eagle for recovery. Eagle will sequence aircraft
5. PREPARE FOR POSSIBLE DIVERSION SEE PAGE E-8

Lost Procedures; Climb, Communicate, Confess & Comply (The 4 C's)

1. Attempt to climb to an altitude that provides the best visibility.
2. Choose a power setting that will give you an economical fuel burn and lean for endurance. The bottom of the green arc (RPM) works well. Verify fuel remaining.
3. Look for prominent landmarks. Airports are often located along major roads.
4. Tune in a local VOR. Navigational aids can be found on the sectional chart.
5. Attempt to contract air traffic control (Center, FSS, or Tower). Center frequencies can be found in the Chart Supplement. Flight Service Station (FSS) common frequencies 121.5, 122.2, or 123.6.
6. If unable to contract a station set transponder to 7700 and call MAYDAY 3 times on "Guard Frequency" 121.5, giving your call sign and state that you are lost.
7. If unable to get reoriented, land before you run out of fuel. Select a good field and fly a low approach over it to determine whether it is suitable for landing. If suitable determine the wind direction and land.
8. Notify the aero club (cell phone) by calling collect if necessary. If there are no dwellings within sight, stay with the aircraft.
9. Use the aircraft survival kit as necessary.

RADIO FAILURE

1. Determine if an actual radio failure exists.

a. Make sure the auto selector on the audio control panel is in the PHONE position. The transmitter selector is on the correct radio and on the correct frequency.

b. If communication is not established go to the intercom fail safe mode. Turn the intercom volume control knob full CCW to click into fail-safe mode.

* The fail-safe mode will only work in the left seat.

CONTROLLED AIRFIELDS

1. If unable to determine the landing runway prior to enter in the airport traffic area, fly at least 2000' above the depicted airport elevation and observe wind indicators or other aircraft. Once the landing runway been determined enter the pattern.

a. Acknowledge tower light signals by rocking your wings.

b. If no light signal is received and no traffic conflicts exist, land. Refer to standard light signals chart for definition of light signals.

2. **ACADEMY AIRFIELD**

a**.** Enter the pattern for the eastern runway displaying your landing light.

b**.** Observe tower for a steady green light on base and final. If no light is observed and no visible conflict exists with other traffic or runway restriction, land.

3. UNCONTROLLED AIRFIELDS

a. Remain 500’ above the published pattern altitude while attempting to determine the landing runway.

b**.** If unable to use traffic to determine the landing runway, use wind indicators.

c**.** Once the landing runway has been determined, join the traffic pattern and land.

4. WHILE HOLDING NUMBER ONE OR TAXIING

a. Turn the aircraft towards the tower and flash the landing light and watch for a light signal.

Diversions from BLACK FOREST VOR, (BRK)

1. Determine fuel remaining.
2. Select an alternate field.
3. Turn to approximate heading.
4. Change altitude if necessary.
5. Notify ATC of your intentions.

Centennial
322° / 22 min
fuel 3.0
⊕

Limon
054° / 27 min
fuel 3.6
⊕

♦
Black Forest VOR
BRK 112.5

Meadow lake
077°/ 2 min
fuel .3
⊕

Colorado Springs
185° / 8 min
fuel 1.1
⊕

Butts
190°/ 9 min
fuel 1.2
⊕

Bullseye
115° / 10 min
fuel 1.3
⊕

calculations based on:
Power 2500 RPM
TAS 110 KIAS
Fuel burn 8.0
Altitude 8000’-10,000’ MSL

Pueblo
158° / 22 min
fuel 3.0
⊕

LANDING EMERGENCIES

Landing with a Flat Tire

1. Main Gear: Land on the side of the runway corresponding to the good tire.
2. Nose Gear: Land in the center of the runway, hold nose wheel off the ground as long as possible.
3. Stop the aircraft on the runway. Shut down the aircraft and call maintenance.

LIGHT SIGNALS

COLOR & TYPE OF SIGNAL	ON THE GROUND	IN FLIGHT
Steady Green	Cleared for takeoff	Cleared to land
Flashing Green	Cleared to taxi	Return for landing (to be followed by a steady green)
Steady Red	Stop	Give way to other aircraft and continue circling
Flashing Red	Taxi clear of runway in use	Airport unsafe – Do not land
Flashing White	Return to starting point on airport	----------
Alternating Red & Green	Warning – Exercise extreme caution!	Warning – Exercise extreme caution!

To acknowledge tower signals: Day: Rock wings
Night: Blink Landing Lights