1 Engine Failure at Altitude

Scenario: While en route to a patient evacuation, the aircraft experiences an engine failure at 6,000 feet. The pilot must glide to a safe landing site.

Challenges:

- Identify a suitable emergency landing location quickly.
- Communicate the emergency properly to ATC/UNICOM.
- Maintain best glide speed and prepare for landing.
- Coordinate with ground EMS for patient transport.

2 Severe Weather Diversion

Scenario: Midway through an EMS flight, weather conditions deteriorate rapidly, forcing the pilot to divert.

Challenges:

- Use the Nav Menu to locate an alternate airport.
- Inform ATC or announce intentions on UNICOM.
- Adjust approach and landing strategy for strong winds or low visibility.
- Ensure patient stability during rough air.

3 Emergency Landing in Remote Terrain

Scenario: A patient must be evacuated from a remote area, but there are no paved runways nearby.

Challenges:

- Select a suitable off-airport landing site (field, road, clear terrain).
- · Perform a controlled short landing.
- Manage rough terrain risks and potential aircraft damage.
- Coordinate with ground EMS roleplayers for patient pickup.

4 In-Flight Medical Emergency

Scenario: A patient onboard suffers a medical emergency requiring immediate attention and possible diversion.

Challenges:

- Communicate urgency while maintaining control of the aircraft.
- Request priority landing clearance at the nearest airport.
- Simulate in-flight medical procedures (roleplay required).
- Execute a rapid but safe landing.

5 Helicopter Rescue Hoist Malfunction (For helicopter EMS pilots)

Scenario: During a patient extraction, the hoist system malfunctions, requiring an alternative approach to rescue.

Challenges:

- Hold a stable hover while troubleshooting the issue.
- Decide whether to abort or attempt a manual landing rescue.
- · Communicate effectively with ground crews.
- Ensure patient safety despite operational challenges.

6 Fuel Emergency - Low Fuel Warning

Scenario: While returning to base, the aircraft unexpectedly burns fuel faster than expected, leading to a fuel emergency.

Challenges:

- Calculate remaining flight time and locate the nearest safe landing site.
- Communicate fuel emergency to ATC/UNICOM.
- Prioritize a safe but immediate landing.
- Execute emergency shutdown procedures upon landing.

7 Runway Blocked on Final Approach

Scenario: While on final approach for landing, another aircraft is discovered blocking the runway, requiring an immediate go-around.

Challenges:

- React quickly and execute a safe go-around.
- Re-coordinate landing clearance with ATC/UNICOM.
- Manage fuel and approach strategy for the second attempt.

• Keep patient condition stable during the delay.

8 Unexpected ATC Communication Failure

Scenario: While flying in controlled airspace, all ATC communication is lost, and the pilot must proceed with minimal guidance.

Challenges:

- Follow lost comms procedures and squawk 7600.
- Continue to navigate safely without ATC instructions.
- Announce intentions on UNICOM for traffic awareness.
- Ensure compliance with standard approach procedures.