**Section 515.963 Flight Program Safety Standards**

For rotor-wing and fixed-wing programs:

a) Flight crews shall wear the following protective clothing:

1) Reflective material or striping on uniforms during night operations;

2) Flame-retardant clothing for all rotocraft crews;

3) Flight helmets for all rotorcraft crews, including specialty teams; and

4) Boots or sturdy footwear for on-scene operations.

b) Safety and Environment

1) Oxygen storage shall be 10 feet from any heat source and 20 feet from any open flame.

2) All crews shall carry a photo ID with first and last names while on duty.

3) Family members or other passengers who accompany patients shall be identified and listed in the communications center.

4) A policy shall address the security of the aircraft and physical environment (i.e., hangar, fuel farm), including:

A) Security of the aircraft or ambulance if left unattended on a helipad, hospital ramp or unsecured airport or parking lot;

B) Education for pilots, mechanics and medical personnel to recognize signs of aircraft tampering; and

C) A plan to address aircraft tampering.

c) Completion of all education required by the EMS System and 14 CFR 135 and the following education components shall be documented for each of the flight medical personnel:

1) General aircraft safety:

A) Aircraft evacuation procedures (exits and emergency release mechanisms), including emergency shutdown − engines, radios, fuel switches, and electrical and oxygen shutdown;

B) Aviation terminology and communication procedures, including knowledge of emergency communications and knowledge of emergency communications frequency;

C) In-flight and ground fire suppression procedures (use of fire extinguishers);

D) In-flight emergency and emergency landing procedures (i.e., position, oxygen, securing equipment);

E) Safety in and around the aircraft, including national aviation regulations pertinent to medical team members, landing zone personnel when possible, patients, and lay individuals;

F) Specific capabilities, limitations and safety measures for each aircraft used, including specific education for backup or occasionally used aircraft;

G) Use of emergency locator transmitter (ELT); and

H) All ground support ambulances used for fixed wing operations shall meet minimal State ambulance licensing requirements located in Section 515.830.

2) Ground operations rotor wing (RW)

A) Landing site policies consistent with Federal Aviation Administration Helicopter Emergency Medical Services (HEMS) requirements;

B) Patient loading and unloading – policy for rapid loading/unloading procedures;

C) Refueling policy for normal and emergency situations;

D) Hazardous materials recognition, response and training policy consistent with 2014 Aeronautical Information Manual, Chapter 10 (2014, US Department of Transportation);

E) Highway scene safety management policy that demonstrates coordination with local emergency response personnel;

F) Survival education/techniques/equipment that are pertinent to the environment/geographic coverage area of the medical service based on the program risk assessment;

G) Smoke in the cockpit/cabin, firefighting in the cockpit/cabin; and

H) Emergency evacuation of crew and patients.

d) A planned and structured safety program shall be provided to public safety/law enforcement agencies and hospital personnel who interface with the medical service that includes:

1) Identifying, designating and preparing an appropriate landing zone (LZ).

2) Personal safety in and around the helicopter for all ground personnel.

3) Procedures for day/night operations, conducted by the medical team, specific to the aircraft, including:

A) High and low reconnaissance;

B) Two-way communications between helicopter and ground personnel to identify approach and departure obstacles and wind direction;

C) Approach and departure path selection; and

D) Procedures for the pilot to ensure safety during ground operations in an LZ with or without engines running.

4) Crash recovery procedures specific to the aircraft make and model shall minimally include:

A) Location of fuel tanks;

B) Oxygen shut-offs in cockpit and cabin;

C) Emergency egress procedures;

D) Aircraft batteries; and

E) Emergency shut-down procedures.

5) Education regarding "helicopter shopping" shall be included.

6) Records shall be kept of initial and recurrent safety education of pre-hospital, referring and receiving ground support personnel.

e) The program shall maintain a safety management system that is proactive in identifying risks and eliminating injuries to personnel and patients and damage to equipment.

f) Special requirements for night operations; SEMSV rotorcraft programs shall incorporate use of night vision goggles (NVG) and shall be compliant by December 31, 2018:

1) Pilot required; and

2) Medical crew recommended.

(Source: Amended at 48 Ill. Reg. 16159, effective November 1, 2024)