

SAN JOAQUIN COUNTY  
EMERGENCY MEDICAL SERVICES AGENCY

**TITLE: EMS AIRCRAFT LANDING SITES**

**EMS Policy No. 4447**

**PURPOSE:**

The purpose of this policy is to specify the requirements for EMS landing site selection, scene safety and landing site training standards.

**AUTHORITY:**

Division 2.5 of the California Health and Safety Code, Section 1797.220; Title 22, California Code of Regulations, Chapter 8; Pre-hospital EMS Aircraft Regulations, Title 21, Public Works Chapter 2.5 Division of Aeronautics (Department of Transportation), Public Utilities Code Section 21662.1 and 21662.5; and Federal Aviation Regulations.

**DEFINITIONS:**

- A. **EMS Landing Site:** A site at or as close as practical to a medical emergency; a transfer point; or a pre-designated site at or near a medical facility.
- B. **EMS Aircraft:** Any aircraft utilized for the purpose of pre-hospital emergency patient response and transport. EMS aircraft includes air ambulances and all categories of rescue aircraft.
- C. **Heliport:** An area of land, water, or structure used or intended to be used for the landings and take-offs of helicopters and includes its buildings and facilities, if any, as approved by the State of California, Department of Transportation, Division of Aeronautics.
- D. **Helispot:** An area of land improved or unimproved where the helicopter will be landing.

**POLICY:**

A. EMS Aircraft Landing Site Standards:

1. Safety guidelines including; Federal Aviation Regulations 91.3, California Code of Regulations Title 21 Public Works Chapter 2.5 Division of Aeronautics (Division of Transportation) Code Section 21662.5, National EMS Pilots Association Landing Site Guidelines and EMS Landing Site Safety Standards.
2. Landing sites to be utilized by EMS Aircraft shall be selected based upon scene safety and logistics. These sites include:
  - (a) Heliports and/or airports meeting Title 21 requirements;
  - (b) San Joaquin County EMS Agency designated day and/or night Landing Sites;

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- (c) Sites chosen at or near the scene of an incident (helispots) during daylight hours which meet the National EMS Pilots Association Landing Site Guidelines.
- 3. The use of hospital helipads, heliports, or other hospital property for the rendezvous and transfer of patient care between ground and air ambulances is strictly prohibited. The EMS Agency is prohibiting this practice in order to eliminate the inherent confusion and delay in transport this practice causes within the EMS system.

B. Landing Site Operations:

- 1. Selection of an emergency helispot shall be made by the "Incident Commander" (IC) of the incident, or be delegated by the IC to qualified personnel performing "Air Operations" (Helispot Manager) duties as specified in the Incident Command System.
  - (a) The "Pilot in Command" of the air ambulance has ultimate authority to refuse to land at any site.
  - (b) The Helispot Manager has the authority to prevent an air ambulance from landing at any site.
- 2. The decision to complete a mission that requires an air ambulance, including landing at the incident, shall be based solely on safety.
- 3. Radio communications should be established between the Incident Commander and/or helispot manager during landing and take off.

C. Training Standards and Curriculum for Ground Personnel:

- 1. The training curriculum for ground personnel as set forth in the National Emergency Medical Services Pilot's Association (NEMSPA) guidelines and is available from the local Air Ambulance service providers in an on-site training session.
- 2. San Joaquin County ambulance and emergency medical responder (EMR) providers should participate in a landing site training session at a minimum once every two (2) years. Training should include classroom and live aircraft operations taught by instructors of a San Joaquin County authorized air ambulance or air rescue provider.

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**PROCEDURE**

- A. The Incident Commander, or delegated Helispot Manager, should select an emergency helispot using the following criteria:
  1. Approach and departure angle of 6:1 (six feet horizontally for every foot of vertical obstruction) day; 8:1 night. Ensure that approach, departure and landing area is clear of overhead obstructions such as wires, trees and light poles, etc. Consider prevailing winds.
  2. Minimum size of 100 X 100 feet day or night.
  3. The surface must be a firm, relatively flat surface (less than a 10 degree slope), free of debris. All gravel, sand, dirt areas should be watered to prevent airborne particulates.
  4. At night a minimum of four flashing or steady burning lights should be used to improve the landing area by marking boundaries of the helispot. No lights should point in the direction of the aircraft.
- B. Management of the landing site shall include adherence to the following guidelines:
  1. Control pedestrian and vehicular traffic to immediate area. Deny access of all pedestrian and vehicular traffic to within 100 feet from the aircraft
  2. Radio contact between helicopter and "Air Operations" personnel should include description of location, winds, surface, obstructions, and HAZMAT.
  3. When the Helispot Manager is ready for the helicopter to land, the helicopter crew should be notified by radio, and the helispot manager should stand with back to the wind, arms outstretched pointing to the helispot.
  4. The Helispot Manager shall maintain the helispot until the helicopter departs, and communicates to "Air Operations" they are clear of the helispot.
- C. Helispots at higher altitudes and temperatures should be given special consideration for density altitude limitations of the helicopter. The pilot in Command, after considering these limitations will have final authority to decide if the helispot is acceptable for safe landing.