

SAN LUIS OBISPO COUNTY EMERGENCY MEDICAL SERVICES AGENCY  
PREHOSPITAL POLICY

Policy Reference No: 119  
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SUBJECT: EMS AIRCRAFT (HELICOPTER) OPERATIONS

PURPOSE

To establish a standardized procedure for the prehospital utilization and evaluation of EMS Aircraft (Helicopters) operating in San Luis Obispo County as a specialized resource providing emergency medical care and prehospital patient transport. This policy **EXCLUDES** EMS Aircraft (Helicopter) operations limited to search and rescue, and interfacility transfers.

AUTHORITY

- A. California Health and Safety Code, Division 2.5, Section 1798.169.
- B. California Code of Regulations, Title 22, Division 9, Chapter 8; Section 100300(c)(3) authorizes local EMS agencies to classify EMS Aircraft in their jurisdiction, except for aircraft operated by the California Highway Patrol, the California Department of Forestry and Fire Protection (CAL FIRE) or the California National Guard, which are classified by the EMS Authority.

DEFINITIONS

- A. Advanced Life Support (ALS) Rescue Aircraft: Rescue aircraft whose medical flight crew has at a minimum one attendant certified or licensed in Advanced Life Support (ALS).
- B. Air Ambulance: Any aircraft specially constructed, modified or equipped, and used for the primary purposes of responding to emergency calls and transporting critically ill or injured patients whose medical flight crew has at a minimum two (2) attendants certified or licensed in Advanced Life Support (ALS).
- C. Approved Landing Site: A permitted hospital heliport or designated EMS Landing Site. A listing of Approved Landing Sites is retained and regularly updated by the EMS Agency.

- D. Auxiliary Rescue Aircraft: A rescue aircraft that does not have a medical flight crew, or whose medical flight crew does not meet the minimum requirements established in Section 100283 of California Code of Regulations, Title 22.
- E. Basic Life Support (BLS) Rescue Aircraft: A rescue aircraft whose medical flight crew has at a minimum one attendant certified as an EMT-IA, or an EMT-I-NA with at least eight (8) hours of hospital clinical training and whose field/clinical experience specified in Section 100074 (c) of California Code of Regulations, Title 22, is in the aeromedical transport of patients.
- F. EMS Aircraft (Helicopters): Any aircraft utilized for the purpose of prehospital emergency patient response and transport including air ambulances and all categories of rescue aircraft.
- G. EMS Landing Site: A site used for the landing and taking off of EMS Aircraft (Helicopters) that is located at or as near as practical to a medical emergency or at or near a medical facility and:
  - 1. has been designated an EMS Landing Site by an officer authorized by a public safety agency, as defined in PUC Section 21662.1, using criteria that the public safety agency has determined is reasonable and prudent for the safe operation of EMS Aircraft (Helicopters).
  - 2. is used, over any 12 month period, for no more than an average of six landings per month with a patient or patients on the helicopter, except to allow for adequate medical response to a mass casualty event even if that response causes the site to be used beyond these limits.
  - 3. is not marked as a permitted heliport as described in PUC Section 3554.
  - 4. is used only for emergency medical purposes.
- H. Estimated Time of Arrival (ETA): The amount of time, including all pre-flight, take-off, and flight time, the EMS Aircraft (Helicopter) is expected over scene.
- I. Expedited Launch Zone: areas of historically remote and/or difficult access. A listing of Expedited Launch Zones is retained and regularly updated by EMS Agency.
- J. First Responders: On-duty EMTs, Paramedics and nurses trained in local EMS policies, and Public Safety personnel trained in first aid and CPR such as firefighters, peace officers, park rangers and lifeguards.
- K. Heliport: An area of land, water, or structure used or intended to be used for the landings and takeoffs of helicopters and includes its buildings and facilities, if any, as approved by the State of California, Department of Transportation, Division of Aeronautics.
- L. Incident Commander (IC): The highest-ranking representative (or designee) on scene of the public safety agency statutorily responsible for incident/scene management.
- M. Landing Zone: A prepared or unprepared area used for an emergency helicopter landing.

- N. Med-Com: The San Luis Obispo County Medical Communications Center, which coordinates all EMS Aircraft (Helicopter) response to the scene of all medical and trauma emergencies within San Luis Obispo County.
- O. Rescue Aircraft: An aircraft whose usual function is not prehospital emergency patient transport but which may be utilized, in compliance with local EMS policy, for prehospital emergency patient transport when use of an air or ground ambulance is inappropriate or unavailable. Rescue aircraft includes ALS Rescue Aircraft, BLS Rescue Aircraft and Auxiliary Rescue Aircraft.

## DISPATCH

- A. Med-Com shall initiate the dispatch of EMS Aircraft (Helicopter) when an incident is located within an Expedited Launch Zone **AND** there is a report of one (1) or more of the following conditions:
  - 1. Falls > 20'
  - 2. Rollover with ejection
  - 3. High-speed MVA or head-on collision
  - 4. Fatalities in the same vehicle as the injured
  - 5. Vehicle v. pedestrian with significant injuries
  - 6. Automobile accidents with extrications/entrapments
  - 7. Unconscious person(s)
  - 8. Burns to face or major portions of the body
  - 9. Significant penetrating trauma to head, neck, chest/back or abdomen
  - 10. Amputations and/or mangled limbs
  - 11. Multi-casualty incident (MCI)
- B. The designated ordering point for all EMS Aircraft shall be Med-Com. Med-Com shall coordinate EMS Aircraft (Helicopter) requests and cancellations.
- C. Med-Com shall **obtain simultaneously request [updated 07/29/2010]** an ETA from each EMS Aircraft (Helicopter) provider and dispatch the EMS Aircraft (Helicopter) with the shortest ETA.
- D. An Air Ambulance shall receive dispatch priority over an ALS Rescue Aircraft when ETAs are equal.
- E. ALS ground ambulance and appropriate first responders shall be dispatched with the EMS Aircraft (Helicopter).
- F. EMS Aircraft (Helicopter) shall have the capability to communicate and maintain communications with Med-Com, EMS providers (responding and on-scene), Base Hospitals and other appropriate facilities or agencies.
- G. Cancellation of EMS Aircraft (Helicopter) Response.

1. Med-Com may cancel an EMS Aircraft (Helicopter) when:
  - a. the Incident Commander, in consultation with the most medically-qualified first responder on scene, determines it is not needed.
  - b. one EMS Aircraft (Helicopter) has been dispatched, and a second EMS Aircraft (Helicopter) becomes available that reports an ETA at least five (5) minutes less than the ETA of the first EMS Aircraft (Helicopter) in which case Med-Com may cancel the first EMS Aircraft (Helicopter).
2. An EMS Aircraft (Helicopter) has the authority to self-cancel when:
  - a. the pilot deems it is unsafe to proceed or land.
  - b. it is determined that there are no patients, or the patient is not appropriate for air transport.
3. Med-Com shall notify the transport provider(s) and/or responding personnel of any cancellation.

#### REQUEST OF EMS AIRCRAFT

- A. Responding or on-scene first responders may request an EMS Aircraft (Helicopter) and assume the responsibility of meeting both Time and Need Criteria.
- B. A request for EMS Aircraft (Helicopter) shall be based on information indicating that **BOTH** the following Time Criteria **AND** Need Criteria are met.
  1. Time Criteria (one or more of the following):
    - a. Transport by EMS Aircraft (Helicopter) would result in a time savings of at least ten (10) minutes over ground transport.
    - b. The scene location is difficult or inaccessible by ground ambulance which could result in a prolonged response and transport.
  2. Need Criteria:
    - a. There is a report of one (1) or more of the following conditions:
      - i. Falls > 20'
      - ii. Rollover with ejection
      - iii. High-speed MVA or head-on collision
      - iv. Fatalities in the same vehicle as the injured
      - v. Vehicle v. pedestrian with significant injuries
      - vi. Automobile accidents with extrications/entrapments
      - vii. Unconscious person(s)
      - viii. Burns to face or major portions of the body
      - ix. Significant penetrating trauma to head, neck, chest/back or abdomen
      - x. Amputations and/or mangled limbs
      - xi. Multi-casualty incident (MCI)

- b. On-scene assessment determines one (1) or more of the following conditions:
- i. Altered mental status with no response to prehospital treatment.
  - ii. Respiratory arrest or severe respiratory compromise.
  - iii. Complications of childbirth, e.g., breech, abnormal presentation, massive blood loss, neonatal distress.
  - iv. Hypotension:
    - Systolic blood pressure < 90
    - Pulse rate >120 BPM
    - Cool, pale or diaphoretic skin
    - Life-threatening hemorrhage
  - v. Acute spinal injury or neurological compromise.
  - vi. Serious burns.
  - vii. Potential neurovascular compromise to a limb.
  - viii. Significant penetrating trauma to the head, neck, chest/back or abdomen.
  - ix. Mechanism of injury with signs/symptoms of:
    - Unconscious or altered level of consciousness
    - Respiratory compromise
    - Systolic blood pressure < 90
    - Pulse rate >120 BPM
    - Cool, pale or diaphoretic skin

## SCENE MANAGEMENT

- A. Scene management will be in accordance with State regulations, local agreements, and *SLO County Emergency Medical Services Agency Prehospital Policy 101: Scene Management*.
- B. Landing Zone Safety
1. The pilot of the EMS Aircraft (Helicopter) shall make the final decision as to the safe operation of the aircraft and the suitability of the Landing Zone.
  2. EMS Aircraft (Helicopter) Landing Zone and safety operations shall follow the guidelines outlined in EMS Authority Air Medical Guidelines.

## TRANSPORT

- A. Criteria for Transport by EMS Aircraft (Helicopter):
1. Patient transport by EMS Aircraft (Helicopter) shall meet **BOTH** the Time Criteria **AND** On-Scene Assessment Need Criteria outlined in this policy.
  2. EMS Aircraft (Helicopter) transportation may not be suitable in the following situations:

- a. Medical or traumatic cardiac arrest not responding to prehospital therapy (consider terminating resuscitation consistent with *SLO County Emergency Medical Services Agency Prehospital Policy 116: Prehospital Determination of Death*)
  - b. Patients contaminated by hazardous material
  - c. Patients who are violent or have behavioral emergencies
- B. EMS Aircraft (Helicopter) medical flight crew should consider turnover of patient transport to ground ambulance if criteria for transport is not indicated by patient condition.
- C. The pilot ultimately determines if it is safe to transport a patient and may turn over transport of a patient to an ALS ground ambulance.
- D. Ground ambulance response shall **NOT** be terminated until EMS Aircraft (Helicopter) departs with patient.
- E. Patients shall be transported to the closest hospital with a permitted Heliport. In extreme circumstances, e.g. MCI, a hospital with an Approved Landing Site may also be utilized.

#### QUALITY IMPROVEMENT

Consistent with Chapter 12 of Title 22 of the California Code of Regulation, EMS Aircraft (Helicopter) service providers are to develop and participate in a QI program in cooperation with the SLO County EMS Agency and other EMS system participants as outlined in *SLO County Emergency Medical Services Agency Prehospital Policy 109: Quality Improvement Program* and *SLO County Emergency Medical Services Agency Prehospital Policy 110: Quality Improvement Program Guidelines*.