

**EMS AIRCRAFT TRANSPORT**

**NOTE:** EMS Aircraft utilized in Alameda County for prehospital emergency care will meet the qualifications specified in Title 22, Chapter 8.

**1. DEFINITIONS**

- 1.1 **"EMS Aircraft"** any aircraft utilized for the purpose of prehospital emergency patient response and transport, which includes air ambulances and all categories of rescue aircraft
- 1.2 **"Air Ambulance"** any aircraft specially constructed, modified or equipped and used for the primary purpose of responding to emergency calls and transporting critically ill or injured patients whose flight crew has at a minimum two (2) attendants certified or licensed in advance life support
- 1.3 **"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 include:
  - ▶ **"ALS Rescue Aircraft"** a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified or licensed in advanced life support
  - ▶ **"BLS Rescue Aircraft"** a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified as an EMT-1
  - ▶ **"Auxiliary Aircraft"** a rescue aircraft which does not have a medical flight crew or whose flight crew does not meet the minimum requirements of a BLS Rescue Aircraft
- 1.4 **"Classifying EMS Agency"** the agency which categorizes the EMS aircraft into groups identified in Section 100300(e). This shall be the local EMS agency in the jurisdiction of origin except for aircraft operated by the CHP, CDF or National Guard
- 1.5 **"Authorizing EMS Agency"** the local EMS agency which approves utilization of specific EMS aircraft within its jurisdiction. EMS aircraft must be authorized by the local EMS agency in order to provide pre hospital patient transport within the jurisdiction of the local EMS agency
- 1.6 **"Approved helipad"** a helipad approved for helicopter flight operations by the FAA and CALTRANS
- 1.7 **"EMS Landing Site"** a site at or near a medical facility, which has been preselected and approved for the landing and taking off of EMS Aircraft but not designed or used exclusively for helicopter flight operations.

**2. INITIATING EMS AIRCRAFT RESPONSE**

- 2.1 The decision to request an EMS Aircraft is based on medical and scene management considerations
- 2.2 Prior to arrival at the scene - An EMS Aircraft may be activated by any responding agency if there may be a potential need for air transport based on the incident type or location of the victim(s)
- 2.3 All responding agencies shall be notified when an EMS Aircraft has been requested
- 2.4 When on-scene, the decision to activate an EMS Aircraft shall be made by the IC (Incident Commander or his/her designee). upon:
  - ▶ the advice of on-scene medical personnel and/or
  - ▶ the suitability of the scene for helicopter operations

**3. CONSIDERATIONS FOR REQUESTING EMS AIRCRAFT:** (one or more of the following conditions exists)

- 3.1 Long response times to scene (>20 minutes)
- 3.2 Inaccessibility to the scene by ground personnel or equipment
- 3.3 Extended extrication
- 3.4 Extended transport to an appropriate facility > 20 minutes (e.g. remote area, peak traffic, closest most appropriate facility closed)

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- 3.5 Patients meeting Critical Trauma Patient Criteria (see [page 24](#)) with extended transport time to an approved Trauma Center
- 3.6 Patients requiring advanced skills not in the Alameda County Paramedic scope of practice. (e.g. RSI, Surgically places thoracostomy tubes)
- 3.7 Patient conditions where a decrease in transport time to an appropriate medical facility may be a significant factor
- 3.8 Patients in cardiac arrest from drowning or penetrating trauma with a short down time. In general, **all other patients with cardiac arrest should not be transported in an air ambulance or rescue aircraft**
- 3.9 A multi-casualty incident exists with a need for increased resources

**4. EMS AIRCRAFT DISPATCH**

- 4.1 All EMS Aircraft activations shall be made through ALCO-CMED. ALCO should be given the following information if available:
  - ▶ Number of Patients and acuity of each
  - ▶ Type and extent of injuries
  - ▶ Location of Landing Site (use Thomas Brothers Map coordinates or Longitude and Latitude, if possible)
  - ▶ Nearest landmarks (e.g., highways, railroad tracks, water towers)
  - ▶ Weather conditions, especially high winds, fog or visibility problems.

**5. COMMUNICATION**

- 5.1 ALCO-CMED shall request activation of the EMS Aircraft that has the shortest total response time to the scene/rendezvous site
- 5.2 The responding EMS Aircraft may contact ALCO on VHF TAC 4 (154.070) while en route to the scene to confirm radio frequency and ground contact/incident identifier
  - ▶ The preferred frequency for helicopter to ground unit communications is: CALCORD (156.075)
  - ▶ Alternate frequencies are VHF TAC 4 (154.070) and VHF TAC 5 (154.235), but should be coordinated through ALCO-CMED
  - ▶ Fire White (154.280) is not authorized for cross patch to an ambulance or helicopter
- 5.3 The responding EMS Aircraft will advise ALCO of ETA in minutes and clock hours. ALCO shall advise the requesting agencies of the EMS Aircraft's ETA
- 5.4 ALCO shall keep responding/on scene ground personnel updated as to aircraft status (cancellation, delays, inability to respond, etc.)
- 5.5 If multiple aircraft are responding to the scene or in the area of the incident, ALCO shall attempt to notify each aircraft of multiple aircraft response
- 5.6 The EMS Aircraft shall contact the receiving hospital prior to arrival. A patient care report and an ETA should be given

**6. UTILIZATION OF RESCUE AIRCRAFT**

- 6.1 A number of public agencies, including East Bay Regional Park District, California Highway Patrol, Coast Guard and various military units, operate aircraft which are classified as ALS Rescue Aircraft, BLS Rescue Aircraft or Auxiliary Aircraft
- 6.2 The decision to transport in a rescue aircraft should be made by on-scene medical personnel and is based on patient condition and availability of other resources
- 6.3 Considerations for utilizing rescue aircraft:

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- ▶ the patient is in an area that is inaccessible to ground transport vehicle,
- ▶ the ETA of a ground ambulance and/or Air Ambulance exceeds the loading and lift-off time by the rescue aircraft
- ▶ an air ambulance is unavailable
- ▶ the patient clearly does not require the level of service provided by an air ambulance
- ▶ a rescue requiring the use of a hoist device is indicated

6.4 When an EMT-P accompanies a patient in a BLS rescue aircraft, the EMT-P must:

- ▶ have available all appropriate medical equipment needed to care for the patient;
- ▶ receive orientation to the aircraft and to medical air transport procedures according to Title 22, Chapter 8, Section 100302

7. **SAFETY/LANDING** - Safety rules at the scene include:

7.1 Landing Zone considerations (L-Z):

- ▶ 75' x 75' during daylight, 100' x 100' during night hours,
- ▶ clear of cross wires, debris, or other obstacles, relatively flat
- ▶ Consult CHP/Law Enforcement when landing on roadways

7.2 Ground personnel should coordinate with public safety agency for road closures, if necessary

7.3 The fire department should determine the landing zone and assure scene safety during landing

7.4 Before clearing EMS aircraft to land the IC must ensure that the helicopter will not block the transport of patients out of the scene by ground. If ground transport will be blocked then the IC must make sure that ground units with critical patients have departed before clearing aircraft to land

7.5 The pilot in command shall have the final authority as to the safe operation of the air transport. If, in the pilot's judgment, patient transport by an EMS aircraft would be unsafe, regardless of the patient's condition, the patient should be transported by ground ambulance

7.6 Ground personnel shall not approach the aircraft unless directed to do so and accompanied by the aircraft crew

7.7 Regardless of how the request was initiated, only the IC shall authorize the landing of a helicopter at the scene. Coordination between medical personnel and the IC is essential

8. **CANCELING EMS AIRCRAFT RESPONSE**

8.1 Ground transport should be utilized if:

- ▶ the overall prehospital time will not be decreased by the use of air transport and/or
- ▶ the patient does not meet criteria identified in Section 3 for Requesting EMS Aircraft.

8.2 Regardless of how an EMS Aircraft activation was initiated, only the IC shall cancel the response. The IC will cancel the EMS Aircraft response if so advised by on-scene medical personnel (see 9.1 below). Coordination among all medical personnel and the IC is essential

8.3 The IC should only cancel an EMS Aircraft response if on scene and aware of the patient's condition

8.4 EMS Aircraft response can be canceled by:

- ▶ notifying ALCO, who will then notify all responding agencies
- ▶ the IC if in contact with the responding Aircraft

8.5 The IC shall be immediately advised of the decision to transport by ground

8.6 If the EMS Aircraft arrive on scene prior to the ground ambulance, the responding ground ambulance shall not be canceled until:

- ▶ the EMS Aircraft has left the scene with the patient aboard; and,
- ▶ it is determined by the IC or his/her designee that there are no additional patients to be transported

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**9. TRANSPORT**

- 9.1 The transporting ALS provider shall have authority and responsibility to determine mode of patient transport (air vs. ground) and patient destination. The transporting ALS provider must consult with first responder personnel and EMS Aircraft crew, if applicable, prior to making this decision
- 9.2 Alameda County transport policies shall be followed for all patients requiring air transport. Patients shall be transported to the closest hospital most appropriate for the medical needs of the patient with an approved Helipad or EMS Landing Site
- 9.3 Trauma Centers with approved helipads or emergency landing sites are:
  - ▶ Eden Hospital (Castro Valley)
  - ▶ Children's Hospital (Oakland)
  - ▶ John Muir Hospital (Walnut Creek)
  - ▶ Highland General Hospital (Coast Guard Island)
  - ▶ Regional Medical Center (San Jose)
  - ▶ Valley Medical Center (San Jose)
  - ▶ Stanford University Hospital (Palo Alto)
- 9.4 Alameda County Receiving Hospitals with approved helipads or emergency landing sites are:
  - ▶ Eden Hospital
  - ▶ Washington Hospital
  - ▶ Valley Care Medical Center
  - ▶ Children's Hospital

**10. PATIENT CARE RESPONSIBILITIES**

- 10.1 Transfer of care shall occur:
  - ▶ upon arrival/landing of the responding personnel at the scene when patient contact is made
  - ▶ after a verbal patient care report is given to the transporting agency in accordance with page 147, "Transfer of Care"
- 10.2 The EMS Aircraft crew may release the patient to an ALS ground transport unit if ground transport is determined appropriate
- 10.3 The EMS Aircraft or ALS ground ambulance crew may release a patient to BLS rescue aircraft if the patient does not require ALS care but air transport is determined to be appropriate.

**11. DOCUMENTATION** - Appropriate documentation must be completed on all patients transported by the EMS Aircraft crew and faxed immediately to ALCO EMS at (510) 618 – 2099**12. REQUEST FOR MILITARY AIRCRAFT**

- 12.1 Military assistance may be used when non-disaster inland search and rescue operations may exceed local and state capabilities. Examples: water rescue, rescue in inclement weather, hoist rescue
- 12.2 One hour response time minimum time should be expected. An ETA can only be given after the request is made and an assessment of available resources has been completed
- 12.3 If hoist rescue requested do not place the patient on a stretcher or stokes basket, although the patient may be placed on a backboard. The hoist equipment requires specialized equipment
- 12.4 The incident commander determines the need for military aircraft and contact ALCO with the following information:
  - ▶ Incident location and longitude and latitude if known
  - ▶ Incident description including the number of injured, types of injuries and topography
  - ▶ If a hoist is requested, an estimate of the distance the patient will need to be lifted from the ground to the aircraft

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- ▶ Altitude of incident if known
- ▶ Air to ground contact frequencies

**12.5 Notification Procedure - ALCO:**

- ▶ **For maritime rescue:** call Coast Guard Dispatch directly at (415) 556-2105 or (415) 556-2103
- ▶ **For land (non-maritime) rescue or assistance call:**

- State OES Law Division at (800) 852-7550 for approval
- Coast Guard dispatch (415) 556-2103 to give the Coast Guard helicopter flight crew an advanced notification. Since the Coast Guard's primary responsibility is maritime search and rescue, they can notify ALCO of their availability

- 12.6 If additional information is needed, ALCO will direct the questions to the requesting IC's dispatch center for direct contact.