

PREHOSPITAL EMS AIRCRAFT POLICIES

Effective August 1, 1989

PURPOSE

The purpose of this policy is to establish minimum standards for the utilization of EMS aircraft in the prehospital setting and to integrate these aircraft into the local EMS patient transport system. Ground ambulance should be considered the backbone of the transportation system, and aircraft are to be utilized only as a specialized resource for the transport of emergency medical patients(s) within the Counties of Inyo, Mono and San Bernardino.

DEFINITIONS

Advanced Life Support - “Advanced Life Support” or “ALS” as used herein means any definitive prehospital emergency care role approved by the local EMS agency, in accordance with State regulations, which includes, but is not limited to all of the specialized care services listed in Section 1797.52 of the Health and Safety Code.

Advanced Life Support Rescue Aircraft - “Advanced Life Support Rescue Aircraft” or “ALS Rescue Aircraft” as used herein means a rescue aircraft whose medical flight crew has at a minimum two medical attendants with at least one certified or licensed in advanced life support and another with minimum of certification or license as an EMT -I.

Air Ambulance - “Air Ambulance” as used herein means any aircraft specially constructed, modified or equipped, and used for the primary purposes of responding to emergency calls and/or transporting critically ill or injured patients(s) whose medical flight crew has a minimum of two (2) ALS certified attendants.

Air Ambulance Service - “Air Ambulance Service” as used herein means an air transportation service, which utilizes air ambulances. This includes the provision of qualified flight crews and aircraft maintenance. **Air Ambulance Service or Air Rescue Service Provider** - “Air Ambulance Service” or “Air Ambulance Service Provider” as used herein means the individual or group that owns and/or operates an air ambulance or air rescue service.

Air Rescue Service - “Air Rescue Service” as used herein means the utilization of EMS aircraft specially constructed, modified or equipped and used for the purpose of responding to emergency calls requiring special equipment and expertise due to the terrain, and or circumstances of the accident, (i.e. mountain rescue, water rescue, etc.)

Authorizing EMS Agency - “Authorizing EMS Agency” as used herein means the local EMS Agency, which approves utilization of specific aircraft within its jurisdiction.

Auxiliary Rescue Aircraft - Auxiliary Rescue Aircraft" as used herein means a rescue aircraft which does not have a medical flight crew, or whose medical flight crew, do not meet the minimum requirements established under Basic Life Support Rescue Aircraft Definition.

Basic Life Support – "Basic Life Support" or "BLS" as used herein means those procedures and skills in the EMT-I scope of practice as listed in Section 100063, Title 22, Administrative Code.

Basic Life Support Rescue Aircraft - "Basic Life Support Rescue Aircraft" or "BLS Rescue Aircraft" as used herein means a rescue aircraft whose medical flight crew has at a minimum one attendant certified as an EMT-I-NA with at least eight (8) hours of hospital clinical training and whose additional training and experience specified in Section 100074c of Title 22, Administrative Code, is specific to the aero-medical transport of patients.

Classifying EMS Agency - "Classifying EMS agency" or "Classifying Agency" as used herein means the agency, which categorized the EMS aircraft. This shall be the local EMS agency in the jurisdiction of origin except for aircraft operated by the California Highway Patrol, the California Department of Forestry or the California National Guard, which shall be classified by the EMS Authority.

Designated Dispatch Center - "Designated Dispatch Center" as used herein means the agency, which has been designated by the local EMS agency for the purposes of coordinating air ambulance or rescue aircraft response to the scene of a medical emergency within the jurisdiction of a local EMS agency.

Emergency Medical Services Aircraft - "Emergency Medical Services Aircraft" or "EMS Aircraft" as used here in means any aircraft utilized for the purposes of prehospital emergency response and transport, which has been authorized or identified as such by the local EMS agency. EMS Aircraft includes air ambulances and all categories of rescue aircraft.

Jurisdiction of Origin - "Jurisdiction of Origin" as used herein means the local EMS jurisdiction within which the authorized air ambulance or rescue aircraft is operationally based for a period of greater than 24 hours within a 10-day period.

Medical Flight Crew - "Medical Flight Crew" as used herein means those individuals, excluding the pilot, specifically assigned to care for patient(s) during aircraft transport.

Rescue Aircraft - "Rescue Aircraft" as used herein means 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 on an incidental basis when an air or ground ambulance is unavailable or inappropriate due to delay in availability or extended response time. Rescue aircraft includes ALS rescue aircraft, BLS rescue aircraft and Auxiliary rescue aircraft.

GENERAL PROVISIONS

1. EMS aircraft shall be classified by ICEMA into the following categories:
 - a. Air Ambulance
 - b. ALS Rescue Aircraft
 - c. BLS Rescue Aircraft
 - d. Auxiliary Rescue Aircraft
2. EMS Aircraft classification shall be reviewed in accordance with ICEMA policies. Reclassification shall occur if there is a transfer or ownership or a change in the aircraft's category.
3. EMS Aircraft must be authorized by ICEMA in order to provide prehospital patient transport within the counties of Inyo, Mono, and San Bernardino. A request from a designated dispatch center shall be deemed as authorization of the California Highway Patrol, Department of Forestry, National Guard or aircraft operated by the Federal Government.
4. Any company, lessee, agency (excluding agencies of the federal government), provider, owner, operator who provides or makes available prehospital air transport or medical personnel either directly or indirectly or any hospital where an EMS aircraft is based, housed or stationed permanently or temporarily shall adhere to all federal, state, and local statutes, ordinances, policies, and procedures related to aircraft operations.
5. ICEMA shall maintain an inventory of:
 - a. The number and type of authorized EMS aircraft.
 - b. The patient capacity of authorized EMS aircraft.
 - c. The level of patient care provided by EMS aircraft personnel.
 - d. Receiving facilities with landing sites approved by the State Department of Transportation, Aeronautics Division.
6. ICEMA shall have written agreements with air ambulance or air rescue providers routinely serving their jurisdiction. The agreement will address "regular", "occasional", or "sporadic" response and assurance of compliance with all local, regional, state and federal rules and regulations.
7. When aero-medical prehospital response is routinely requested from outside the area of jurisdiction, interagency agreements shall be executed between ICEMA and the EMS agency from the County of origin which formalize:
 - a. EMS Aircraft authorization
 - b. EMS Aircraft provider designation
 - c. Skills authorization

- d. Local medical control policies and procedures including but not limited to:
 1. Medical direction
 2. Record keeping requirements
 3. Patient transfer between ground and air medical personnel
 4. Patient destination
 5. Requirements for equipment and supplies.
8. When aero-medical prehospital response is on an irregular basis requested from outside the area of jurisdiction of ICEMA, medical flight crew may perform their basic scope of practice without further authorization provided that:
 - a. The request is made by a designated dispatch center in the requesting jurisdiction.
 - b. Medical control is maintained in accordance with the policies and procedures of the local EMS agency in the jurisdiction of origin.
9. No person or organization shall provide or hold themselves out as providing prehospital EMS aircraft services unless that person or organization has been classified and authorized by ICEMA or in the case of state agencies, the EMS Authority.
10. Authorized EMS Aircraft providers shall maintain required EMS provider records including, but not limited to:
 - a. Employee records, which include certification and/or qualifications of each employee.
 - b. EMS Aircraft maintenance dates.
 - c. EMS Aircraft dispatch records.
 - d. Limits of insurance coverage as defined by San Bernardino County Risk Management.
11. EMS Aircraft medical flight crews shall follow the ICEMA's policies and procedures for medical control.
12. ICEMA may establish fees to recover costs directly related to initial and/or continuing authorization of EMS Aircraft.

EMS Aircraft Provider Reports

EMS Aircraft providers shall complete an ICEMA Air Transportation Report for every transport and send it to ICEMA within ten days. The report shall include:

- a. Date of Service
- b. Flight log number
- c. Incident location
- d. Paramedic log number and paramedic unit

- e. Time of air ambulance "LIFT OFF"
- f. Time air ambulance on scene
- g. Time air ambulance departed scene
- h. Time air ambulance arrived at paramedic receiving center
- i. Nearest paramedic receiving center
- j. Nearest trauma center
- k. Specific reason for use of air ambulance

Equipment and Supplies

1. EMS Aircraft shall have on board the required medical supplies and equipment commensurate with the scope of practice of the medical flight crew as specified by the authorizing EMS agency.
2. Exceptions to the required medical supplies and equipment list is based upon aircraft weight limitations may be determined by the authorizing EMS agency
3. Additional supplies and/or equipment may be carried on board to meet the needs of a specific type of patient and/or additional medical personnel not usually staffing the EMS Aircraft.
4. Each EMS aircraft shall utilize appropriate radio frequencies for dispatching, routing, and coordination of flights and have the capability of communicating with:
 - a. The designated dispatch center
 - b. EMS ground units at the scene of an emergency
 - c. Base Hospitals
 - d. Receiving Hospitals
 - e. Other appropriate facilities or agencies.
5. Equipment may be inspected by ICEMA for compliance to this policy.
6. EMS Aircraft shall be configured so that:
 - a. There is sufficient space in the patient compartment to accommodate one (1) patient on a stretcher and one (1) patient attendant on BLS Rescue Aircraft Unit.
 - b. There is sufficient space for medical personnel to have adequate access to the patient in order to carry out necessary procedures including CPR on the ground and in the air.
 - c. There is sufficient space for required medical supplies and equipment.
 - d. There are adequate safety belts and tie-downs for all personnel, patient(s), stretchers, and equipment to prevent inadvertent movement.
 - e. There is adequate interior lighting for patient care arranged so that it does not interfere with the pilot's vision.

7. Air ambulances shall have sufficient space to accommodate one (1) patient and two (2) patient attendants.

Personnel

1. The medical flight crew of an air ambulance, when responding to the prehospital setting and transporting a patient, shall at minimum, consist of two attendants trained and certified in advanced life support.
2. The medical flight crew of other EMS Advanced Life Support Aircraft shall at a minimum consist of attendants certified in advanced life support, or registered nurse, or physician with appropriate EMS training as approved by ICEMA and another attendant with minimum of certification or license as an EMT-1.
3. All medical flight crew of EMS Aircraft shall have training certified by ICEMA in aero-medical transportation including but not limited to:
 - a. EMS Aircraft patient handling consideration
 - b. Changes in barometric pressure, decompression sickness and air embolism
 - c. Oxygen therapy in the airborne environment. Patient assessment in the airborne environment.
 - d. Interaction control in the airborne environment.
 - e. Hazardous materials response procedures
 - f. Aircraft operational systems
 - g. Crash and survival procedures
 - h. Mapping/aircraft orientation
 - i. Aircraft safety
 - j. In-flight treatment modalities
 - k. EMS system and aviation communication procedures
 - l. Roles and responsibilities
 - m. The prehospital care system(s) within which they operate including related protocols.
 - n. Use of on-board medical equipment
4. Medical flight crews shall participate in continuing education requirements as required by their licensure or certification. Continuing education specific to aero-medical transport may be required.
5. In situations where medical flight crews are less qualified than the ground personnel from whom they received patients, they may assume patient care responsibility only in accordance with ICEMA policies and procedures.

6. Pilots of EMS Aircraft shall be oriented to the local EMS system(s) within which they operate and comply with the current safety guidelines approved by ICEMA.

DISPATCH

Designated Dispatch Center

1. The San Bernardino County Communications Center shall coordinate and be aware of EMS aircraft resources operating within the County and maintain status of these units.
2. The Designated Dispatch Center for Inyo County shall be _____ and Mono County shall be _____.
3. The Communications Center shall act as access coordinator to air ambulance and/or air rescue services within the County.
4. The Center shall provide liaison with other counties in the event that additional resources are needed.
5. A request from the designated dispatch center shall be deemed as authorization of aircraft operated by the California Highway Patrol, Department of Forestry, National Guard or the Federal Government.
6. The Designated Dispatch Center shall operate in accordance with relevant EMS program regulations.
7. EMS Aircraft requests shall only be made through a dispatch center, which has been designated by a local EMS agency.

Designated Dispatch Center Data Collection

The Designated Dispatch Center shall document the following data:

1. Call History

Log of all air ambulance requests and assignments to include:

- a. Time air ambulance requested by Agency
- b. Time air ambulance requested for "STANDBY"
- c. Time air ambulance requested for "ACTIVATION"
- d. Time air ambulance requested for "CANCELLATION" by requestor
- e. Agency requesting air ambulance
- f. Name of person receiving the request for "STANDBY" at the coordinating agency
- g. Name of person receiving the request for "ACTIVATION" at the coordinating agency
- h. Name of air ambulance service provider requested for "STANDBY"
- i. Name of air ambulance service provider requested for "ACTIVATION"

- j. Any discrepancies in status should be logged
- k. Time agencies are notified of air ambulance activation
- l. ETA of responding air ambulance
- m. Lifting off to respond
- n. Arrival at scene
- o. Departure from scene/location of destination
- p. ETA to the receiving medical facility
- q. Arrival at the medical facility
- r. Departure from the medical facility
- s. Arrival at their base of operation

Monthly Report to ICEMA

All required data and reports will be submitted to ICEMA by the 15th day of the month following the month for which the data applies.

- 1. Designated Dispatch Center Summary Activity Report shall include:
 - a. Listing of Requesting Agency by date and provider assigned
 - b. Actual activations, standby requests and cancellations
- 2. Copies of Coordinating Agency's Assignment and Status Logs

Type of Personnel and/or Organizations That May Request EMS Aircraft Through the Public Safety Incident Commander If On Scene

- 1. Public Safety Personnel
- 2. EMS Provider Personnel
 - a. Base Hospital Emergency Department Physician
 - b. Receiving Hospital Emergency Department Physician
 - c. EMT-Ps, EMT-IIs, EMT-Is on scene (highest medical authority on scene)

Process for Activation

The Public Safety Incident Commander shall request any EMS Aircraft directly through their own jurisdictional dispatch center who will in turn place a request through the designated dispatch center. In the event public safety personnel are not on scene, private field providers may request any EMS Aircraft through the designated dispatch center.

Transportation Decision Methods

- 1. The criteria for requesting aircraft transportation shall be as follows:

- a. The Personnel and/or Organizations shall determine the need for an air ambulance based upon the following considerations:
 - 1) Safe operating conditions at the scene
 - 2) Ground versus air ambulance response and transport time factors as they relate to:
 - a) patient (s) status
 - b) location of incident
 - c) location of appropriate receiving center
 - d) availability of ground transport
 - e) availability of air transport
 - f) air ambulance; air rescue needs
 - b. Air Transport Zones (appendix A -to be determined)
2. Determination on the method of transportation shall be made with the concurrence of the base hospital physician (for medical reasons) and the Incident Commander (based upon scene management consideration).
 3. If base hospital contact cannot be established or maintained, the decision for the method of transportation shall be made with the concurrent of the highest medical authority on scene (for medical reasons) and the Incident Commander (based upon scene management considerations).
 4. Patient(s) that are transported by EMS Aircraft shall be delivered to an approved appropriate receiving facility.
 5. Patients(s) that meet the criteria for Trauma Care System entry shall be transported in accordance with the ICEMA Trauma Care System policies.

Priority Assignment

Priority assignment by the Designated Dispatch Center shall be made utilizing the following "guidelines":

1. Agency first requesting an air ambulance for routine operations shall receive first assignment.
2. A request for activation shall supersede a STANDBY request.
 - a. The Designated Dispatch Center shall immediately notify the Requestor placing the air ambulance on STANDBY and inform them of ACTIVATION to another.
3. For multiple requests for the air ambulance, the coordinating agency must advise the first requesting Incident Commander of other subsequent calls and/ or requests. Upon concurrence or originating requestor, the air ambulance may be directed to another scene.

Cancellation

1. The decision to cancel the air ambulance may be made by:
 - a. The Pilot in command of the aircraft, for safety reasons
 - b. The Public Safety Incident Commander based upon scene management considerations in concurrence with the base hospital physician for medical reasons. If base hospital contact cannot be made, decision to cancel for medical reasons shall be made with the concurrence of the highest medical authority on scene.
 - c. The designated dispatch center
2. The requestor must notify the Designated Dispatch Center and the base hospital physician, if possible, whenever the air ambulance is cancelled.
3. The Designated Dispatch Center shall notify all agencies involved in the activation process of the cancellation of the air ambulance request.

Tracking of EMS Aircraft

An EMS Aircraft Dispatcher should maintain the status of local EMS Aircraft. Local EMS Aircraft providers should continuously update the dispatch center of their location and availability for response. Locator devices approved by the local EMS Agency must be on board EMS Aircraft.

Communications

1. A dispatcher should gather information from an individual or agency that is notifying the Dispatch Center of an incident or requesting EMS Aircraft response. The information obtained should contain at least the following:
 - a. Incident location -Map reference, if possible. (i.e. Thomas Bros.)
 - b. Incident Type
 - c. Call back number
 - d. Responding Agency (ies)
 - e. Relevant Medical Information
 - f. Landing Limitations at the Scene (weather, terrain, etc.)
2. A dispatcher should contact an EMS Aircraft Provider and communicate at least the following information:
 - a. "Order number" (requesting agency's incident number)
 - b. Type of incident and relevant medical information
 - c. Incident Location
 - d. Map Coordinates
 - e. Responding Agency (ies)

- f. Responding EMS Provider
 - g. Landing Limitation and/or scene hazards
 - h. Reporting Party
 - i. Call sign and radio frequency of ground contact.
3. If an EMS Aircraft Provider is dispatched to an emergency scene, EMS aircraft personnel should notify the dispatch center upon:
- a. Lifting off to respond
 - b. Arrival at scene
 - c. Departure from scene/location of destination
 - d. ETA to the receiving medical facility
 - e. Arrival at the medical facility
 - f. Departure from the medical facility
 - g. Arrival at their base of operation

Operational Requirements

1. A ground ambulance if available may be simultaneously dispatched with the EMS Aircraft.
2. Consideration must be given to dispatching of Air Rescue Provider in the event the incident requires capabilities of the medical flight crew beyond the normal, i.e. mountain rescue, water rescue, etc.
3. Ground ambulance arrival on scene prior to arrival of the EMS Aircraft:
 - a. Upon arrival at the scene, the ground ambulance personnel shall notify the Incident Commander who shall notify the responding EMS Aircraft.
 - b. If the patient's condition necessitates or the patient requests EMS Aircraft transport, the incident commander shall be responsible for communicating to the responding EMS Aircraft the following information:
 1. Landing limitations at the scene
 2. Determination of the EMS Aircraft estimated time of arrival (ETA)
 - c. If the responding EMS Aircraft ETA is greater than twenty minutes to the scene, the Incident Commander shall communicate this information to the medical control facility and to the highest licensed or certified medical authority.
4. EMS Aircraft arrival on scene prior to arrival of the ground ambulance.
 - a. Upon arrival at scene the EMS Aircraft personnel shall notify the responding ground ambulance or Incident Commander.
 - b. The patient may refuse transport by air. Trauma patients must follow the trauma care system protocols and policies.

5. Transfer of patient responsibility:
 - a. There will be an orderly transfer of responsibility from the ground EMS medical personnel to the air medical EMS crew.
 - b. The ground EMS medical personnel will assist the air medical EMS crew as long as scope of practice is not exceeded.
 - c. Ground EMS medical personnel shall not be required to accompany the patient during transport by EMS aircraft.