

SIERRA-SACRAMENTO VALLEY EMS AGENCY

ALS PROGRAM POLICY

REFERENCE NO. 450

SUBJECT: EMS PREHOSPITAL AIRCRAFT OPERATIONS PROTOCOL

PURPOSE:

To establish minimum standards for the integration of EMS aircraft and flight personnel into the EMS prehospital patient transport system. It is recognized that EMS aircraft services are a specialized resource for the transport and care of critical emergency patients.

AUTHORITY:

Health & Safety Code, Division 2.5, Sections 1797.200, 1797.204, 1797.206, 1797.218, 1797.220, 1797.222, 1798, 1798.2, 1798.6, 1798.100, 1798.102, 1798.160, 1798.162, 1798.163, 1798.165, 1798.169 and 1798.170.

California Code of Regulations, Title 22, Chapters 2, 3, 4 and Chapter 8, Section 100276 et seq.

California Code of Regulations, Title 13, Section 1105.

California Division of Aeronautics, Title IV, 370.3, Sub-Chapter 2.1, Article 1.

Federal Aviation Regulations, 91.3, 91.11 and 91.12.

DEFINITIONS:

1. "Emergency medical services aircraft" or "EMS aircraft" means any aircraft utilized for the purpose of prehospital emergency patient response and transport. EMS aircraft includes air ambulances and all categories of rescue aircraft.
2. "Air ambulance" means 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 medical flight crew has at a minimum of two (2) attendants certified or licensed in advanced life support.
4. "Rescue aircraft" 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 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.

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5. "Advanced life support rescue aircraft" or "ALS rescue aircraft" means a rescue aircraft whose medical flight crew has, at a minimum, one attendant licensed in advanced life support.
6. "Basic life support rescue aircraft" or "BLS rescue aircraft" means a rescue aircraft whose medical flight crew has, at a minimum, one attendant certified as an EMT-I with at least eight (8) hours of hospital clinical training and whose field/clinical experience specified in Section 10074 (c) of Title 22, California Code of Regulations, is in the aero medical transport of patients.
7. "Auxiliary rescue aircraft" means a rescue aircraft which does not have a medical flight crew, or whose medical flight crew does not meet the minimum requirements of a basic life support rescue aircraft.

12. "Regional Coordination Center" in this policy means: The California Department of Forestry and Fire Protection (CDF) Grass Valley Emergency Command Center (ECC), an agency which has been designated by the S-SV EMS Agency for the purpose of centralized coordination of the requests for an air ambulance or rescue aircraft to respond to the scene of a medical emergency, within the S-SV EMS jurisdiction.

POLICY:

The Sierra-Sacramento Valley (S-SV) EMS Agency is the authorizing agency which approves utilization of specific EMS aircraft within the S-SV EMS region.

Any aircraft utilized for the purpose of prehospital emergency patient response and transport within the S-SV EMS region shall adhere to the policies and provisions of the S-SV EMS Agency and any applicable county ordinance.

I. GENERAL PROVISIONS:

- A. No person or organization shall provide or hold themselves out as providing prehospital Air Ambulance or Air Rescue services unless that person or organization has aircraft which have been classified by a local EMS agency or, in the case of the California Highway Patrol, California Department of Forestry and Fire Protection, and California National Guard, by the EMS Authority.
- B. All EMS aircraft shall be classified. EMS aircraft classification shall be limited to the following categories:
 1. Air Ambulance
 2. ALS Rescue Aircraft
 3. BLS Rescue Aircraft
 4. Auxiliary Rescue Aircraft

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- C. Reclassification shall occur if there is a transfer of ownership or a change in the aircraft's category.
- D. EMS aircraft must be authorized by the Agency in order to provide prehospital patient transport within the Agency's jurisdiction.

Advanced Life Support EMS aircraft service provider agencies, which utilize paramedic personnel, shall complete the ALS service provider application process, and when applicable, shall comply with county ordinances if the service provider agency is located within the agency's region.

- E. EMS aircraft and air rescue service providers including 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 EMS aircraft operations, including qualifications of flight crews and aircraft maintenance.

II. DISPATCH:

The dispatch of EMS aircraft within the S-SV EMS region shall be governed by the following provisions:

- A. Whenever the public safety provider agency having patient care jurisdiction over the location of the incident and/or the primary PSAP determines the use of an EMS air ambulance may be advantageous, an EMS air ambulance should be immediately requested.
- B. EMS aircraft shall be requested by the Incident Commander, or designee. The request shall be made to the communication center (PSAP) of the public safety provider agency having patient care jurisdiction over the location of the incident.
If a private ALS ambulance arrives on-scene before the arrival of public safety agency personnel, the helicopter shall be requested through the applicable public safety agency communication center (PSAP). This may be accomplished via radio or cellular telephone. If unable to contact the PSAP directly from the field, the private ALS ambulance dispatch center may be used to relay the request to the applicable PSAP.

No EMS aircraft shall respond to an EMS incident without the formal request of the public safety provider agency.

- C. Immediately following a request for an EMS aircraft, the Public Safety Agency Communications Center or PSAP shall contact the CDF Grass Valley Emergency Command Center (ECC) and request the aircraft. The ECC shall be utilized as the helicopter coordination center for initial response emergency incidents only. (Note: Interfacility transfers and certain subscription-services are outside the scope of this plan.)
PSAP dispatch centers will provide information to the ECC regarding the incident. The information they must give will include:

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- Physical location. The general geographic location will suffice.
 - Nature of call: Type of incident and severity of injuries, if known.
 - Ground contact and radio frequency.
 - Any known aircraft hazards in the area, including; power lines, hazardous materials, other aircraft, or inclement weather conditions at the scene.
- D. The ECC will verify the location, determine the latitude/longitude, and retrieve the EMS aircraft proximity list of the location. Based on current status (provided by EMS aircraft providers individually or utilizing the electronic online service) the ECC will telephone the dispatch center of the EMS air ambulance provider that will provide the most rapid and appropriate air resource. If the EMS air ambulance is available, dispatch information will be relayed, and the ETA will be determined utilizing the ECC Computer-Aided Navigation (CAN) program. If it is determined that the EMS air ambulance is unavailable, the next most rapid and appropriate identified EMS air ambulance will be contacted.

Upon securing a responding EMS air ambulance, the ECC will re-contact the ordering PSAP and relay resource and CAN determined ETA information, and also request any subsequent or updated information relative to the EMS aircraft request.

If an ALS rescue helicopter is in the vicinity of an emergency, they should land and deliver patient care. ALS rescue helicopters should be utilized for prehospital emergency patient transport when, in the opinion of the most medically qualified person on scene, the patient's condition warrants immediate transport. However, consideration should be given to airway stabilization and/or the need for higher level medical procedures.

In the event the air ambulance is unavailable, the use of an ALS rescue helicopter is permissible. Often, both an air ambulance and an ALS rescue helicopter may simultaneously respond to the same event. If an air ambulance was originally requested, consideration should be given to not canceling the air ambulance until the patient has departed the scene.

The PSAP will then relay the information to the Incident Commander.

- E. The responding EMS aircraft dispatch center will contact the ordering PSAP.
- F. When practical, the responding EMS aircraft shall contact the Incident Commander (IC) or designee with accurate ETA, or if unable to contact the IC, the IC public safety agency dispatch center.

III. REGIONAL COORDINATION CENTER:

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- A. The ECC will update and maintain status of the EMS aircraft availability and document the dispatch accordingly.
- B. Any responding EMS aircraft shall notify the ECC when entering and flying through the CDF Nevada-Yuba-Placer Ranger Unit's geographical area. The ECC will inform the aircraft crew of any other EMS aircraft, known to be responding to the incident and/or any known aircraft activities, such as fire suppression, in the area.

The ECC will not perform any "flight-following" operations with the responding EMS aircraft; this will remain the responsibility of the ordering PSAP and/or home helicopter dispatch center.

- C. Upon notification of an EMS aircraft response, the ECC personnel shall alert the aircraft of any known aircraft activities already underway in close proximity to the incident, e.g., fire suppression and/or previously dispatched aircraft.

IV. COMMUNICATIONS:

- A. The EMS aircraft provider shall be honest, open, ethical and responsible for informing the ECC of any changes in their availability status, in a timely manner. This shall include any circumstances and/or activities that will affect the immediate, (longer than 15 minutes) availability or capability to participate in an emergency call, i.e., maintenance, training flights, interfacility transports, etc.

All air ambulance providers that routinely respond in the S-SV EMS Region shall maintain and update their availability on the regional electronic online service. This will require at a minimum, updating availability once per pilot shift. Until the regional electronic online service is operational this requirement may be met by telephone or radio communication.

- B. In addition to maintaining Med. 9 or 10, each EMS aircraft shall have the capability of communicating directly, while in flight, with those entities listed below:
 - 1. Required FAA facilities.
 - 2. Regional Emergency Coordination Center (ECC) and PSAP on designated frequency(s).
 - 3. Provider agency ground units, through a frequency(s) to be determined, or through a frequency(s) designated at the time of dispatch.
 - 4. Designated base hospitals and receiving hospitals.

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5. Other EMS Aircraft responding in the local area.
- C. Maintain communications with the aircrew using CALCORD (if no other channel has been assigned.) Initial operational frequency of 156.075 is subject to change upon order of the Incident Commander.

V. SPACE AND EQUIPMENT:

- A. All EMS aircraft shall be configured so that:
1. There is sufficient space in the patient compartment to accommodate one (1) patient on a stretcher and one (1) patient attendant. Air ambulances shall at a minimum have space to accommodate one (1) patient and two (2) patient attendants.
 2. 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.
 3. There is sufficient space for medical equipment and supplies required by State regulations and local EMS agency policy.
- B. Each EMS aircraft shall have adequate safety belts and tie-downs for all personnel, patient(s), stretcher(s) and equipment to prevent inadvertent movement.
- C. Each EMS aircraft shall:
1. Have onboard equipment and supplies commensurate with the scope of practice of the medical flight crew, as specified by the classifying EMS agency. This requirement may be fulfilled through the utilization of appropriate kits (cases/packs) which can be carried on a given flight to meet the needs of a specific type of patient and/or additional medical personnel not usually staffing the aircraft.
 2. Be equipped with a radio headset for each crew member, ride-along (including the patient, if needed), and additional clinical personnel. Each headset should allow intra-aircraft communication as well as communications with ground stations, base hospitals and receiving facilities.

VI. PATIENT DESTINATION:

- A. Due to the wide potential geographic range of an EMS aircraft, patient destination shall conform to Patient Destination Guidelines outlined in the California Code of Regulations, Title 13, Section 1105 and S-SV EMS policies, Patient Destination, Reference No. 505 and Trauma Triage Criteria, Reference No. 860.

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- B. In **ALL** situations, the pilot of each EMS aircraft will exercise prime authority and responsibility for the safe operation of the aircraft including, but not limited to, routing, destination, and landing site (FAR 91.3). However, clinical personnel shall advise the pilot of any special considerations, appropriate destination alternatives or applicable information in order to meet the needs of the patient(s).

VII. PERSONNEL:

- A. All ALS EMS air ambulances shall be staffed with a minimum of two (2) medical flight crew members certified or licensed in advanced life support. Staffing can be achieved with any combination of:
1. Paramedics
 2. Nurses
 3. Physicians
- B. Medical Flight Crew: The medical flight crew of an EMS aircraft shall have training in aeromedical transportation. Training should be equivalent to the DOT Air Medical Crew National Standard Curriculum.
- C. All medical flight crews shall participate in such continuing education requirements as required by their license or certification.
- D. In situations where the medical flight crew is less medically qualified than the ground personnel from whom they receive patients, they may assume patient care responsibility only in accordance with policies and procedures of the requesting local EMS agency.
- E. EMS aircraft that do not have a medical flight crew shall not transport patients except in accordance with the policies and procedures of the local EMS agency.
- F. Medical Director: All air ambulance services shall have a physician Medical Director who, by training and experience, is qualified in Emergency Medicine. The Medical Director shall be responsible for the supervision of the quality assurance/improvement program of air medical transport patient care.
- G. Paramedics shall operate under the policies, procedures and protocols as established by the local EMS Agency. Standardized procedures for Registered Nurses may be developed by the air ambulance service's Medical Director, but must be on file with the S-SV EMS Agency Medical Director prior to implementation.

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H. If there is disagreement between EMS personnel regarding air vs. ground transport, base hospital contact shall be made to determine the mode of transport.

VIII. PATIENT CARE REPORTS:

The S-SV scannable Patient Care Report shall be initiated for every dispatched response in accordance with S-SV Policy "Patient Care Report (PCR) Form," Reference No. 605.

CROSS REFERENCES:

Policy and Procedure Manual

Patient Destination, Reference No. 505
Patient Care Report (PCR) Form, Reference No. 605
Trauma Triage Criteria, Reference No. 860
Multiple Casualty Incident, Reference No. 837