

Santa Barbara City Fire Department - Standard Operating Procedures Emergency Operations		Code: E-XII-16
Medical Evacuation by Helicopter		
Chpt: XII EMS	Revised: 3/23/12	Pages: 3

I. PURPOSE

A. To establish guidelines for working with helicopters in a medical environment.

II. OPERATIONS

A. Santa Barbara City Fire Department Incident Commanders may initiate a request for medical evacuation by helicopter under the following conditions:

1. An immediate or impending life-threatening emergency exists and geographic conditions limit the availability or accessibility of surface ambulance transport
2. When ground response and transport times may cause a significant compromise in patient care
3. Ground rescue personnel are unavailable, committed elsewhere, or otherwise unable to affect a ground rescue.

B. Whenever possible, medical evacuation by helicopter should be requested by and coordinated through the paramedic at the scene.

C. When a paramedic is not present, nor available and whose arrival is not imminent, firefighter-initiated requests for medical evacuation by helicopter will be directed through the Duty Battalion Chief, who will then contact either SBFD dispatch who will in turn relay the request to the County Emergency Communications Center (CONTROL) who will actually make the request under the auspices of the Area Coordinator/Santa Barbara County Fire Chief.

III. HELICOPTER RESPONSE TO MEDICAL EVACUATION REQUEST:

A. Existing protocols will be utilized to determine which airship to launch based upon request. The request must be specific in nature:

1. Airship with paramedic hoist capability
2. Medical Transport (crew, patient, or both) airship
3. Cal-Star
 - a) (Primary first-in for medical) Will fly as available; night capable
4. SBC

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a) Will fly as available; night vision capable, paramedic hoist capable.

5. Ventura County Sheriff's Department (Camarillo)

a) Will fly as available; night capable; must call back personnel at night, and may supply physician on board if requested.

IV. GUIDELINES FOR WORKING WITH AND AROUND HELICOPTERS

A. A FAR 91.91 Airspace Restriction should be requested for the purpose of restricting airspace over the evacuation site to keep extraneous aircraft from interfering with the evacuation helicopter. A 91.91 request should be specific, for example, "a one mile diameter", and is requested from the Santa Barbara Airport Control Tower via dispatch or the County Emergency Communications Center ("CONTROL").

B. Several streamers (barrier tape) 6' to 8' long should be securely attached to a high place (pike pole lashed to an apparatus hand rail) a minimum of 100' from the landing pad. Streamers indicate wind direction to the helicopter pilot.

C. Helicopters take off and land INTO the prevailing wind.

D. A common radio frequency must be established between the helicopter pilot and ground personnel.

E. There should be no overhead or lateral obstructions (wires, trees, tall brush), or loose debris within 200' to 300' of the helicopter landing pad which may be affected by the rotor blades or rotor wash.

F. A minimum safety circle of 60' should be provided at the touchdown pad to provide an adequate safety margin for the rotor blades.

G. The touchdown pad should be level, and on a solid surface like concrete, asphalt, or mineral soil cleared to a minimum diameter of 30'. Turnouts, turnarounds, cul-de-sacs, and parking areas that provide a drop-off at takeoff are ideal.

H. If possible, the landing area should be wet down just before ship touchdown in order to minimize dust and debris.

I. The touchdown pad should be clearly marked (foam buckets, flares if safe, hose rolls wrapped tightly in fastened turnout coats).

J. Ground forces will wear helmets with chin straps fastened, and goggles or face shields in place. All loose objects, to include victim coverings and support paraphernalia subject to prop wash, must be secured. Seat belts of passengers and anchoring devices to secure the victim must be double-checked.

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K. Helicopters are always approached from the front. Debarkation always occurs toward the front of the helicopter. Approach and exit from a helicopter is always done from the front of the ship in full view of the pilot.

L. Rotor blades can drop from 1' to 4' as they slow upon landing. For this reason, individuals approaching or leaving a ship always do so in a bent, or hunched manner until clear of the landing area.

M. At minimum, a 20 lb. dry chemical extinguisher and manned 275' 1 3/4" preconnect will serve as a safety line. If manpower allows, an additional foam safety line is also recommended.

N. One firefighter will be designated to communicate with the helicopter pilot and guide the ship to the touchdown pad using the attached hand signals. Although 12 hand signals are depicted, relatively few will actually be needed to assist a helicopter pilot to safely bring a ship to a well-sited touchdown pad.