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S.O.P. #: TACTICAL OPERATIONS MANUAL #03

SUBJECT: MEDEVAC HELICOPTER LANDING SITE PROCEDURES

DIVISION: EMERGENCY OPERATIONS

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Objective: To ensure a safe Landing Zone (LZ) and a secure perimeter for the Medevac Helicopter, and to ensure that it is maintained from time of arrival of the aircraft until patient is loaded and aircraft has safely departed the landing site.

Section 1: Engine Company Initial Operations.

A. The Engine Officer will:

1. Have the engine positioned so as not to be a LZ hazard, but still close enough to perform fire/rescue operations should an emergency occur during either landing or take-off of the helicopter.
  2. Be notified by Dispatch when the Medevac Helicopter is on the talk group. If the landing site has not been determined at the time Dispatch made the initial contact with the helicopter crew, the landing site engine will advise the helicopter via the proper talk group when the location has been determined and/or if a change of the landing site has to be made for safety reasons.
2. When determining a location for a LZ, the following must be kept in mind:
- a. Optimal area needed is 150' x 150'
  - b. Be cognizant of areas with loose gravel and other debris
  - c. LZ's should be free of cars, pedestrians, wires, trees, antennas of any other obstacles
  - d. LZ should be a flat surface that is firm.
  - e. When a roadway is to be use for the LZ, all traffic must be stopped in both directions.
  - f. The rotor wash on the current AW 139 aircraft is very strong and can cause property damage (rotor wash, flying debris) however, **THE PILOT WILL MAKE THE FINAL DECISION AS TO THE LANDING SITE.**
  - g. If a chosen LZ is not utilized by the flight crew, they will work with the engine to establish a new LZ.

- B. Once the landing site has been determined and the landing site engine has arrived at that location, the following will be initiated:
- A. Engine Officer will do the following:
  - B. Maintain the proper talk group on the radio to communicate with the helicopter and become part of the site security crew and control access to the LZ on all sides.
  - C. Once communications is established, the Officer will walk the landing site, look for hidden obstacles, such as large rocks, tree limbs, sump holes that may affect the stability of the landing gear or be blown into the rotor wash, and look for overhead obstacles that may affect rotor clearance such as wires, trees and light poles.
  - D. The Officer will then advise the helicopter if the landing site is secure and what, if any, obstacles are at the LZ.
  - E. If the flight crew does not have a visual and needs to be directed to the LZ, it is best to use the “clock” method (with 12:00 being straight in front of the aircraft, and 6:00 being to the rear from the PILOT’S point of view) instead of using “N”, “S”, “E”, or “W” as these direction do not usually coincide with the compass in the aircraft.
3. The apparatus operator will do the following:
- a. Properly position the Engine.
  - b. If at night, keep ALL emergency and head lights on until the helicopter pilot calls that he/she has the landing site in view, then turn off all emergency lights and head lights, leaving only the apparatus marker lights on, so as to not destroy the night vision of the helicopter pilot.
  - c. If radio communication are lost or not established turn off the emergency lights when the aircraft is on final approach and approximately 300 feet above the ground.
  - d. If at night and the helicopter pilot is unable to determine the actual location of the landing site, he/she may call to have flares placed to identify the site. If flares are set up, place one in each corner of the landing zone. When the pilot calls that he/she has the site in view, all flares will be extinguished and removed prior to the aircraft landing. At no time should any white lights be directed at the aircraft.
  - e. The remainder of the crew will be in full turnout gear and will be prepared to place an attack line in service, if necessary. However the line does not need to be pulled and charged. The AW139 has an on-board suppression system that gives the crew plenty of time to escape and the greater danger is from the rotors and crowd control in the event of “hard landing”.

- f. Once the helicopter has landed, the Engine Officer will notify Dispatch the helicopter has landed. Three of the crew members, wearing hearing and eye protection, but no unsecured head coverings, will position themselves to secure the landing site area from any unauthorized entry. If additional personnel are needed to secure the site, the Engine Officer will use the resources at hand. (Police Officers and other Firefighters at the scene)
- g. All personnel around or near the helicopter will wear hearing and eye protection, but will not wear any unsecured head covering.
- h. When carrying the patient(s) to the helicopter, approaches to the aircraft will be made from the front, in view of the pilot, and only the personnel designated by the Flight Paramedic will approach the aircraft. NEVER approach the aircraft with a patient without being accompanied by the Flight Paramedic and NEVER approach the aircraft from the rear.
- i. After the helicopter has departed, the Engine Officer will advise Dispatch of same and also advise its destination, number of patients, and patient priority.

Section 2: Medic Unit Operation at Landing Site.

- A. The Medic Unit, just prior to arrival at the landing site, will turn off all emergency and head lights. If at night, leave on the unit's marker lights. The Medic Unit is to park no closer than 200 feet from the helicopter, unless otherwise directed. Do not remove the patient from the Medic Unit until the helicopter has landed and the Flight Paramedic has given directions to do so.
- B. The medic crew will see that the patient is protected at all times from the rotor wash.
- C. The medic crew will interface with the Flight Paramedic at the incident scene or in the ambulance and pass on patient information.
- D. The medic crew will not approach the helicopter until directed to do so by the Flight Paramedic, and then they will be wearing both hearing and eye protection. If a Paramedic from the field is to board the aircraft, he/she will do so before the patient is loaded, and only when directed by the Flight Paramedic.