TOLEDO FIRE & RESCUE DEPARTMENT

C-48 Helicopter (Air Ambulance) Landing Zone

Emergency Manual

Date Revised: 02/01/2018

Last Modified: 09/27/2024 09:47

Export C48 to PDF
Export -Entire C Manual- to PDF

Policy/Procedure

At times, an incident may require that a patient be transported to a hospital via air ambulance. A few examples include: prolonged extrications of critically injured victims, natural disasters that have impacted the City's infrastructure or incidents during which seconds of delay may have a direct impact on patient outcome. To ensure the safety of Toledo Fire and Rescue Department personnel, the patient, and also the helicopter flight crew, the following procedure shall be followed.

1. Establishment, Security, and Maintenance of a Landing Zone:

1. The Incident Commander shall name a Landing Zone Coordinator. The Landing Zone Coordinator shall be responsible for determining the location of the Landing Zone, security of the Landing Zone, and guidance of the aircraft into and out of the Landing Zone. Assignment of the Landing Zone Coordinator shall be in addition to, and independent of, Command and the Incident Safety Sector Officer.

2. The Landing Zone Coordinator shall contact Lucas County Emergency Medical Services Dispatch Center and request an Operations channel dedicated to communications with all transport aircraft. The Landing Zone Coordinator shall establish and maintain radio contact with all aircraft utilizing the Landing Zone, notifying them of hazards unique to the area such as power lines, trees, or other obstacles.

3. The Landing Zone shall be at least 75' x 75' in size, if at all possible. The best Landing Zones are rectangular in shape, allowing the pilot to land and take off horizontally into the wind. The Landing Zone Coordinator shall notify an aircraft's pilot if the area chosen is smaller than 75' x 75'. Landing Zones established on highway overpasses may not meet the size requirement. It will be up to the aircraft's pilot to determine the feasibility of landing in an established zone.

4. The Landing Zone Coordinator shall ensure that all loose debris is cleared from the Landing Zone. Crewmembers shall assist the Landing Zone Coordinator with this task.

5. The Landing Zone Coordinator shall ensure a charged hoseline is stretched to the proximity of the Landing Zone, placed in a state of readiness, and attended by fire personnel.

6. The Landing Zone shall be established on level ground, if possible. Although it is possible to land on a slope, it is difficult for the best of pilots.

7. The Landing Zone Coordinator shall ensure all personnel remain a safe distance from the rear of the aircraft, especially the tail rotor.

8. The Landing Zone shall be marked with heavy objects only. Lightweight items such as rope, scene tape, and lightweight traffic cones shall be avoided as they may be blown into the aircraft's rotors. Fire helmets shall be attached firmly to member's heads with chinstraps.

9. At night, the Landing Zone may be illuminated with rig headlights or other portable lights. Two rigs shall be parked upwind, well outside at the corners of the Landing Zone, with their headlights forming an "X" across the middle. At no time shall lights be directed skyward as many pilots routinely utilize night vision goggles during flight.

10. Upon approach of the aircraft, the Landing Zone Coordinator shall stand near, but outside of, the Landing Zone, back to the wind, extending both arms in front of themselves to indicate wind direction to the pilot.

11. Fire personnel shall shield their eyes and the eyes of their patients to protect them from debris blown around by rotor wash.

12. The Landing Zone Coordinator shall contact the pilot after landing to determine whether particular safety issues exist.

13. The flight crew shall determine from which point personnel enter and exit the Landing Zone. Personnel shall not enter the Landing Zone from the rear of the aircraft, nor shall they enter from the direct front, unless specifically directed to by the flight crew.

14. Fire personnel shall at all times defer to the expertise of the aircraft's flight crew and shall accommodate all flight crew requests regarding transfer of patient care. TFRD members shall adhere to directives regarding the aircraft issued by the Flight Crew. Crewmembers shall follow all directives from the flight crew to the letter.

15. The Landing Zone Coordinator shall ensure Toledo Fire and Rescue Department personnel leave the Landing Zone in as safe a manner as they entered, prior to the departure of the aircraft.

2. Special Considerations:

1. "Rotor Dip", a condition in which one or more rotor blades flex toward the ground during revolution of a helicopters main rotor, occurs at all speeds when a helicopter is operating. This dip may result in dramatically reduced clearance between a rotor blade and the ground. Members shall duck

heads when approaching a helicopter's operating rotor.

2. A pilot may utilize "Rotor Brakes" during patient loading. The aircraft's rotors may slow to a stop; however, the engine may still be running at full speed. This mechanism is controlled solely by the pilot, who may release it at any given time. Rotors can reach operating speed within three seconds of the brake's release. Stopped rotors are not an indication of a safe state during air transport of a patient.

3. Fire personnel shall be aware that loose items, helmets, gloves, hand lights, towel rolls, and others may be blown into the aircraft's rotors. All items shall be secured to the extent possible.

4. Members shall be aware that helicopters are difficult to control. Minute changes in wind direction and other factors have a great affect on the aircraft's dynamics. Situational awareness shall be practiced by all crews in the vicinity of such operating aircraft. Members should not expect a pilot to land at the pinpoint center of the Landing Zone.

5. Hearing protection is recommended.

6. Open flames, such as road flares, shall not be used to identify a Landing Zone.

7. Fire personnel shall not aim headlights or hand lights at the aircraft as temporary pilot blindness may result.

8. If conditions warrant, apparatus drivers shall turn off their rig's emergency flashing lights to avoid confusing the pilot. Two rigs may utilize their emergency lights to mark the location of the Landing Zone as defined above.

See Also:

Permanent link:
https://www.tfrdpolicies.com/dokuwiki/doku.php?id=c_manual:c48

Last update: **09/27/2024 09:47**