Use of Medical Helicopters and Aircraft Landing Procedures

Purpose: The mission of Winter Park Fire Rescue is to provide urgent transportation of critically ill and injured patients via medical helicopter transport from the scene of an incident. This guideline should serve as a guide for responses requiring the utilization of emergency medical helicopters for the evacuation of critically ill or injured patients as a result of incidents in the City of Winter Park.

Scope: This procedure applies to all Winter Park Fire-Rescue personnel and Public Safety Personnel working with WPFD

314.01 Considerations for requesting a Medical Helicopter

Due to uncontrollable situations ground transportation may not be the quickest mode of transportation of a critically injured patient in need of specialized care. As a general rule, if the estimated ground transport time is greater than 12 minutes, consider air transport.

Considerations may include:

- Time of Day
- Traffic conditions
- Access to roadways and thoroughfares

314.02 Requesting the Helicopter

- All requests should be made through Winter Park communication center. At no time should a request be made via hospital based radio systems. The communications center will contact the closest available aircraft to determine availability and assign the appropriate cross streets and relevant scene information.
- Stand-by Status: Placing the helicopter on a stand-by status will commit the helicopter to the scene. This procedure is used when the crew first arrives on the scene and by their initial impression believes that a helicopter is warranted. The benefits of using this
status are that it alerts the air transport crews and allows them to plot coordinates and stand by for initial information.

- **Active Request:** In an active request, air transport teams are dispatched directly to the scene. In a questionable transport, it is preferable that the helicopter be dispatched and later canceled, than to delay the response of the helicopter.

314.03 Information needed for Helicopter Dispatch

- The nature of the incident.
- The scene location including closest major cross streets and advice as to whether the helicopter can land on scene or at an alternative landing zone, if necessary.
- Identity the FD unit who will be the ground contact and radio frequency.
- Detailed patient information is not necessary.

314.04 Establishing a Landing Zone

I. Requirements

A. Minimum size:

- 100’ x 100’ day and night

B. Clearance:

- No wires or obstructions should extend over the landing zone.
- No bushes, posts, and other obstructions should be more than 4’ in height, in the area of the tail rotor, or 6’ in height in the area of the main rotor.
- The area should be as level as possible. The maximum slope permitted 10 degrees.
- Landing areas should be free of loose debris.

C. Markings:

Ideal marks should include vehicle headlights (on low beam setting), portable highway strobes (amber or red lenses). DO NOT use highway flares or parking lot cones to mark a landing zone. These items may become airborne in rotor wash.
NEVER SHINE A LIGHT AT THE HELICOPTER DURING NIGHT TIME OPERATIONS!

Doing this can harm the pilots night vision and may cause harm to observers, patients and the aircraft. ALL OBSTACLES SHOULD BE REPORTED TO THE HELICOPTER BEFORE LANDING.

314.05 Aircraft Landing Procedures

Landing Zone Coordinator

After establishing the need for helicopter transport the incident commander shall appoint a Landing Zone Coordinator. The LZC shall be responsible for securing an adequate landing zone and designate personnel to secure the safety zone. Along with the landing zone all unnecessary personnel; pedestrians and vehicles should not enter the LZ during the landing or departure of the helicopter. The LZC shall be the only radio contact with the flight crew.

Radio communications

 Shortly after initial request of a medical helicopter a member of the flight crew will contact ground scene personnel for landing zone information. All relevant landing zone information should be passed along to the flight crew.

Example:

“Your LZ is approximately 110’ by 110’ with a firm grass surface, a slight pitch to the west of about one foot and there are 4 light poles to the north, the approach is clear from the south.”
Only if the wind is in excess of twenty (20) miles per hour an hour should the information be passed on to the pilot.

While overhead the aircraft will circle around a few times allowing the pilot to orient himself to the LZ. If during this time you are asked directional information by the pilot, your answers should be given as if you were sitting in the pilot’s seat looking at the LZ (i.e. “to your north are four light poles”), or by using clock positions using the nose of the aircraft as 12:00 position.

Once the pilot is satisfied the LZ is suitable the flight crew shall notify the LZC that the aircraft is on final approach to land.

Once the aircraft is on final approach the LZC shall direct Winter Park to issue an alert tone and announce, “Emergency radio traffic only” until the helicopter has safely landed.

In the event of a breach of safety the LZC shall advise the aircraft to abort the landing.

Once landed, the LZC shall notify Winter Park once the helicopter is safely on the ground.

314.06 After the Aircraft is on the Ground

Approaching and Loading the Helicopter

- Once the helicopter has landed do not approach the aircraft until a member of the flight crew has signaled. Approach the helicopter from the front, in sight of the pilot at all times or at the direction of the Flight Crew.
- Approach the helicopter in a crouched position. Hands or equipment should not be raised above your head. I.V. poles should not be used around the aircraft.
- NEVER APPROACH FROM THE REAR!
- The Flight Crew will come to the patient. Do not attempt to move the patient into the landing zone until assisted by the Flight Crew.
- At no time is anyone permitted near the tail of the helicopter.
- Do not assist the Flight Crew in opening or closing the helicopter doors.
- Flight Crews are responsible for loading and unloading equipment and will direct the loading of patients.

Helicopter Departure

Before the aircraft departs the pilot shall establish communication with the LZC to ensure the LZ is secure for departure, pass on any pre-departure instructions, or make any necessary requests.
The LZC shall advise the flight crew that the LZ is secure and it is safe for lift off. Prior to lifting off, the LZC shall notify Winter Park to issue an alert tone and announce only “emergency radio traffic” until the aircraft has safely lifted off the ground and cleared the scene.