

Salt River Fire Department Operating Guidelines

Helicopter Operations

Rev. Sept. 2008

209.02

1 of 4



Purpose

Several public and private helicopter services are available to the Salt River Fire Department for various purposes, including emergency medical transportation, rescue from inaccessible locations, aerial reconnaissance of emergency scene and emergency transportation of manpower and/or equipment.

The agencies involved in these services and available for emergencies are:

- Air Evac
- Native American Air
- Department of Public Safety

Each agency's operating procedures and equipment limitations present different constraints on their use.

Helicopters may be requested through “Communications” for a variety of situations. The “Fire” unit requesting helicopter support should indicate either a particular unit or a particular type of mission, and give any details of the situation to “Communications.” The most suitable unit for a particular mission will depend on availability and the details of the situation.

Upon any requests for a Helicopter, “Communications” shall increase the alarm, by assigning another apparatus (engine or aerial) to the assignment.

EMERGENCY MEDICAL TRANSPORTATION

For EMS transports, all requests for **medical air transport** shall come from an “on scene” Fire unit.

While enroute to a call the “Fire” unit can place **medical air transport** on “standby”, if the call, is of a serious nature or is of a pediatric nature. Communications shall contact the various providers (Air Evac, Native Air, and AZ DPS) for ETA’s and place the provider with the shortest ETA on standby.

Helicopter transportation should be considered for:

- Level 1 patients (Also referred to as “Immediate”)
- Trauma patients requiring urgent surgery.
- Pediatric or OB patients (Level 3 patients require level 3 hospitals; opposite of trauma)
- Patients requiring specialized treatment (burns, neuro).

Salt River Fire Department Operating Guidelines

Helicopter Operations

Rev. Sept. 2008

209.02

2 of 4



Hospital and Department of Public Safety helicopters are particularly suited to specialized patient transportation and should be utilized for these missions. Helicopters belonging to other agencies are not suitable for medical transportation, and should not be utilized for this purpose.

Helicopter transportation may be indicated for patients in the Community when distance or delay factors affect ambulance transportation, when sufficient ambulances are unavailable or when patients are in locations inaccessible to ground units.

While hospital helicopters are capable of carrying two litter patients, only one critical patient can be treated with adequate space. If necessary, use additional helicopters for multiple patient incidents.

The request for a helicopter should include the number and condition of patients, weight of patient, the need for specialized care, the destination hospital and the location of the landing area.

When a request is made for “medical air transport”, an estimated time of arrival (ETA) should be ascertained. If the ETA is excessive, “Communications” should contact another provider, responding the provider with the shortest ETA. Final consideration for an excessive ETA would be ground transportation to the nearest appropriate facility.

LANDING ZONES

The selection of an appropriate landing zone is of critical importance in a field situation. A suitable landing area must be located and identified for the pilot. Command will assign personnel to select and identify a landing zone. The assigned personnel must have a portable radio.

- The Landing Zone must be free of obstructions for an area approximately 100 feet by 100 feet (100' x 100'). Check for overhead wires, poles, towers and similar obstructions.
- Area must be free of small objects, which can be blown around by rotor wash. Check for metal objects, loose clothing or blankets. Avoid dusty locations, if possible.
- If the landing area is very dusty, consider wetting it with a hose line before landing.
- Keep all personnel out of the landing area. Spectators must be kept at least 100 feet from the helicopter at all times. 200 feet from the rear rotor (LZ can assign FD Personnel to a rear rotor watch/guard position – See FD personnel PPE.)

Salt River Fire Department Operating Guidelines

Helicopter Operations

Rev. Sept. 2008

209.02

3 of 4



- Approach and takeoff are normally made into the wind. This path must be free of obstructions and should avoid flying over treatment area.
- During the summer months, the thinner air negatively affects the “lift” of the aircraft. Landing Zones should be set up to allow the aircraft to gain forward ground speed, thus helping lift the aircraft when departing the scene.
- Landing zone personnel should communicate with the pilot by radio, if possible, or by hand signals. Mark center of the landing zone with portable strobe.
- Any nearby obstructions must be indicated to pilot. Use spotlight at night to show wires, poles, etc. The pilot is the best judge of the ability to land in a given location, but personnel on the ground must identify all obstructions and hazards. Mark upwind end and corners of Landing Zone with lights or flares. (Secure or hold flares to prevent fires.)

On streets or parking lots, use vehicles to "square-off" area and mark upwind end with single light or flare. Shine spotlights on ground.

SAFETY FACTOR

- **SRFD PPE shall include at minimum of helmet with appropriate eye protection, safety vest, pants and steel toe shoes.**
- Do not approach helicopter until rotors stop completely or until pilot signals to approach.
- Always approach from front.
- Keep all personnel away from tail rotor.
- Aircraft crew will direct patient loading and door opening/closing.
- Keep spectators 100 feet away.
- Remove any light objects or debris from landing area.
- Landing Zone personnel must use eye protection or helmet face shields.
- Stage patients waiting to be loaded at least 100 feet away. Secure sheets and blankets and cover eyes during landing.
- Beware - rotor wash from large helicopter is very strong. Small objects and clothing (jackets, caps, etc.) can be blown around easily.

Salt River Fire Department Operating Guidelines

Helicopter Operations

Rev. Sept. 2008

209.02

4 of 4



COMMUNICATIONS

Air-to-ground communications should be used whenever possible to give landing instructions to approaching helicopters. Alarm will coordinate the establishment of air-to-ground communications. The pilot of a helicopter approaching the scene will advise when ready to communicate with ground units. Alarm will identify the radio channel to be used and advise the pilot of the frequency when requesting the helicopter. Direct air-to-ground communications should then be established. Personnel at the landing area should have direct communications to the pilot whenever possible.

Channel 4 VHF (154.280) "Mutual Aid" is to be used for landing coordination.

Use vehicle radio in lieu of portable to establish contact with helicopter.

National Guard Helicopters have no direct communication facilities except ground control on aviation radios.

RESCUE

Helicopters are particularly suited to physical rescue of persons stranded in inaccessible locations, whether injured or not. Depending on the location of the victim, a helicopter may be useful in removing the victim or placing rescue personnel in a position to reach the victim.

Since helicopters with hoists are not available, the helicopter must be able to land or hover to complete a rescue. Hospital helicopters are not suitable for most forms of physical rescue, but may be useful in transporting personnel and equipment to a location close to a patient.

Small helicopters are generally more maneuverable and able to work in close quarters, but have limited lifting capacity and limited patient carrying space. The pilot is the best judge of the ability to perform a rescue. When requesting a helicopter for a rescue mission, a description of the victim's location and condition should be given.

AERIAL RECONNAISSANCE

Aerial observation may be desirable to assist Command in complex situations. This has proven extremely effective in brush fire fighting and complex structural fires involving difficult access. Helicopters may be requested to place a Fire Department observer overhead with communications to Command or to actually Command from above.

A television station or other helicopter will often be available in the vicinity of a major incident. Command should try to establish direct communication with the helicopter to arrange a pick-up location, if that helicopter has that capability. (Please See COMMUNICATIONS.)