



Flagstaff Medical Center
Northern Arizona Healthcare

HOSPITAL
GUIDELINES OF PRACTICE

NUMBER: HP 700-02
Page 1 of 5

EFFECTIVE DATE:

October 18, 1999

TITLE:

FMC HELIPAD OPERATIONS

PURPOSE

To provide guidelines for the safe operation of helicopters utilizing the FMC helipad.

DEFINITION N/A

PROCEDURE

a. Helipad Characteristics

1. In accordance with guidelines set forth in the references, the helicopter landing facility at FMC is a private use hospital heliport.
2. The helipad is located atop the Emergency Department roof on the southeast corner of the Hospital campus (N35 12.51, W111 38.59). The 40' x 80' pad is constructed of corrugated aluminum matting which is heated to prevent ice accumulation. A tricolor green/amber/white beacon serves to identify FMC and an illuminated windsock provides wind information. A closed circuit television monitoring system enhances security and safety.
3. The southern half of the pad, identified by an "H" and amber perimeter lights, is the designated takeoff and landing area. The northern half of the pad is for helicopter parking only.
4. There are no aircraft services available at FMC. A variety of services may be found at Flagstaff Pulliam Airport, located a short distance to the south.

b. Communications

1. Helicopters operating at FMC should establish communications with Guardian Air dispatch at the earliest opportunity. The Guardian Air dispatcher will be contacted on the following frequencies: Rx 152.285 PL14, Tx 157.545PL17. Weather information is available through the Flagstaff ASOS.
2. Timely communication with the Guardian Air Dispatcher is especially paramount when multiple helicopters are inbound to the facility.
3. All incoming aircraft will notify the Guardian Air Dispatcher at the earliest convenience, but not less than a minimum of (5) five miles out.
4. The Guardian Air Dispatcher will notify the Emergency Department and PBX Operator of any inbound helicopters. PBX will, in turn, contact the Security Department to enable them to position a security officer on the helipad.
5. As soon as reasonably possible, the crew will notify Pharmacy of medication replacement needs. Pharmacy will expedite order within a reasonable length of time.

c. Arrival and Departure Procedures

1. Helicopters operating at FMC are encouraged to follow the noise abatement guidelines depicted in attachment (2). Arrivals/departures from the east should use Switzer Mesa as an initial point while flights to/from the west should use Basha's Plaza. The shaded portions of the attachment highlight noise sensitive zones; these areas should be avoided whenever possible. To be sensitive to neighbors, 8,000' MSL is the recommended altitude when flying over Flagstaff.

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2. **In accordance with reference (b), arrivals and departures to the FMC helipad will be to the "H". The northern pad is for parking only.** Once on the pad and wind/weather permitting, pilots are requested to park their helicopter facing west for offloading purposes. Hot vs. cold offload will be at the discretion of the Flight Team and ED personnel. Further offload criteria and offload procedures are outlined in separate Guidelines of Practice.
 3. Due to the singular landing area, there will be no simultaneous helicopter operations conducted on the FMC helipad. If two helicopters arrive in close proximity, the first will land to the "H", then slide to the parking area before the second ship lands on the "H". An alternative would be for the first helicopter to hot offload the patient, then reposition to the airport, thereby clearing the pad for the next helicopter. **Timely and effective communication between pilots and the Guardian Air Dispatcher is essential in resolving potential hazards associated with multi-ship operations.**
 4. Anytime two aircraft occupy the FMC helipad, no patient will be offloaded from the aircraft on the "H" until the aircraft on the parking spot has its rotors shut down.
 5. Flight teams are encouraged to employ "reasonable expedience" in the delivery of their patient. Undue delays on the pad should be minimized. The telephone in the elevator vestibule should be used to advise the Security Department as to crew whereabouts. **All pilots must either remain with aircraft or in the ED to be readily available to relocate their aircraft in case of another inbound helicopter or if a helicopter on the parking spot is dispatched on a flight.** All pilots and crews will be notified in the ED or on the pad via a security officer and/or by overhead page for their immediate response to "clear the pad". If a transient helicopter is asked to "clear the pad", they may reposition to Pulliam Airport or orbit over Switzer Mesa until the pad is once again clear for them to return to FMC.
 6. When the helicopter crew is ready to depart, the Guardian Air Dispatcher will be contacted. All departures will commence over the "H" and the flight paths depicted in attachment (2) should be followed whenever safely possible.
- d. Safety
1. A portable fire suppression system is located in the vestibule at the northwest corner of the helipad.
 2. In emergency situations that render the elevator unusable, alternate evacuation routes include the Pediatric wing on the western roof and a metal staircase located behind the air handling unit penthouse on the north side of the helipad.
 3. All offload personnel will be directly supervised by the helicopter medical crew. Running is prohibited on the helipad.
 4. Gurneys will be either locked or attended at all times.
 5. A helipad utilization log will be maintained by FMC Security.
- e. Violations of safety practices and/or this policy will be reported to the FMC Director of Security/Safety. The Director of Security/Safety will follow up with the helicopter company and seek compliance for the reported violations.
- f. In situations where there is continuous violations of safety practices of this policy, helicopter companies may have their privilege to land on the FMC heliport suspended and/or revoked.

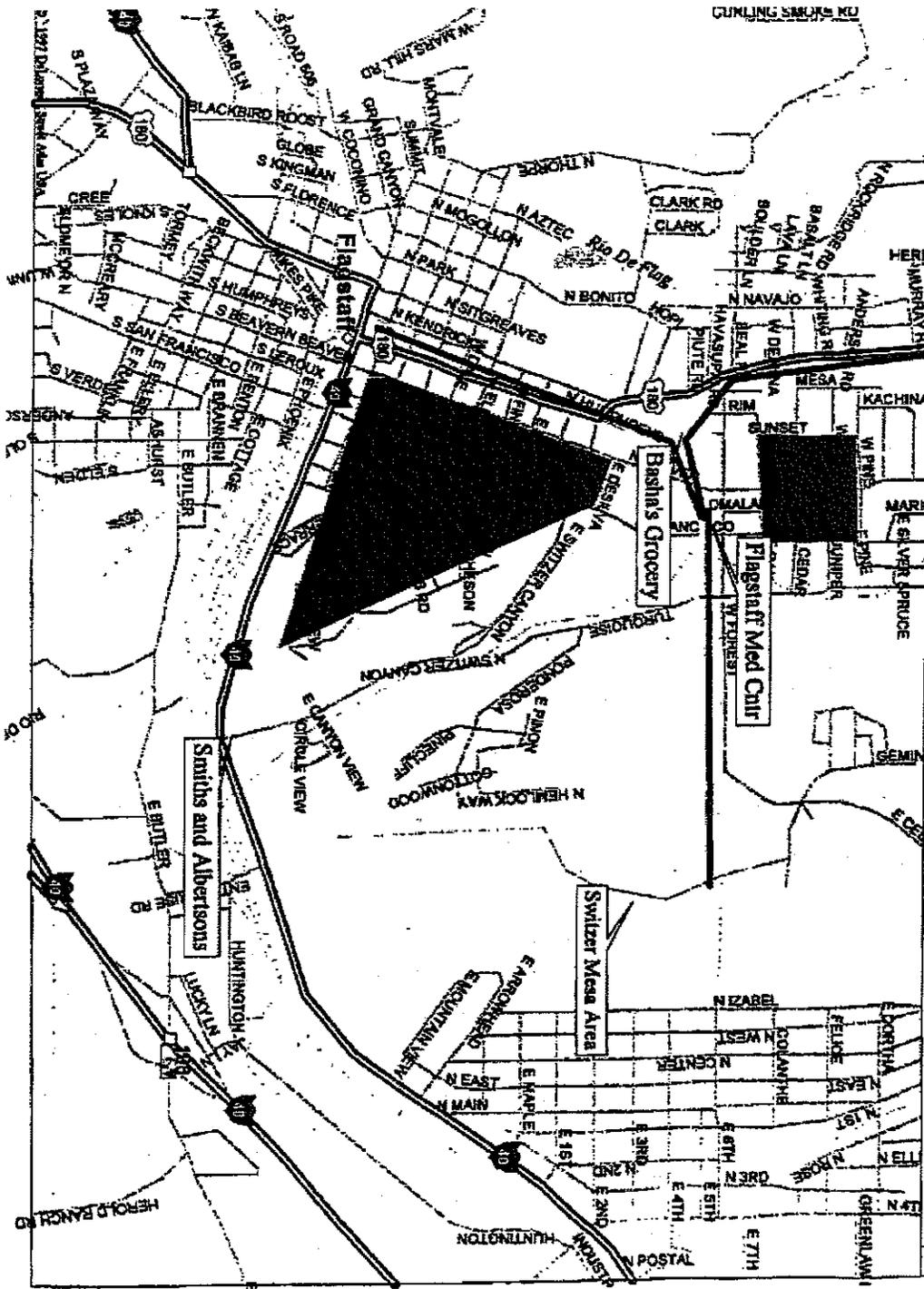
ATTACHMENTS

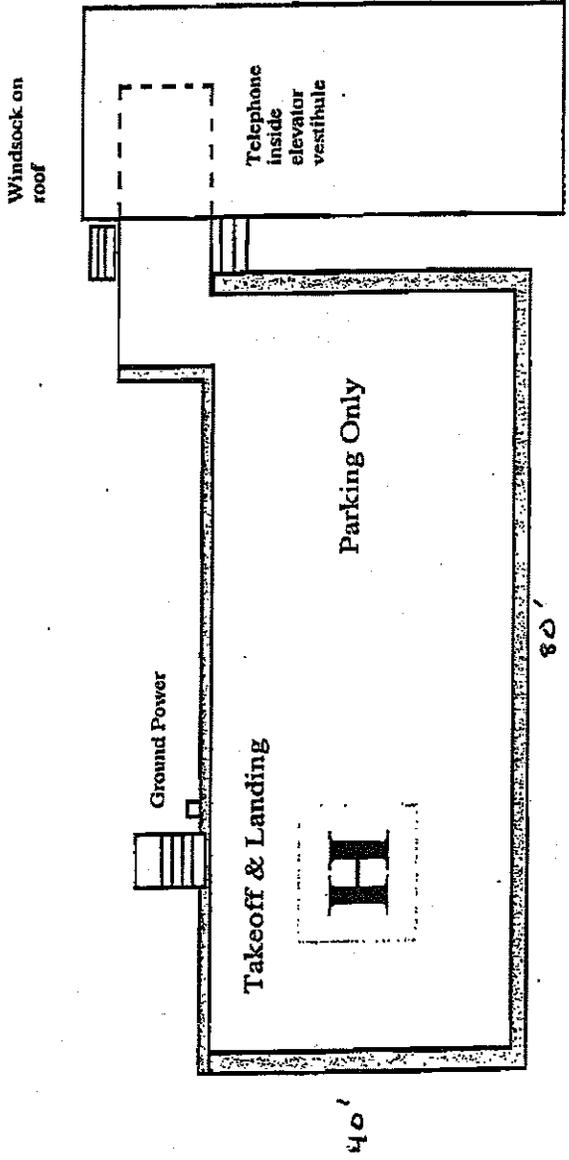
Helipad Illustration
FMC Helicopter Arrival/Departure Routes
Federal Aviation Administration Form 7480-1

REFERENCES

Federal Aviation Regulations (FAR) Part 77
Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5390-2A, Heliport Design
Arizona Revised Statutes, Title 13

HMC Helicopter Arrival/Departure Routes







Flagstaff Medical Center
Northern Arizona Healthcare

HOSPITAL
GUIDELINES OF PRACTICE

NUMBER: HP 700-01
Page 1 of 3

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November 1983

TITLE:

HELICOPTER LANDINGS, LOADING/UNLOADING PROCEDURES AND "HOT" OFF-LOADS

PURPOSE

When a patient is being transported by helicopter for treatment at Flagstaff Medical Center, the Emergency Department (ED) will receive advance notice and prepare for the patient's arrival.

DEFINITION N/A

PROCEDURE

1. Flagstaff Medical Center is notified of an inbound helicopter arrival with or without a patient.
 - a. The flight crew will notify the Emergency Department, via EMSCOM, to provide patient conditions (if applicable) and ETA (estimated time of arrival).
 - b. The pilot will notify Guardian Air dispatch on the following frequencies: Rx 152.285 PL14, Tx 157.545PL17 and will provide the following information:
 - 1) ETA
 - 2) Number of patients
 - 3) Off-load status (a hot off-load or a cold off-load)
 - 4) If any extra personnel or special equipment are needed
 - c. Guardian Air dispatch will notify the Emergency Department and the Flagstaff Medical Center PBX Operator. Guardian Air dispatch will relay the following information from the pilot:
 - 1) ETA
 - 2) Number of patients
 - 3) Off-load status (a hot off-load or a cold off-load)
 - 4) If any extra personnel or special equipment are needed.
2. Security personnel will arrive on the helipad, prior to the aircrafts arrival, and visually inspect the area to ensure the area is free from debris.
3. The Security personnel will take a stripped (i.e., mattress and linens removed) stretcher equipped with O₂ and portable suction to the helipad elevator and wait in the elevator vestibule for the helicopter to land. Once the helicopter has shut down, Security personnel, and assistant, if any, will proceed to the helipad with the stretcher.
 - a. Loading and unloading will be done after the helicopter has been **shut down** except as noted below for "Helicopter Hot Off-Loading Procedure".
 - b. Security personnel will assist in the loading and unloading of patients and in transporting the patient to the appropriate unit.
 - c. In the event that Security personnel are not available to meet and assist the flight crew, the Security Officer must notify the PBX. The PBX operator will notify the Emergency Department and request that Emergency Department personnel meet the flight crew.
4. In an emergent situation, the helicopter team may request a "hot" off-load, following the procedures described below for "Helicopter Hot Off-Loading Procedures".
 - a. Personnel will approach or leave the aircraft FROM THE FRONT ONLY.
5. No one but trained personnel will be allowed on the helipad. The maximum number of personnel on the helipad should be limited to three (observational safety), unless unusual conditions exist.
6. The flight crew will notify the Guardian Air Dispatcher when ready to depart. The flight crew must also contact Security or ED personnel and Security and ED personnel will allow access to the helipad elevator, if necessary.

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7. Pilots will be requested to land with the nose of the aircraft facing in a westerly direction, unless weather conditions make it unsafe to do so. Personnel will then utilize the extreme west edge of the helipad to approach the aircraft.
 - a. If wind conditions dictate that aircraft be landed facing the east, the personnel will approach, when appropriate and safe, by traversing along the extreme north and then east edge of the helipad.
8. Pilots of all parked aircraft will remain available to depart their aircraft from the helipad for other inbound helicopters should the need arise. The pilot in command will be the final authority in determining if the aircraft can safely depart.
9. As a courtesy to other helicopter vendors, all flight crews will conduct patient transfers (to include clearing the helipad) in a timely manner.

HELICOPTER "HOT" OFF-LOADING PROCEDURE

PURPOSE

To insure a safe and coordinated environment for "hot" off-loading procedures for unstable patients or the need for a quick turnaround by the helicopter for safety reasons.

DEFINITION N/A

PROCEDURE

1. Advanced notification of an impending "hot" off-load is given to the ED nurse or physician by the helicopter team. A "hot" off-load is determined by the flight team and physician following the approved guidelines.
2. The Emergency Department personnel will notify the switchboard, and switchboard will immediately notify Security of the potential "hot" off-load request.
3. Security and Emergency Department personnel will take a stripped (i.e., mattress and linens removed) stretcher equipped with O₂ and portable suction to the helipad elevator and wait in the elevator vestibule for the helicopter to land.
4. Once the helicopter has landed, personnel assisting with a "hot" off-load will only approach the helicopter when directed by the flight crew. An RN may be called to the helicopter to assist the flight crew through the door behind the pilot.
5. No one but trained hospital personnel will be allowed on the helipad. The maximum number of hospital personnel on the helipad will be limited to three (observation safety).
6. During "hot" off-loading or loading of the patient, the pilot will remain seated at the controls at all times.
7. Hospital Security is utilized to secure the area from unauthorized personnel and to assist with unloading of the patient.
8. Assisting personnel are warned to approach the helicopter from the FRONT ONLY. At no time shall hospital personnel walk past or approach the aircraft from a location aft of the rear aircraft doors.
9. "Hot" off-loading is a potentially dangerous situation that will be used only in extreme emergencies as specified in #1 above. When a "hot" off-load is felt to be inappropriate, it will be reviewed by the flight team, the charge nurse and physician at the time of the incident.
10. After the "hot" off-load has been completed, Security must notify the pilot that the off-load is complete and personnel are clear. Security will assure that the helipad remains secure until the rotors have come to a complete stop.
11. Pilots will be requested to land with the nose of the aircraft facing west, when weather conditions allow. Personnel will utilize the extreme west edge of the helipad when approaching the aircraft. If conditions require that a landing to the east occur, personnel will traverse along the extreme northern edge of the helipad and approach the aircraft utilizing the extreme east edge of the helipad. Departure of the personnel will occur along the same path.
12. "Hot" off-loading will be a Quality Council Management indicator to be monitored internally by the Quality Council Committee and the Medical Director of Pre-Hospital Care and/or Medical Director of Guardian Air for approval of any issues that may arise.

ATTACHMENTS Guidelines for a "Hot" Off-Loading

REFERENCES N/A

GUIDELINES FOR A "HOT" OFF-LOAD

1. The patient has a life or limb threatening condition which will have a negative impact with a three-minute delay.
2. The patient is combative, posing a danger to him/herself or the aircraft team.
3. An unstable patient whose airway, hypovolemic condition, or cardiac stability is unmaintainable in the aircraft. Determination as to whether to "hot" off-load an unstable patient should involve the ED physician on duty.
4. In a disaster, where the helicopter is used as a "load and go" operation, involving numerous turnarounds or when the flight crew has another priority mission pending.
5. If more than one helicopter is being used to medivac patients to the same helipad.
6. At the direct discretion of the receiving physician.