



National Medevac, Inc.
Air Ambulance Service

Air Ambulance Flight Profiles and Procedures

Pilots: Following are some general considerations and suggested procedures for air ambulance flights:

Preflight:

Patient restrictions: Coordinate with medical crew on any special requirements - especially cabin/aircraft restrictions with the patient onboard. [Note: generally, cabin altitudes up to 6,000 feet will be no problem].

Weather: Air ambulance flights are much more restrictive regarding diversion of flight due to destination airport being below minimums. If the destination airport is close to minimums then we may delay or cancel the flight. If enroute weather is a problem, i.e., turbulence, squall lines, known icing please coordinate with the medical crew - these may have a significant affect on the patient's medical condition and a flight may be delayed, rerouted, or cancelled.

Preflight briefing: Confirm the trip itinerary, airports, and FBO's prior to departure, if you have a preference for a particular FBO please inform the medical coordinator during initial flight workup.

Patient Loading:

Responsibilities: The medical flight crew and ground ambulance crew will be responsible for loading/offloading the patient. We ask that the pilot(s) stand ready to assist but not participate in the actual loading procedure. We suggest that the pilot(s) be in a position to prevent any ground team from damaging the aircraft, i.e., prevent a stretcher from rolling into the wing, etc.

Ground Ambulance: Except during inclement weather or extreme hot/cold, do not let ground ambulance within ten feet of the aircraft. The flight crew will direct the ambulance into position [not the ground or ambulance crew]. Use extreme care when ambulance and ground crew are operating around the aircraft. We prefer to have the ground ambulance wait at the airport until we have lifted off and are clear of the area. This will ensure that an ambulance will be available if we need to return to the airport due to mechanical failure.

Crew Coordination: We ask that cockpit crews back up medical crews in assuring that all patient belongings and medical equipment are loaded/offloaded from aircraft as appropriate.

Taxi and Takeoff:

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Startup: Please coordinate with medical crew before starting up. There is sometimes a slight delay when the patient is loaded to get medical equipment sorted out and stowed and the patient settled in..

Hot/Cold Weather: During extreme weather we ask that the cabin be heated or cooled as soon as feasible. Sick patients are much more sensitive to extreme temperatures - and may also have a significant medical impact, i.e. hypothermia, heat prostration, chest pain [Angina], etc.

Taxi: Please coordinate with medical crew prior to taxi - they may be busy with the patient and may not be seated. If at a busy airport where a significant delay is possible, ask for lifeguard taxi priority [tower may let you back taxi to get you out quickly - make sure the cabin is ready for takeoff in that event].

Takeoff: Do not taxi onto the runway [uncontrolled fields] or call that you are ready for takeoff [controlled fields], until you have checked with the medical crew and made sure that the cabin is ready for takeoff. Be especially watchful for loose medical equipment and make sure that everyone is belted.

Flight Attitudes: No abrupt maneuvers, normal climb out, maximum 500 FPM cabin altitude change [pressurized aircraft] or 500 FPM climb [nonpressurized]; Make believe that you are flying the President!

Enroute:

Lifeguard: Please file Lifeguard flight plans when patient on board, you may also file Lifeguard when enroute to pick up the patient [should only use for emergency transfer, though].

Normal Cruise: Recheck with medical crew about altitude restrictions. When arriving at final cruise altitude let the flight nurse know the cabin altitude.

Arrival Update: Let the flight nurse know the actual arrival time as soon as possible after takeoff/climb/cruise. If any delays are anticipated please alert the crew as soon as possible.

Altitude Alternatives: Generally a 6,000 foot cabin/aircraft altitude is tolerated by most patients. Yet we wish to avoid any moderate or severe turbulence. Therefore, there may be situations where the flight is experiencing turbulence at moderate altitudes and it is possible to climb above it. Check with the flight nurse and work out a plan. Generally, no patient on oxygen should be above 8,000 feet [cabin/aircraft] and 10,000 feet should not be exceeded except in rare circumstances. The above discussion also holds true for other weather/flight phenomena, i.e. icing, strong headwinds, cloud layers, etc. The pilot should ALWAYS check with the flight nurse before climbing higher and use 500 FPM as maximum ascent/descent.

Enroute Fuelstops: If a fuelstop is required with a patient onboard, radio ahead to the FBO for a quick turn [let them know that you are an air ambulance flight] and have a fire/crash truck standing by at the refuel point. You can work out details with ATC also. When on the ground try to expedite ground handling, the flight nurse will not leave the patient so ask is there is anything he/she needs [like a soda]. During temperature extremes, be sensitive to the passengers/patient and try to maximize heating/cooling as appropriate.

Enroute Alternates: Sometimes a patients conditions will deteriorate and require that the aircraft divert to a nearer airport. Always consider enroute alternate landings when a patient is onboard. Preferably, a major city where comprehensive medical care and ground advanced life support is available.

Patient Deterioration: If the patient's condition worsens suddenly the crew may ask to:

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1. Decrease altitude [decrease cabin altitude]: Please do so if reasonable and safe. Sometimes a difference in two or three thousand feet cabin altitude will have a significant effect on the patient.
2. Make emergency landing: in this event, as above, plan to reroute to nearest appropriate airport. Radio ATC that you have a medical emergency and will need an ambulance - preferably a paramedic crew, to meet the aircraft. Consider asking for a Lifeguard helicopter if one is available at the alternate airport. ATC is usually very helpful and understanding in these situations.
3. In the event of a cardiac arrest the medical crew may ask the copilot/first officer to help if possible. If flight duties permit and you feel that it is reasonable and safe, please help the medical crew during the emergency. We understand that this may not be possible and also understand that the pilots responsibility is to the aircraft but an extra pair of hands can sometimes make a difference between a hopeless situation and lifesaving one.

Miscellaneous:

Oxygen: The following discussion pertains to FAR 135.91.

1. Oxygen will be onboard all aircraft configured for air ambulance. The medical crew will comply with all requirements for securing equipment but we ask that the flight crew double check.
2. No smoking during any portion of the flight when oxygen is onboard [Para (a)(5)(b)]
3. All flight nurses will be trained on the use of the equipment and may handle, or connect bottles, oxygen masks, ventilators, etc. as needed [Para (a)(5)(c)].

Flight Crewmember Duties: The following discussion pertains to FAR 135.100.

Medical flight crews are instructed not to talk with the pilot(s) during ground operations, takeoff, and climb out. We ask that strict cockpit/aircraft discipline be maintained at all times. But we also wish to maintain a cooperative and collaborative environment.

The medical crew will have total authority over the patient and medical equipment, the pilot in command will have absolute and final authority over all aircraft operations. In areas where there may be some overlap (such as possible altitude restrictions due to a patient's medical condition), we ask that the cockpit crew comply with such requests when reasonable, safe, and within Federal Aviation Regulation. If the cockpit crew has any questions or concerns please voice them to the flight nurse. If the pilots have any questions about the patient's medical condition, or how it will affect the flight (i.e. contagious diseases, agitated patients, etc.) please let the medical crew know before startup, or preferably at the preflight briefing.

Passenger Briefing: The following discussion pertains to FAR 135.117:

Please make sure that the medical crew is familiar with emergency procedures/exits/door operations prior to flight. We use several different aircraft and while the medical crew is trained in general emergency procedures, they may not be familiar with the particular aircraft. We ask that the pilot or second officer follow routine cabin briefing with any family members who accompany the flight. Note: many patients will be unable to follow emergency procedures, or may be unconscious and be totally dependent on the crew. Please note that evacuation may be difficult in certain situations (such as a patient with a body cast, patient on a ventilator, unconscious patient, etc.). You may want to discuss this with the flight nurse during preflight briefing.

Medical Equipment: The medical crew is responsible for all medical equipment and supplies. The onboard stretcher is certified for the aircraft and will be installed per company operations manual. Cleaning of the cabin, removal of equipment, dirty linens, and so forth will be the responsibility of the medical crew.

Summary:

We welcome the opportunity to work with you. National Medevac strives for the same high professional standards and quality of care. We wish to foster a cooperative and professional environment. We want to be thought of as members of your team rather than just a charter customer. If you have any questions, concerns, comments, suggestions, or professional criticisms feel free to offer them. If you are interested in any aspects of the medical care of the patient please feel free to speak with the flight nurse.

We look forward to working with you.

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