

The Nasty Fire National Guard Hoist Operation

September 3, 2011

Intent

The National Guard's hoist-capable helicopter out of Salem, Oregon was activated on September 3rd, 2011 to extract a USFS rappeller from the Nasty Fire on the Willamette National Forest. The following is a descriptive timeline of events that explains the circumstances, the process and the outcome of the hoist operation.

Background on the Nasty Fire

The Nasty Fire was first reported on August 26 in the Opal Creek Wilderness of the Willamette National Forest. There were numerous other lightning fires on the forest and a Type 3 organization was in place to manage the complex. On August 29th, a module of rappellers arrived on the forest and was briefed by the IMT. The intended strategy was to suppress the fire using rappellers because of the difficult ground access routes and distance from roads. The team recognized that, in the event of a medical emergency, helicopter transport would be the only reasonable way to evacuate a patient from the fire. In addition, the weather forecast was calling for a marine layer to move over the fire area in the next few days, making helicopter flights impossible.

The rappel aircraft performed a recon of the fire on the afternoon of August 29th and estimated the fire to be roughly 4 acres on 100% slope. The determination was also made that there were no suitable landing areas within several miles of the fire. Even if the trees were cleared, the ground simply didn't offer any level touchdown pads. A hoist operation was therefore deemed to be the only means of evacuating a patient from this fire.

The rappel crew performed a second recon of the fire the next day, August 30th, and decided to postpone the insertion of rappellers due to the proximity of the marine cloud layer and the possibility that there would be no medical egress if the fire became soaked in.

On August 31st, the rappel crew performed a third recon and decided to staff the fire. By 1745 that evening, the fire was staffed with 14 rappellers and at 1950 transitioned from a Type 5 to a Type 4 incident.

On September 1st, the fire was reinforced with an additional 16 rappellers, 2 of whom were placed on a vantage point across the drainage to act as lookouts. A total of 30 rappellers were now on scene, organized as shown in Figure 1.

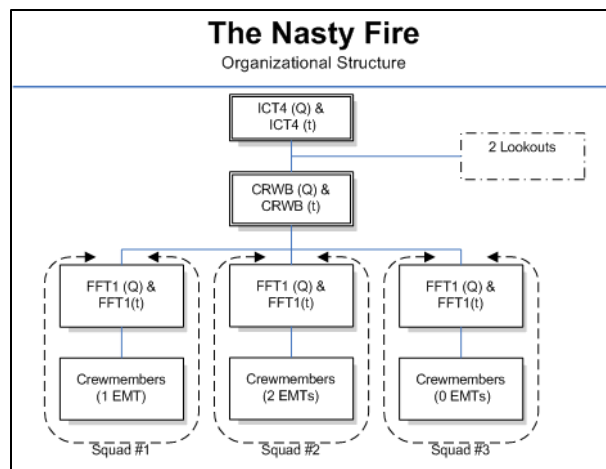


Figure 1 On-scene organizational structure

Circumstances

On September 3rd, the size of the fire had been determined by GPS to be 8.5 acre and ground resources were still engaged in line-construction around the fire. The fire was officially “lined” at 1355 and the crew was improving line in the southwest corner of the fire (marked as the “Medevac Site” in Figure 2). The crew boss was working with squad 1 while squad 2 worked nearby. Squad 3 was snagging the interior and the IC’s were on the ridge top where radio communication was better.

The medical plan that had been established for the fire was that the crew boss would assume command

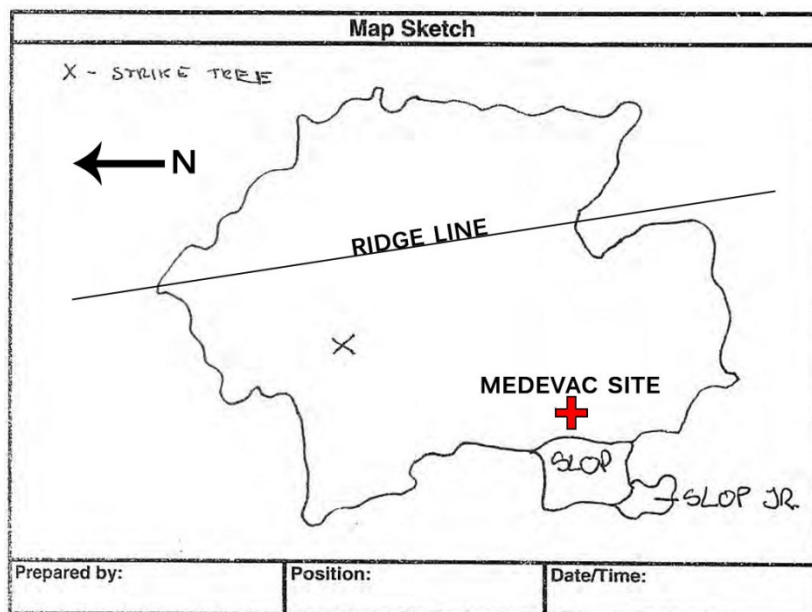


Figure 2 Map sketch

of any medical emergencies while the nearest EMT would take control of patient care. The personnel at the lookout were asked to write down anything they heard over the radio and be ready to relay to dispatch in case radio communication was poor at the fire.

At 1550, the squad boss trainee from squad 2 called the crew boss on the radio and announced that squad 2’s squad boss had been stung by a bee. He had only recently discovered that he was allergic to bee stings several weeks prior when he had an anaphylactic reaction and was rushed to the hospital for

treatment. Everyone on the fire was aware of his allergy and 3 different people on the fire were carrying epinephrine, including the patient himself.

Process

The crew boss rushed to the patient’s location when he received the radio call and conferred with the EMT on-scene. The EMT was preparing the patient for an epi injection and advised the crew boss that the hoist aircraft would be necessary. The hoist aircraft was ordered through dispatch and the standard Nine Line Patient Assessment was relayed to complete the request.

The rappel aircraft arrived over the incident within 25 minutes to deliver medical extraction gear. The gear delivery included an airway kit, scoop stretcher and a litter.

An air attack had also been assigned to the incident and was on-scene during the medical emergency. Air attack was able to contact the hoist aircraft while it was en route and relay information between the aircraft and the medical IC.

Nasty Fire Hoist Extraction Timeline

September 3, 2011

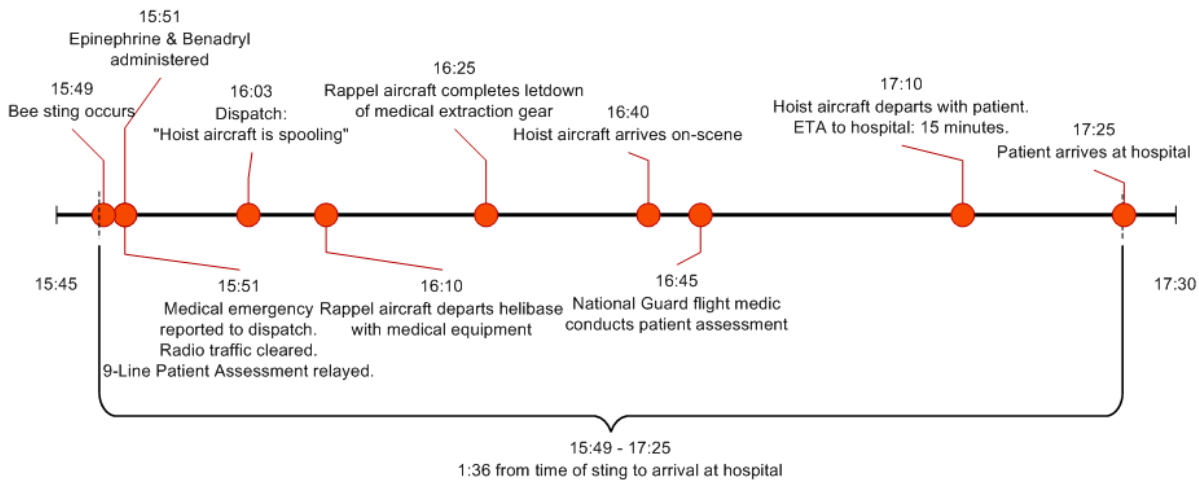


Figure 3 Hoist extraction timeline

The hoist aircraft arrived 49 minutes after being ordered and was able to communicate with air attack on the victor frequency as well as the medical IC on the forest air-to-ground frequency. Ground resources notified the medical aircraft that a stretcher and litter were already available on-scene, but were informed that the hoist operation had to be performed using National Guard equipment. A National Guard EMT was delivered to the ground to conduct a patient assessment and coordinate the packaging and extraction of the patient. At this time, the patient was experiencing burning at the site of the injection, cramping, nausea, weakness, and redness in the face. However, since the patient was conscious and able to walk, he was extracted using the Jungle Penetrator for expedience. The hoist aircraft was on-scene for 30 minutes before departing with the patient onboard and a 15-minute ETE to the hospital.

Outcome

The patient arrived at the hospital 1 hour and 36 minutes after being stung, which is excellent for any medical transport, especially a wilderness medevac. The patient was released from the hospital the same day without complication. There were several things that could have gone better and several things that greatly contributed to the success of the operation. The following is a summary of the factors involved:

1. The lookouts were a crucial link in the communication between the medical IC and dispatch. Numerous transmissions from the IC were broken and unreadable by dispatch, but the lookouts were able to accurately relay patient assessments and other information.
2. Air attack was used to relay information from the medical IC to both dispatch and



Figure 4 The Hoist Operation

the hoist aircraft before it arrived on-scene. However, the messages were paraphrased as they were relayed and did not retain their original meaning. Several messages containing medical terminology and requests for specific pieces of equipment were relayed incorrectly and cost several minutes apiece to correct.

3. The type 3 management team had recognized early on that any medical emergency on this fire would depend solely on the hoist program for medevac. Notifications were made in advance to the dispatch center and the Salem National Guard to ensure that they would be prepared for a medical extraction.