

Gila National Forest

Facilitated Learning Analysis

June 29, 2009



Farm Flats Smokejumper Proficiency Jump

June 15, 2009

Introduction

On June 15, 2009, the Gila smokejumpers conducted a proficiency jump at Farm Flats on the Gila National Forest. The activity began at approximately 8:00 am. The jump was a planned event and 11 smokejumpers were scheduled to jump that morning. The Silver City smokejumper base supervisor was the first person to jump and completed the jump without incident. Following the base supervisor, five 2-person “sticks” (stick references a pass made by the jump ship during jump operations) executed jumps. Five individuals did experience “hard landings,” and one smokejumper landed in a tree. Smokejumpers occasionally experience “hard landings” of varying degree and are given appropriate training to deal with such situations. The smokejumper who landed in the tree was initiating a “let down” procedure, when he fell from the tree or “burned out.” He sustained injuries that required a medivac, by helicopter, from the jump spot to the closest emergency facility, Gila Regional Medical Center in Silver City, New Mexico, and later that day was transported to Thomason General Hospital in El Paso, Texas. The five smokejumpers who experienced “hard landings” were assessed at the medical facility in Silver City, New Mexico. Four did not require further medical treatment, however, one smokejumper was referred to a specialist in Albuquerque, New Mexico, where his injury was assessed. As of the time of this report, two smokejumpers are on paid leave, due to injuries, and the remaining four have resumed normal duties.

Facilitated Learning Analysis Process

Background: The Facilitative Learning Analysis (FLA) provides a mechanism for firefighters to learn from near misses, close calls and/or events of significance. Lessons learned from this process may prevent a serious accident from occurring. The process is simple, expedient, and can be performed by wildland fire units across the country. The Facilitated Learning Analysis Guide incorporates FLA goals and objectives and is readily available for assistance in implementing this process.

Rationale: The decision process for the Gila National Forest to utilize the FLA for the Farm Flats Proficiency Jump was based on the following:

The FLA process was selected by the Gila National Forest as the best analysis tool to look into the events associated with the Farm Flats Smokejumper Proficiency Jump on June 15, 2009. The rationale for the use of this tool is based on several factors:

- The “Decision Aid for Agency Administrators for Choosing a Post Event Investigative/Analysis Process,” found in the FLA Implementation Guide, dated June 6, 2009, was used.
- There was also no indication that there was any recklessness, dishonesty, or negative behavioral connotations associated with the events that took place.

- Many positive things happened that day and we did not want to lose sight of the good work that was done.
- In reference to doctrine, the forest believes that this is an educational opportunity for our agency to foster open and honest dialog that will assist us in sharing lessons learned information with the broader fire community.
- It was also believed that the final FLA product (document) will assist in answering questions that may still exist, related to the events of June 15, 2009.

FLA Team: The Gila National Forest’s Fire Leadership group conferred with USFS Southwestern Region Fire Program Directors, Northern Rockies Region Fire Program Directors, and home unit smokejumper base managers to identify potential FLA team members. They agreed on the following individuals for participation on the team, based on individual skills, experience, demonstrated ability to remain objective, and expertise as subject matter experts. The team consisted of:

- Julian Affuso, FLA Team Lead Facilitator
- Jeff Andrews, FLA Team Member
- Jeff Kinderman, FS Subject Matter Expert
- Marty Adell, BLM Subject Matter Expert
- Loretta Benavidez, FLA Technical Writer

Delegation: A *Delegation of Authority* was issued on June 23, 2009, to conduct an FLA for the Farm Flats Smokejumper Proficiency Jump and the resulting injuries; and medivac that occurred on June 15, 2009 on the Gila National Forest. The delegation identified four separate situations that the team was asked to focus on:

1. Smokejumper proficiency jump operations at Farm Flats.
2. Medical evacuation of the injured individuals.
3. Medical claim business practices associated with ASC-HCM.
4. Communications and information flow related to the incident.

The *summary* of events and *lessons learned* for each of the four situations are addressed individually for purposes of this report.

Proficiency Jump at Farm Flats

Note: For identification purposes, smokejumpers are numbered by the order that they jumped.

Summary: The proficiency jump was a planned event scheduled for the morning of June 15, 2009. An interagency group of eleven smokejumpers were scheduled to take part in the proficiency jump. A briefing was conducted and all pre-notifications were made, in accordance with local procedures.

At approximately 8:50 am, conditions at the jump site were acceptable, as determined by designated smokejumper spotter. Skies were clear, winds were out of the WSW at 6-8 mph, which equates to 200 yards of drift by the streamers. The jump spot is approximately five acres of flat, open ground, surrounded by 40–60 foot ponderosa pine at an elevation of 7,200 feet. Ground personnel on scene, included a jump evaluator, an EMT (with trauma kit), and two drivers. Ground personnel reported to the jump ship (J-15) that winds were gusting 10-12 mph, prior to jump ship arrival, and that current winds were light and variable, switching from east to west.

Jump operations began with a single person stick, who upon landing, reported to the ground crew that the release point was good and to continue jump operations. The second stick followed with two jumpers (no. 2 and no. 3). Jumper no. 2 landed in the spot and experienced a “hard landing.” Jumper no. 3 was set up to land in the jump spot, when a wind gust blew him backwards approximately 20 feet. This caused his parachute to be “hung up” in two ponderosa pines.

Jumper no. 4 and no. 5 both landed in the spot, with jumper no. 5 later reporting a bit of a hard landing. Jumper no. 6 and no. 7 landed in the spot, with no. 7 reporting a “hard landing.” Jumper no. 8 and no. 9 experienced soft landings, although no. 9 had elected to land in an alternate spot, due to his assessment of changing wind conditions, specific to his final. He indicated that he thought he would have made the jump spot, however there was a slight uncertainty and he didn’t want to chance it.

When the last stick of smokejumpers, no. 10 and no. 11, jumped, no. 11 experienced a parachute malfunction and had to deploy his reserve parachute. Proper protocols and procedures were followed. When jumper no. 10 realized that his jump partner had experienced a malfunction, he reassessed his pattern to provide ample room, both horizontally and vertically, for his jump partner. Jumper no. 10’s maneuver, as it was executed, was initiated immediately and safely to best accommodate the current situation that had developed only seconds before. On final, jumper no.10 was pushed from left to right by a shift in wind, resulting in contact with a tree, which caused a “hard landing.” Jumper no.11 made adequate and appropriate adjustments that directed his approach toward the jump spot, but on final approach, he brushed the top of a 15-25 foot tree on the northern edge of the jump spot which contributed to a “hard landing.”

During the time period between no. 10’s and no. 11’s landings, no. 3 was suspended approximately 30 feet off the ground, with a loose left parachute riser and a tight right parachute riser. He initially felt that he was hung up securely. At some point, he was able to get to the bole of one of the trees, using a limb. His back was to the bole of the tree and he was straddling a limb. He pulled (reefed) on his tight riser to see how secure it was. He started let down procedures by releasing the right side of his personal gear (PG) bag and reserve. Let down tape was threaded through the friction rings and tied to the tight riser. Jumper no. 1 arrived to observe and assist, if needed, on the let down. Jumper no. 3 considered tying off to the bole of the tree, but given his position (with his back to the bole), this would have been difficult to do. Jumper no. 3 decided to proceed with the let down, but first had to un-straddle

the limb. Tension remained on the right riser. Jumper no. 3 realized that the left side of his parachute was starting to slip from one of the trees and he reacted by grabbing a limb. Jumper no. 3 was unable to maintain his grip and/or the limb broke. This put the full weight of the jumper on the suspended parachute, which resulted in the parachute being dislodged from the trees. Jumper no. 3 fell to the ground, approximately 30 feet and sustained injuries. J-15 cancelled cargo drop operations, following notification of the injury from ground crew.

Lessons Learned:

- Flight characteristics of the reserve parachute are similar to that of the main, however the descent rate is slightly higher. As outlined in the Ram Air Training Manual (RATM), continue to emphasize training relative to the reserve parachute flight characteristics.
- Constant assessment of jump partner conditions is necessary in order to get jumpers to the ground safely. As unexpected situations develop, the need to maintain adequate separation continues to remain critical.
- Let downs need to be accomplished in a smooth and efficient manner, as described in the National Smokejumper Training Guide – USFS, 2008.
- To minimize hard landings, set up to land into the wind and execute a proper Parachute Landing Fall (PLF), as described in the National Smokejumper Training Guide – USFS, 2008 and the Ram Air Training Manual (RATM).
- Continue to validate conditions during jump operations.

Medical Evacuation

Summary: Within seconds of jumper no.10 and no. 11’s “hard landings,” jumper no. 3, “burned out” and his approximate 30’ fall resulted in injuries that appeared to be critical. As smokejumpers on the ground triaged the situation involving no. 3, no. 10, and no.11, it was quickly determined that the priority was jumper no. 3, whose injuries required immediate medical attention and a request for medivac was made. J-15 continued as the communication link between the ground operations and dispatch. Jumper no. 4, a qualified EMT, assumed the role of lead in the medical handling of the patient. All of the smokejumpers acted in some capacity to support the activity involving the medivac of no. 3. An ambulance and helicopter were requested by the ground EMT via the spotter and dispatch launched a Forest Service exclusive use contract ship and made a request for an ambulance through Central Dispatch. At the request of the Forest Aviation Officer, dispatch assigned a second Forest Service exclusive use helicopter as well as an Air Attack. A Forest Service employee, who was also an EMT, was asked to escort the ambulance to Farm Flats. The helicopter arrived on scene and smokejumpers assisted in loading no. 3 into the helicopter. The helicopter manager and one EMT smokejumper, who provided medical support, accompanied no. 3 during transport to Gila Regional Medical Center. Once no. 3 was loaded into the helicopter, the inbound

ground ambulance was cancelled by dispatch. This caused confusion for the smokejumpers on scene at Farm Flats, who were unaware of the cancellation of the ground ambulance. Regardless, they did not wait for its arrival. Three smokejumpers (no. 1 and two ground personnel) transported no. 10 to the hospital. The remaining smokejumpers gathered up their gear and proceeded to Gila Regional Medical Center. Later the base supervisor asked no. 2, no. 5, no. 7, and no. 11 to undergo evaluations, as a precautionary measure. No. 11 was transported to Albuquerque, New Mexico, via air ambulance for further evaluation and was released to his home unit on the following day. Smokejumper no. 3 was transferred from Gila Regional Medical Center to Thomason General Hospital in El Paso, Texas, via air ambulance, and was released on June 19, 2009. He was later transported by air ambulance to his residence, and as of the date of this report, is on injury leave.

Lessons Learned:

- Ensure that a Medical Evacuation Plan, with necessary justifications relative to resource utilization, is approved and implemented.
- Continue to capitalize on past lessons learned to appropriately respond to future medical emergencies.
- Annually, and as needed, continue to deliver accurate and timely briefings/training, relative to local protocols associated with medical evacuation procedures.
- Utilize established procedures and guides to help support the people making the decisions.
- Conduct frequent trauma and medical kit familiarity training. Continue scenario-based medical training.
- Although precautionary medical evaluations seemed unnecessary by some, they did result in the identification of an injury.

Albuquerque Service Center-Human Capital Management (ASC-HCM)

Summary: Upon notification of injury, the assistant base supervisor responded to Gila Regional Medical Center to assist with the administrative process for injury/medical documentation. The Forest Safety Officer also responded to the hospital to assist with this procedure. The assistant base supervisor made initial contact with ASC-HCM and completed and submitted the required documentation as per HCM guidelines. This activity was accomplished by telephone calls, fax transmittals, computer forms and databases. All totaled, documentation was required for the six individuals who received medical assessment or treatment that day.

The assistant base supervisor felt that the process went fairly smooth and was mostly a positive experience in dealing with ASC-HCM. He expressed that a greater challenge was encountered when entering data into Safety and Health Information Portal System (SHIPS).

Lessons Learned:

- When working in an interagency program, ensure all agency policies and procedures are understood. Provide training as appropriate.
- Continued follow-up communications with HCM are essential to ensure that case work is completed in an accurate and timely fashion.
- Recognize that when dealing with a centralized personnel center, the process may take longer than anticipated. Patience may be necessary.

Communications and Information Dissemination

Summary: Radio transmissions associated with this incident utilized the Gila South frequency, which was also in use by firefighting and field resources across the southern portion of the Forest. Upon receipt of J-15's request for a medivac helicopter and ambulance to assist with unspecified injuries, dispatch cleared Gila South frequency for emergency radio traffic. J-15's next transmission to dispatch included information regarding the jumper's injuries, and mechanism of injury. During the course of these radio transmissions, numerous independent notification calls were made by the Forest fire/aviation managers, dispatchers, and possibly others, without a planned and coordinated effort. Additionally, the lack of coordination resulted in certain key individuals not being notified. This series of notifications and, in some cases, interpretations of radio transmissions contributed to the erroneous dissemination and release of information at the local, regional and national levels. Examples include inaccurate release of information relating to number of injured, nature of injuries, and agency affiliation.

Lessons Learned:

- Within your respective units, ensure communication plans are completed and referenced, as appropriate.
 - Ensure communication plans identify and provide a single point of contact for the release of information.
 - Utilize conference calls throughout the event as a means to share information.
 - Information transfer must be accurate, timely and consistent.
 - Information dissemination must be audience appropriate.
 - Reference National and Regional guidelines, relative to transfer or relay of incident information. Reference privacy act within plan.

- Recognize the sensitivity of situations and refrain from spreading un-validated information.

FLA Team Conclusion

Uncertainty regarding the FLA process, and the need, led to initial participant apprehension at multiple levels. Once individuals obtained a better understanding of the FLA process, they were willing to share their experiences in an open format. This willingness resulted in several lessons learned by individuals at all levels associated with this event.

While numerous lessons have been learned as documented in this report, additional learning will come from the Malfunction and Abnormality Reporting (MARS) database and SHIPS database. Specific events associated with this report have been entered into their database of record.

Although there were unfortunate events that occurred, it is important to highlight that many individuals worked together in a cooperative and timely manner to mitigate the potential escalation of this incident.

The overall lack of education regarding the FLA process has identified a need to provide training and additional exposure to the fire community.

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