

ATV Accident Lessons Learned

Kelley Fire
ID-STF-000423

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September 3, 2013

DESCRIPTION OF THE ACCIDENT PROCESS

Executive Summary

On September 3, 2013 at approximately 1600 a Polaris Sportsman 550 EPS AVT was totaled when it rolled down a steep slope on Division Delta of the Kelley Fire near Featherville, Idaho. There were no injuries to personnel during the accident or in the recovery efforts of the vehicle. The following information is based on statements and interviews from those involved in the accident and should be used as a lessons learned to help mitigate this kind of accident from occurring in the future.

Activities – prior to

The West Fork Kelley Creek ATV Trail #038 is a narrow one-way trail with few areas available to turn out.



Sign placed at DP 11. This is the location where the ATV operator entered the trail.

The local forest has identified travel regulations at the trailhead designating single uphill travel only. Upon scouting the trail, the Division Supervisor (DIVS) realized that the trail would be a valuable asset. However, good communications would be necessary to mitigate the one-way only travel on the trail. The DIVS asked the Safety Officer (SOF2(t)) assigned to the division to sign the trailhead with a sign requiring operators of ATVs to call out on the tactical frequency assigned to the division and announce which way they were traveling. The DIVS posted a sign on the trail at DP 11 and the SOF2(t) posted two signs along the lower section of the trail where operators could pull over and call out to ensure they would not meet opposing traffic in a spot on the trail where they could not pass. Individuals on the division were also required to do this on the main roads within the division as they did not have adequate room for two vehicles to pass on them either.

Activities – property damage event



Right side of ATV

At approximately 1545 on the day of the accident, the DIVS (t) received a call from a crew requesting to have a face-to-face. The DIVS (t) looked at his map and decided his route of travel would be down the #038 trail out of DP 11 to a point where he could rendezvous with the crew. The DIVS (t) entered the trail without calling out on the tactical channel and proceeded down the trail for about ½ mile, at which point he saw a UTV headed up the trail (opposite direction from his travel). Upon realizing that the traffic jam had taken place in a spot on the narrow mid-slope trail in a location where they would not be able to pass, the operator of the ATV decided to back up and look for a place to pull

over. As he was backing up he noticed an area on the outside of the trail that looked wide enough to allow the UTV to pass. As he pulled onto the shoulder, the loose soil gave way and caused the rear right tire to drop off. The operator of the ATV had only two choices at that point: 1) he could try and throw his weight forward shifting the balance to the front tires and attempt to drive out, risking being impacted by the vehicle if it rolled or 2) he could bail out and get clear of the vehicle to lessen the chance of personal injury. In a split second decision the operator bailed off the ATV, landed on the downhill side of the vehicle in heavy brush and took a few tumbles down the hill but was not impacted by the ATV as it tumbled past him. The ATV did several flips and took serious damage as it careened down the steep slope until it reached a point where the terrain started to flatten and the brush was able to slow it to a point where it came to rest upright on its tires.



Left side of ATV

Activities – events after property damage

The individuals on the UTV immediately came to the aid of the ATV operator to ensure there were no injuries. The operator was shaken up but due to his use of PPE and the decision to abandon the vehicle did not receive any bodily injuries. The operator of the ATV walked down to the still running vehicle, assessed the damage and shut it off before hiking back to the trail and getting a ride on the UTV back to DP 11 where he started making the appropriate notifications. He then returned to ICP where he met with some members of the IMT to discuss the events and the plans for extraction. He was also checked out by the Medical Unit Leader. The day following the accident (September 4th) the SOF2(t) and the DIVS(t) hiked into the accident site to take photos, get GPS locations and devise a plan for extraction of the ATV. It was determined that the vehicle was in a location that was safe to work in and that the best way to extract the ATV would be to sling it out with a helicopter. On September 5th the ATV was successfully flown out to the Kelley Helibase.

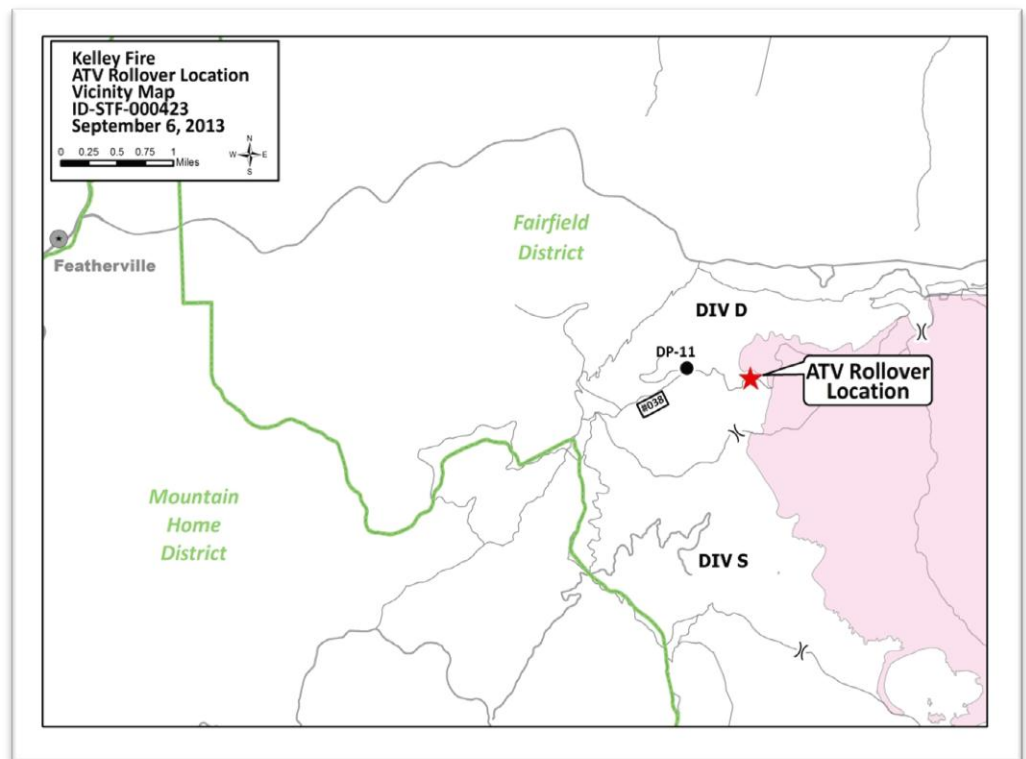
Lessons Learned

-The operators of both of the vehicles should have called out on the radio stating their intended direction and location of travel. This communication could have alerted the other operator and a good passing location could have been identified to avoid a traffic jam.

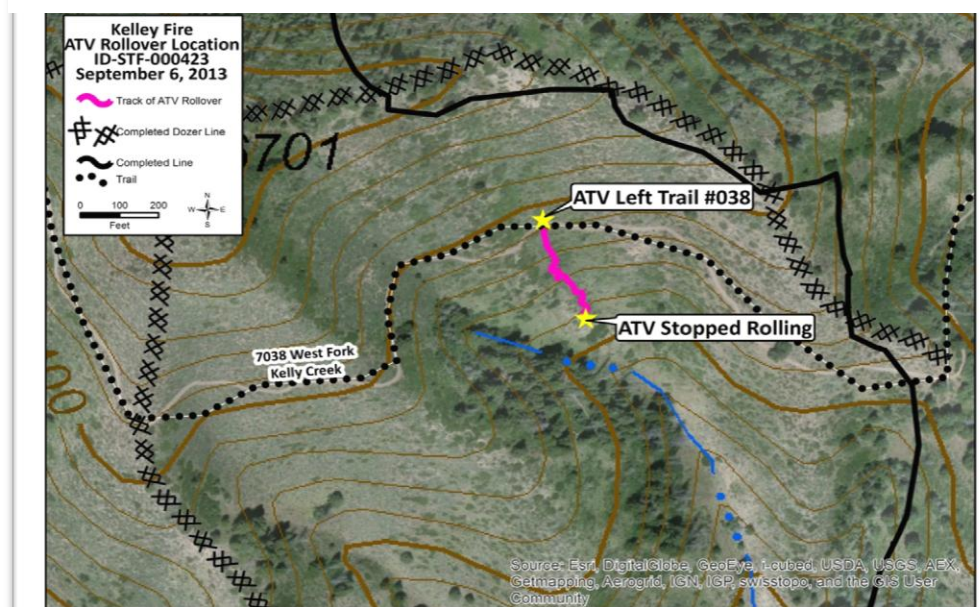
-Upon recognizing the traffic jam had occurred, all parties should have shut the vehicles off and devised a plan to remedy the situation. This communication could have identified safe alternatives to solo backing by the operator of the ATV such as: using a spotter(s); testing the pullout for stability; using all four individuals to manually lift and slide the ATV around; or calling for help from other crewmembers or heavy equipment to construct an adequate turnaround spot.

-The ATV operator was wearing all required PPE specified in the Interagency Standards for Fire and Fire Aviation Operations, including DOT certified full face helmet. The operator is also qualified as ATVO in IQCS according to his Redcard. The combination of refresher training and use of PPE led to both quick thinking and protection from bodily injury.

-The use of ATV's and UTV's can be a great asset for fire operations, logistical missions and medical emergencies. However, prior to their use, one must decide if it is a necessity or just a convenience, and consider a wide variety of mitigation measures to provide for safe operations.



Vicinity map of the ATV accident



Map of ATV accident site