Rapid Lesson Sharing

Event Type: UTV Rollover During Prescribed Fire Operations

Date: Feb. 12, 2015

Location: Ozark-St. Francis National Forests; Arkansas

Est. 2002

NARRATIVE

On Feb. 12 at approximately 1600 a prescribed fire was being conducted on Mt. Carmel on the Mt. Magazine Ranger District.

W1, the Squad Boss for the fire crew, was the only qualified V1 (UTV—Utility Task Vehicle) operator. The crew had been on site approximately three hours burning a 352-acre section with no issues.

The momentum made V1 roll to the right and do one complete revolution, landing back upright on its wheels.

Photo above taken from second water bar looking down the dozer line that the V1 (UTV) drove up.

Once the prescribed fire was completed, the Burn Boss asked the crew to go to the western line to check fire behavior and to identify any potential areas of spotting.

Fire Crew Get into V1 and Drive Up Steep Grade

At this point, all three fire crew members got into V1, buckled up and headed up the dozer line. While ascending the mountain, they came to the first dozer-created water bar and had no issues going over it.

Approximately 50 yards from that first water bar, they encountered the second dozer-created water bar. Due to this bar's height (approximately 4-5 feet high), W1 realized that he couldn't drive over it.

Decision Made to Drive Around Second Water Bar

Due to the mountain's steep pitch, W1 had V1 fully powered-up. He therefore decided that he couldn't stop to back up—fearing that once stopped the V1 could start sliding back down the mountain. He quickly decided to drive around the second water bar.

Photo above shows where V1 (UTV) drove into the black to try to go around the second water bar. Photo on right shows the dozer that built the line for this prescribed fire.

After entering the burned area of the woods, W1 was attempting to drive V1 back onto the dozer line. There was an approximate 14-16 inch difference in height between the

level of the woods and the dozer line (see photo on right). Once W1 tried to get V1 back onto the dozer line, V1's right side wheels were not making contact with the ground. Because V1 was being fully powered, the right side wheels were spinning rapidly in the air.

Photo on left shows the height difference between the wood line and dozer line—an approximate 14- to 16-inch drop. Photo on right is the UTV that was involved in this incident.

V1 Starts Teetering from Right to Left

Next, V1 started teetering from right to left. When the vehicle's right tires finally touched the ground—because they were spinning at a rapid rate of speed—the wheels grabbed the ground quickly and V1 teetered to the right. The momentum made V1 roll to the right and do one complete revolution, landing back upright on its wheels.

All three members unbuckled and got out of V1 to check on each other and to check out V1. There were no injuries to the firefighters nor damage to V1.

LESSONS

Recommendation 1

Once dozer lines are created, attention should be given to water bars with the assumption that a UTV may have to traverse them.

Water bars should not be built extremely high. In this incident, the water bar was approximately 4-5 foot high—making it non-traversable.

Additionally, regardless of how high the water bars are made, the dozer operator should take into consideration that a UTV will have to access the water bar—and ensure that paths are provided on both sides of the water bar for UTVs to drive around it.

Recommendation 2

All dozer lines that are dangerous for UTV travel should be marked on the fire maps as "Not for UTV Use" and briefed as such during tailgate sessions.

Recommendation 3

If they are going to drive on them, have UTV operators first walk and inspect the dozer lines.

After Action

The Forest Safety Officer observed the UTV at the work center. There was no visual damage to the vehicle. The UTV was started and ran with no issues. Seatbelts prevented death or serious injuries.

This RLS Submitted By:
Forest Safety Officer

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