2012

Klamath
National Forest

FACILITATED LEARNING ANALYSIS - KLAMATH NATIONAL FOREST

FLA Team Members:
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While in route to the Berry Point Fire (Oregon) from the Lake Fire (Modoc National Forest (MDF), a Klamath National Forest (KNF) engine was involved in a Motor Vehicle Accident (MVA) with no injuries and little damage to the engine. They were reassigned to the Berry Point Fire as an immediate need strike team leaving from a drop point on the Lake Fire.

Timeline of events

July 28: At approximately 1200 hrs. Strike Team 3600C forms up at Yreka Interagency Command Center and heads to the Peak incident.

August 1: At approximately1400 hrs. Strike Team 3600C demobed and reassigned immediate need to the Chips incident.

August 3: Strike Team 3600C reassigned to Salt Creek Incident Shasta Trinity National Forest (SHF).

August 5: Strike Team 3600C demobed from Salt Creek incident, an engine is red tagged for missing bolts on chassis. Engine fixed and returned to service.

August 6: Strike Team 3600C reassigned to Hayfork R.D. for cover assignments and I.A. then reassigned to MDF after a couple hours on the Hayfork R.D.

August 8: Strike Team 3600C assigned to the Lake Complex on the MDF.

August 11: At approximately 1335 hrs. engine from Strike Team 3600C leaves roadway while in route to Berry Point Fire.

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The Story:

While in route to the Berry Point fire an engine from a strike team from (KNF), was involved in an accident. On August 11th, a KNF strike team of engines was traveling in a convoy of vehicles on a MDF road and the last engine in the strike team had a near miss MVA.

(Words of the driver)

"The incident occurred while traveling northbound on a freshly graded cinder dirt road. My engine was traveling with a strike team of engines and about three or four other engines and a hand crew in 5 pickups. We were in the middle of the convoy on a two lane cinder road. Before the S turn where the near miss happened there is about a mile of straight road. Normally on single and two lane dirt roads I always try to stay on the right side of my lane. The road made a turn into a steep ravine that instantly turned into a one lane road with a narrower spot at the low water crossing at the bottom of the ravine. I was already going slowly when I hit the top of the S turn. Midway through the S turn, I saw that the road

turned into a skinnier one lane road at the bottom of a ravine. I was on my right side of the lane when I saw this.

“As I began to turn to the middle of the lane at the bottom I felt the back right duals do a dip effect. Dip effect means the feeling of when your rear duals go into a pot hole, or when your duals sink into mud or sand. Instantly as I felt the dip effect, the rear of the engine started to get pulled to the passenger side. At this point I fell into recover mode. As my rear end started to be sucked off the road I knew I had to keep the two front tires on the road to keep from a potential rollover. So I turned the wheel away from the side that was sucking the engine off the road and throttled the engine by pressing the accelerator pedal. In doing so this kept the front right wheel on the hard pack of the road right in front of the low water crossing thus keeping the engine upright even with the rear dual off in the soft cinder shoulder.

“Without rain or watering before road grading, the grader leaves a soft or false shoulder. On this particular out turned corner that led up to the crossing, there was almost three feet of soft shoulder that looked like hard pack road base. So when I was turning thru the turn to enter the low water crossing I was not alarmed by the road width until my back dual started to sink. I am constantly going through driving tactics in my head when I drive, like backup plans or escape routes. What would I do if a car pulled in front of me or what would I do if my front tire blew and on my district, what would I do if my rear dual got sucked off the edge as in the Stanza accident. As soon as this episode started it was over with both of my front tires on the road and my back duals off the road. I instantly exited the engine with the crew and I went into damage assessment.

“At this time the captain assessed the scene for safety and ordered the crew to exit the vehicle with most of the crew leaving the vehicle on the uphill side. I then dumped the water out of my tank to prevent possibility of continued rollover due to the soft pack. After the certified mechanic and I did a damage assessment investigation, we found the only damage was the petcock on the bottom of the pump was broken off. We had spares on board since this may happen occasionally on backwoods roads.

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“When the incident occurred it was day 13 of our assignment. The previous day’s shift was 16 hours and the night before the incident I had approximately 7 hours of sleep and I was off shift for 8 hours thus meeting my 2:1 work rest ratio. On August 5th thru the 8th of the assignment we were in initial attack staging, the 10th and 11th we started mopping up on the Lake fire. The 6 days before the incident were relatively light in physical and mental operations combined with sufficient sleep for an assignment. The road we drove was unfamiliar to us but at the same time was driven with the same caution as any other road. After the MVA incident, the ICT 4 of the Lake Fire who was also at scene, told us there had been potential near misses because of the newly dry graded cinder roads in which two other vehicles left the hard pack.”

Lessons Learned from Incident

What went right:

1. Driver's training and experience helped keep the engine upright after leaving road way. Emergency Vehicle Operations Training (EVOT) and Engine Academy instruction influenced a positive outcome.
2. Captain and driver remained calm during the incident.
3. Captain assessed the scene for safety and then led a calm and organized egress of the vehicle.

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Lessons Learned from Incident (continued)

Discussion points:

4. *Driver unfamiliar with road and hazards associated with it*.
   Ask local units about roads and the hazards associated with them and if no one is available to talk to then drive slower than usual to give yourself ample time to react to the hazards.

5. *Driving too far to the right side of the road when on gravel roads.* When on narrow roads it's a good idea to drive towards the center of the road to give you more reaction time and distance. Always keep in mind that traffic could be coming towards you when on narrow roads, so drive accordingly.

6. *All accidents, no matter how minor, need to be reported up the chain of command and the appropriate forms must be completed*.

7. *Forest road hazards need to be marked with flagging, traffic cones or signs to ensure that hazards are identified and they need to be communicated to others.* Do not make the assumption that people know or have seen the hazard, pass any hazard awareness information on to other resources or people to ensure it is known.

Thank you to everyone who contributed to this Facilitated Learning Analysis, so that in the future people may learn from this incident and to foster a learning culture.