

Facilitated Learning Analysis



ASH CREEK FIRE BURN INJURY ACCIDENT

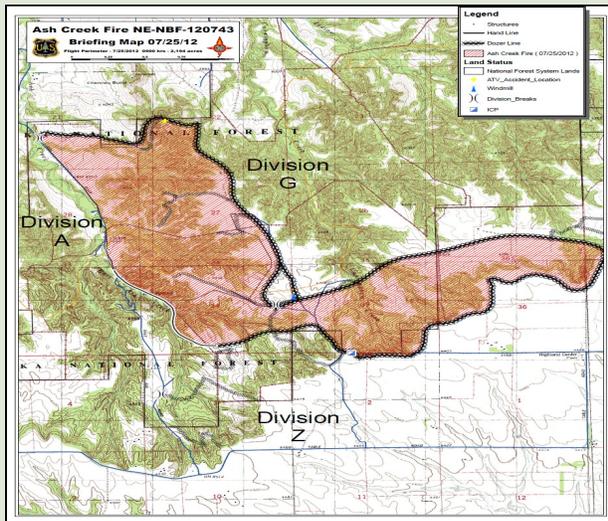
July 24, 2012

Nebraska National Forest
Pine Ridge Ranger District



SUMMARY

On July 24th, sometime after 1400, a dozer operator sustained burns on his face, nose, ear and the right hand while working directly on the fire's edge. The dozer was working with two hotshot personnel trying to flank a section of the fire that had slopped over control lines when the wind direction changed pushing the fire towards the dozer. The two hot shots stepped into the black and signaled the dozer to follow. As the dozer moved into the black the burn injuries occurred.



“If you are in an open cab, wear your helmet, shield and gloves.”

INCIDENT

At 1130 on July 22nd a fire was reported on Pine Ridge Ranger District on the Nebraska National Forest. The fire quickly transitioned from initial attack to a type 3 incident management team.

At approximately 0800 on July 24th a slop over was discovered on the north end of the fire. At this time the fire was estimated at 800 acres. An interagency hotshot crew attended to the slop over with direct hand line and a small burnout. The area the crew was working in was at the head of the fire at that time. At some point that morning the slop over was contained and resources were holding the fire line.

At 1245 the wind switched and fire activity picked up on the south end of the fire. The division supervisor requested help from the hotshot crew working on the division to the north and asked them to bring a dozer. A D-6 open cab dozer assigned to the fire was available and accompanied the hotshot crew. At approximately 1400 they arrived at the area of concern. The fire had slopped over the containment lines and was very active.

“You just do what you have to do around here, I don't care who you are.”

The crew and the dozer anchored into the cold black edge of the fire and began pushing direct on the fire's edge flanking it as the fire moved east. The fire was backing with favorable winds, with flame lengths estimated around 1 foot. The dozer pushed across a grassy flat area and got held up on the edge of a steep draw. The crew superintendent, a squad boss, and the dozer found a route around the draw. The remainder of the hotshot crew anchored off of the dozer line and constructed hand line down and across the steep draw.

The dozer and the two hotshots moved into position on the other side of the draw. The dozer pushed through grass and timber including areas of thick fuel loading, downed logs and snags on fire in the timbered areas. One of the hotshots recalled stating that "if the wind direction switches we'll just go into the black." The two hotshots were ahead of the dozer when the wind switched and they stepped towards the green. One of the hotshots said that he motioned with hand signals for the dozer to do go in the black. The dozer turned at a right angle and went into the black along with the two hotshots.

The fire was burning in the timber and starting to torch out trees. As the dozer operator looked back he saw that the flames were "behind [him] and curling over the top." He could not see the two hotshots due to smoke and was standing up in the dozer and leaning forward to try to get further out of the way of the heat.

"I looked down at my hands and they shaking from the heat."

The dozer operator estimated it took about 45 seconds from the time he started to take a lot of heat until he was safely in the black out of the heat. The fire activity when the two hotshots stepped into the black was estimated to be 2 to 3 foot flame lengths while the area where the dozer went into the black was estimated to have 4 foot flame lengths with trees torching out behind.

When the wind resumed blowing to the south the two hotshots and dozer picked up the fire's edge again and continued line construction until they ran into a canyon that they couldn't cross. The dozer returned to ICP for the remainder of the shift. The entire hotshot crew picked up the fire's edge and continued line construction.



The dozer operator did not report his injuries or seek medical attention for several days.

"It didn't even hurt for 72 hours."

OBSERVATIONS AND LESSONS LEARNED

Firefighters and equipment operators were wearing appropriate fire clothing. The addition of a shroud and gloves could have reduced the injuries incurred by the dozer operator. However, in high temperatures, additional consideration is also given to the effects of heat on an individual and the potential for a heat related injury. Wearing a shroud can increase body heat.

Normal communication occurred during operations and when fire activity changed. Hand signals were used to guide the dozer into the black because an audio signal was not practical due to equipment noise. A hand held radio would not have been heard in this environment.

The hotshots and the dozer were acting in accordance with the leader's intent in the execution of their duties in fighting this fire.

The hotshot crew, working in conjunction with a dozer, increased operational effectiveness. When the dozer could not progress due to steep terrain, the hotshots were able to cut hand line until the dozer could pick up the fire line again.



An Interagency FLA team reviewed the circumstances of the accident with intent of providing lessons learned for the greater wildland fire community.

FLA Team:

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