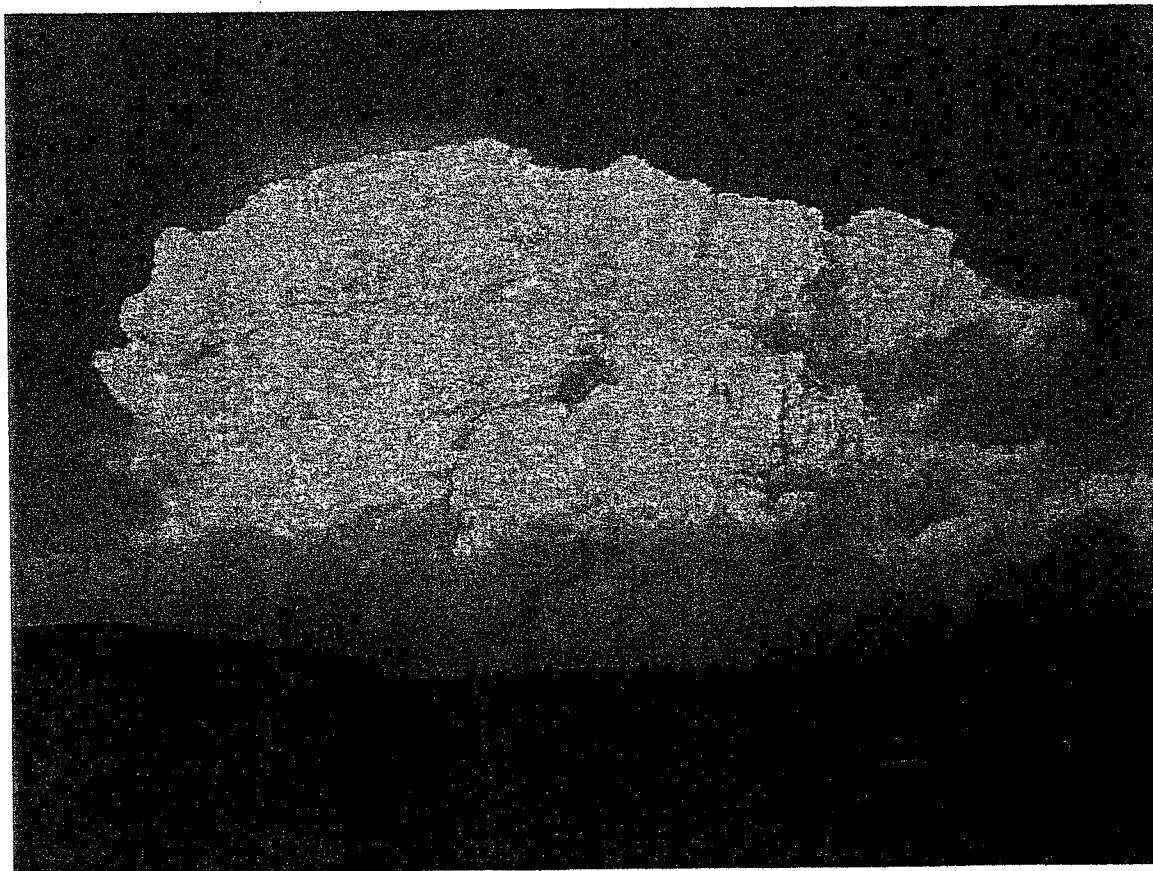


Jasper Fire Shelter Deployment Investigation

August 28, 2000



Point A - view to the south.

Jasper Fire

Shelter Deployment Investigation

CHRONOLOGY

On August 24, 2000 at 1400 a fire start in the area of Jasper Cave was reported by fire lookouts. The fire developed and spread quickly to the Northeast. On initial attack the District AFMO acted as Incident Commander. The Incident Commander reconned the fire from the air at 1522. The fire was reported at 70-75 acres with some crowning. Spotting 100-200 yards ahead of the fire was observed. At 1646 Incident Command was transferred to the District FMO and the AFMO became Operations Chief (OPSC). A Type III Incident Management team was ordered by the incident at approximately 1600.

The deployment incident developed upon the decision to use the Mud Springs Road (FDR 282) as a control line. The decision to fire the road was made by the OPSC. Four Engine Crews (Black Hills NF CE-5, CE-9, BL-3 and NPS Wind Cave WCP-71) were briefed on the plan of operations and safety concerns on State Highway 16 prior to entering FDR 282 by the Strike Team Leader (STL).

The engines assembled in a small clearing at point A (see attached map). It was then decided that the primary escape route for the firing operation would be back out FDR 282 (south) to Hwy 16 with a secondary escape route to the North along FDR 282. OPSC scouted further North along the road and came back to point A to report that the fire was across the road. The East flank of the fire intersected FDR 282, crossing the road north of Point A.

OPSC gave instructions for burnout operations to begin at point A and continue south toward Hwy 16. There was no anchor point at this location. This location was at the head of a drain in a saddle. Other minor drainages were present further to the south along the road. A lookout was posted a short distance south of point A. The lookout was posted in a position where the flames approaching from the southwest were not visible.

On-site measured weather readings during the firing operation were as follows: temperature 95 degrees and 15% RH. Winds were southerly to southeasterly at 5 mph. Immediately after burnout commenced, one spot fire was noticed in the vicinity of point A on the east side of FDR 282. An engine attacked the spot. At that time the wind lulled temporarily, followed by a rapid increase in fire spread and intensity as well as crowning. This was reported as a wind shift by the lookout. STL decided to cease firing operations and withdraw quickly. The engine attacking the spot cut their hose to make a hasty retreat.

OPSC led all personnel in a retreat south, followed closely by STL in engine CE-9 and then the remaining engines. As the engines retreated south along the road, fire intensity increased. The fire spread up the minor drainages and crossed the road. This

compromised the escape route. The second engine in line stopped momentarily at point B due to flames blocking the road. STL found an opening with burning light fuels and encouraged the engines to come to that opening. The order was given by STL to "Pull into the black." The engines drove through flames to point C where they gathered in the opening. There they double-checked to be sure all personnel were present. They waited there until fire behavior moderated. All personnel then proceeded out to Highway 16.

The engines, along with OPSC and STL again grouped on Highway 16 to discuss what happened. OPSC stayed a short time and then left to report the incident to the Incident Commander and District Ranger.

FINDINGS

- 1) Personnel were briefed by STL on tactics, escape routes, and safety zone (Highway 16) prior to entering FDR 282.
- 2) All personnel were accounted for upon reaching safety in the "black".
- 3) The command structure was well established and maintained. Personnel were aware of the chain of command. Personnel remained in communication throughout the most stressful portion of the incident.
- 4) Some crewmembers were significantly shaken. A Critical Incident Stress Debriefing Team was ordered and used.
- 5) Shift length was not an issue. There had not been any Initial Attack activity in over a week.
- 6) Fire fighting tactics were too aggressive for current conditions.
- 7) Safety zones were not adequate and known to all personnel. None of the personnel reached the designated safety zone (State Highway 16).
- 8) The escape route was not adequate, was too long, and no useable secondary escape route was identified.
- 9) The backfiring operation was not well planned or executed and had a very low probability of success
- 10) There was no anchor point for the firing operation.
- 11) Overhead personnel should have recognized the seriousness of the situation earlier.
- 12) Four shelters were partially deployed in two of the engines. Shelters were removed from their cases, and some were placed against the vehicle windows to deflect intense radiant heat.
- 13) Damage to the engines was minimal. A tarp was melted, some disposable oil jugs were deformed slightly.
- 14) Standard Fire Orders #1, 2, 7 and 10 were violated and Watch Out Situations #3, 8, 10, 11, 15, 16 and 17 were present.

RECOMMENDATIONS

Extreme fire behavior associated with this fire season calls for a change in standard tactics, methods and strategies. Under extreme conditions, typical methods of fighting fire may be ineffective or dangerous. Under these conditions we should instill in people that it is easy to underestimate the fire's potential.

Too many considerations were placed above "safety first". Stopping the fire at the road became the primary objective, not safety. Strong emphasis should be placed on safety attitudes at the local level.

Critical Incident Stress Debriefing Team services should be offered to supervisory personnel as well as firefighters. District employees are stressed as well. Mostly as a result of the impact of a large fire operation.

Use the site for a Forest "fire safety field trip". Develop a learning exercise that utilizes the effectiveness of actual experience.

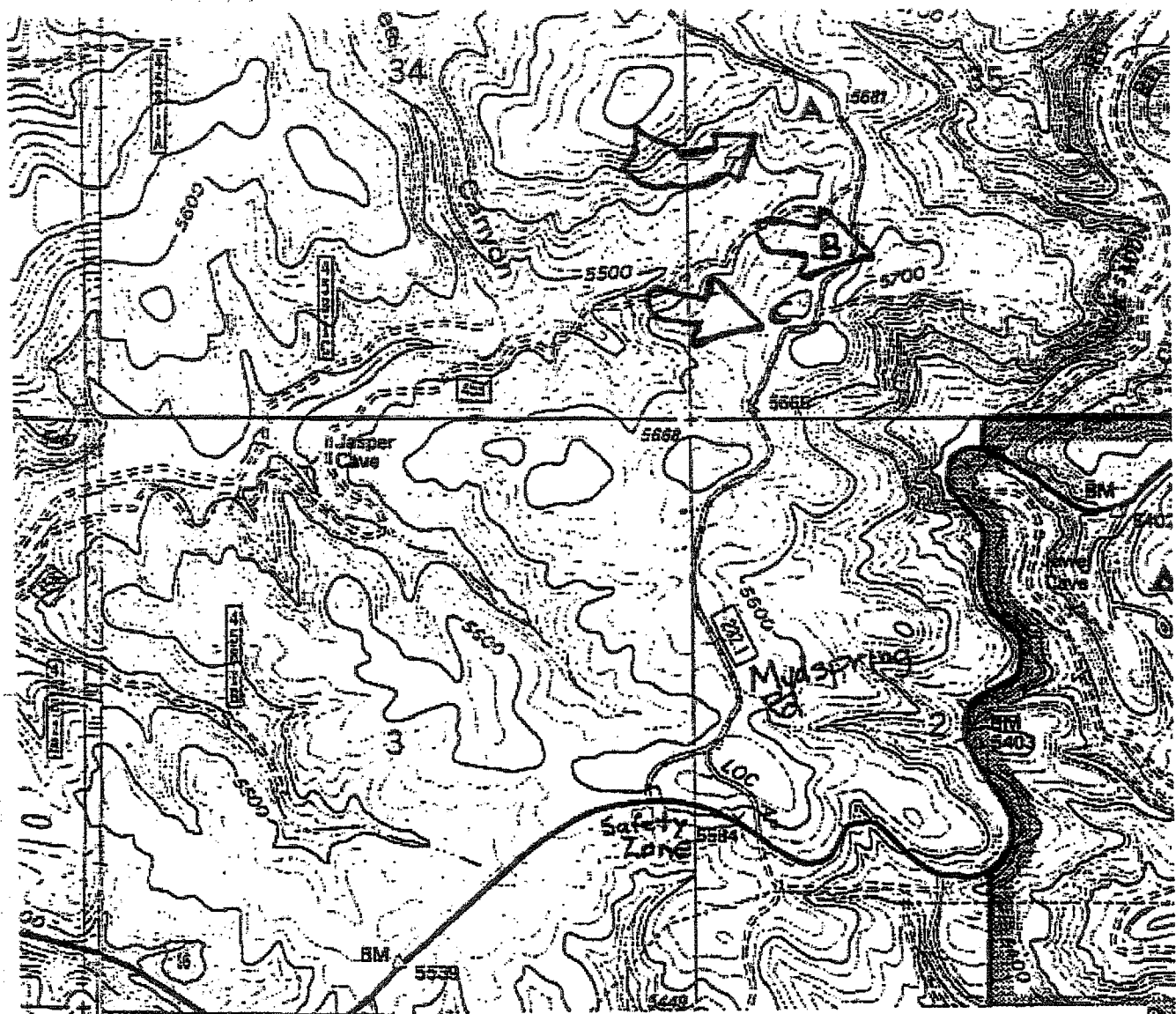
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Jasper Fire Shelter Deployment
August 27, 2000**

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Jasper Fire Shelter Deployment

- A → Engines assemble and start of firing
- B → Fire crosses road, escape route compromised
- C → All engines regroup

➡ - Fire Movement



Point B – view to the south



Point B – view to the north – downhill side



Point B – view uphill to the east



Point B – view to the west downhill



Point A – view to the south