Incident Summary Page for the Hotshot Crew Line of Duty Death

Name of Hotshots LODD:	Incident Name:
Daniel Holmes	Grant West Prescribed Fire
	Incident Date & Time: 10/02/2004
Hotshot Crew:	Incident Location:
Arrowhead	Kings Canyon National Park, California
	Personal Information

Dan Holmes, age 26, had been a member of the Hotshots since 2003. He was survived by his family from New Hampshire and his girlfriend.

The Arrowhead Hotshot Crew provided the following summary of the incident

Conditions leading up to the event:

Prescribed fire is a tool used in an approach by the National Park Service to manage forest structure and composition. The use of prescribed fire helps to enhance ecosystems and reduce the severity of uncontrolled wildfires. Sequoia and Kings Canyon National Parks have an ongoing history of conducting prescribed fires which support their efforts in fuels reduction.

The 2004 Grant West Omnibus Prescribed Burn was located in the Grant Grove area of Kings Canyon National Park. This area of the park has been the site of multiple burns since 1990. In the late 1990's a tussock moth infestation led to a considerable die-off of White fir, a common tree species in the Grant Grove area.

On September 28, 2004, a 60 acre section was successfully burned after local crews completed prep for the burn unit. Snags within and adjacent to the unit were assessed by experienced sawyers. Those which were deemed as hazards were felled to reduce the risk to firefighters and lower the potential for igniting spot fires. The "accident snag," as it became known, was located 12 feet inside the fireline and stood 146 feet tall. During the unit preparation it was determined by the sawyers that the tree was not a substantial safety hazard, nor did it pose a large risk of fire escape. Fireline was scraped around the tree to prevent fire from igniting it at the base during the prescribed burn.

Brief description of the event:

At 08:00 on October 2, the day began with an overhead briefing followed by a general briefing at 09:00. Most firefighters confirmed snag hazards were heavily emphasized during the briefing and were noted in the Incident Action Plan. At 10:42 all fireline personnel were in place and a test fire was conducted to evaluate burn conditions and smoke dispersion. During the test fire it was noted some smaller trees began to torch and generated large amounts of smoke. Embers cast from this torching led to firefighters seeing smoke coming from the top of the accident snag and a short time later flames were observed. After completion of the test fire, Division A Supervisor determined the snag posed a threat to spotting down wind and needed to be felled.

The Falling Boss and a saw team from the Arrowhead IHC (which included Daniel Holmes) were sent to assess the snag. The Falling Boss and saw team determined the best plan was to reconfigure the hose lay in preparation to attack the snag once it was felled across the line. At 12:46 the saw team, on their way to help with the hose lay realignment, passed under the snag's direction of lean. It was at this time the top of the accident tree was seen by many firefighters falling out of the tree and towards the saw team. The speed of the top coming down didn't allow time for the saw team to move more than a step or two before Holmes was struck on his head by a falling limb and lost consciousness. Arrowhead crew EMTs were immediately on scene and began administering medical treatment. At 12:49 the initial patient assessment was completed and at 12:51 an air ambulance was ordered. At 12:56 the park ambulance arrived at the location where State Highway 180 and the fireline connected, approximately 450 feet from the accident site. Arrowhead crew members boarded and carried Holmes to the ambulance, CPR was started in the ambulance while en route, and they arrived at the McGee Overlook highway turnout by 13:21. Once at McGee Overlook, CPR was continued along with one shock from an AED device that produced no results. The air ambulance landed at McGee Overlook shortly after at 13:32. A flight nurse and paramedic took over resuscitation efforts until 13:58 when efforts were halted and Daniel Holmes was pronounced deceased.

Fire behavior factors that were present during the event:

While burning within the prescription parameters, torching was observed in the area that consisted of weakened trees and snags. Embers were seen being cast into these receptive fuels during the test fire.

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Operational lessons available for learning from this incident:

Maintain a safe working area around snags and fire weakened trees.

Maximize situational awareness when it is necessary to work in these areas.

When working in snags, especially when fire is established in them, avoid walking/working in the area which aligns with the trees direction of lean.

Notable impact or historical significance for the wildland fire service from this incident:

The NWCG *S-212 Wildland Fire Chainsaws* course had lessons from this accident incorporated into its next revision. Specifically the need for lookouts was clarified.

The next revision of the NWCG *Incident Response Pocket Guide* had clarification of language for hazards related to snags which have fire established in their tops.

The National Park Service implemented new Line of Duty Death (LODD) procedures based on the lessons learned from the Daniel Holmes family notification and subsequent post-accident activities.

Links to more information on this incident:

https://www.nps.gov/articles/000/grant-west-incident-daniel-holmes-fatality.htm https://www.nwcg.gov/committee/6mfs/grant-west-rx https://wlfalwaysremember.net/2004/10/02/dan-holmes/



Daniel Holmes