Incident Summary Page for the 100 Fires Project

Incident Name: Dutch Creek Tree Felling Accident Eagle Fire on the Iron Complex	**Incident Date & Time:** July 25, 2008 @ 13:40
Incident Location: Big Bar Ranger District, Shasta-Trinity National Forest, California	**Incident Size:** 72,000 acres
Types of resources involved: National Park Service engine crew minus the Captain and various fireline overhead	**# of Fatalities/injuries:** 1 fatality

Reason this fire was selected for the 100 Fires list:

- Fire made a notable impact within the wildland fire service

Conditions leading up to the event:

The fire season of 2008 began early in the western United States, particularly in northern California. In less than one day, nearly 8,000 lightning strikes started more than 1000 wildfires across northern California. By late June, there were over 100 lightning sparked fires still burning in Trinity County. Among these was the Eagle Fire, part of the Iron Complex, near Junction City, California. The widespread fire activity had blanketed the northern Sacramento Valley with thick smoke. Firefighting resources were stretched thin and reinforcements were coming from all parts of the United States and even other countries. During June and July, there were close to 19,000 firefighters actively involved with firefighting in California.

Andrew "Andy" Palmer graduated high school on June 12, 2008 and began work as an Administratively Determined (AD) firefighter on June 16 at Olympic National Park in Port Angeles, Washington. He completed Basic Firefighter training June 24 and S-212, Wildland Fire Chainsaws on June 28. Andy was then hired as GS-462, Forestry Aid, and assigned to an engine module on June 29. He completed his Faller A (currently FAL3) position task book on July 4.

On July 22 the Olympic National Park engine received a resource order to the Iron Complex on the Shasta-Trinity National Forest in northern California. It was the crew's day off and it took a number of hours for them to mobilize. En route to the fire they experienced a series of mechanical issues with the engine, ultimately leading to the separation of the crew and Engine Captain after arrival at the incident. On the morning of July 25 the crew members reported to the Operations Branch Director (trainee) as unassigned resources and were given an assignment as a falling module on Division B. Upon reporting to Division B, the engine crew announced, *"We're your fallers."* Division B assumed there were two class C Fallers (now FAL1) and one swamper on the falling module. The crew was assigned to remove hazard trees downhill along a dozer line beginning at what later became Drop Point (DP) 17.

Brief description of the event:

During the hazard tree removal assignment, the decision was made to cut a 37" DBH Ponderosa pine. This tree fell downhill towards a 54" DBH Sugar pine with an uphill lean and large cat face. The Ponderosa pine either struck the Sugar pine or the vibrations of it hitting the ground caused a 120' long section of the Sugar pine to break off and fall upslope. A section of the Sugar pine, approximately 20" in diameter, hit Andy causing major injuries.

The accident was called into Iron Complex Communications with the following radio transmission, *"Man down. Man down. We need help. Medical emergency. Dozer pad. Broken leg. Bleeding. Drop Point 72 and dozer line. Call 911, we need help."* At 13:47 Trinity County Sheriff's Office received a call stating there had been an injury and that it *"Sounds like a broken leg."* Emergency medical support was dispatched at 13:50 and were told, *"Reported man down on the fire. Possible broken leg. Subject is on a dozer line…"* There was no sense of urgency in the relay of information from the Iron Complex Communications to the Sheriff's Office Dispatch or to the responding medical care providers. Inquiries were made regarding helicopter availability to conduct a medical evacuation and two air medical services declined the mission due to poor visibility in the smoky conditions.

Additional fireline resources arrived on scene and a Crew Boss also assigned to the dozer line took over radio communications. As the local paramedics arrived on scene, they realized the situation was much more urgent than they had previously been lead to believe and decided to execute evacuation via carryout. At 14:44 a Task Force Leader (trainee) arrived on scene and took over radio communication.

After doing their assessment, providing care, and packaging Andy the paramedics initiated the carryout down the steep dozer line. Shortly thereafter a Fireline Paramedic arrived on scene and felt patient management was priority over patient transport. At 15:20 patient care was transferred to the Fireline Paramedic and the decision was made to wait on an incoming United States Coast Guard helicopter. A faller began cutting trees to prepare an extraction site. The Division Supervisor and Branch Director had arrived on scene and the Branch Director took over radio communications. One hour and fifty minutes had passed since the accident.

At 16:00 the Branch Director transferred scene communication to the Division Supervisor. At 16:17 the Coast Guard helicopter arrived on scene, established communication with the ground, and then winched down a rescue swimmer and rescue basket. Andy was transferred to the basket and hoisted into the helicopter. Then, since the rescue swimmer was not a medic, both he and the Fireline Paramedic, were hoisted into the helicopter. Two hours and forty-seven minutes had passed since the accident.

While en route to Redding, California aboard the Coast Guard helicopter, the Fireline Paramedic initiated a cardiac arrest treatment protocol. A flight nurse responded to the helicopter after it landed at 17:05. Three hours and twenty-six minutes had elapsed since the accident. The flight nurse initiated base hospital contact and at 17:10 a Mercy Hospital Emergency Room physician pronounced time of death via radio.

Fire behavior factors that were present during the event:

The section of Division B where this incident occurred was in the mop up phase. Hazard trees were a greater threat than fire behavior.

Operational lessons available for learning from this incident:

Individual qualifications need to be clearly stated and understood when assigning resources or accepting an assignment and when carrying out assigned tasks.

It is imperative to have a standard medical emergency process in place and used across the wildland fire community to include Incident Management Teams, local units to include dispatch/coordination centers, and crews/modules.

Prior to giving or accepting an assignment ensure there is a medical response plan in place and known to resources.

Medevac is an incident within an incident and one person needs to be the known Incident Commander. Transfer of command should occur as necessary and should follow established transfer of command principles such as notifying assigned resources and communications/dispatch.

During a medical emergency, providing a good initial situation report can make the difference in response and outcome. Using the NWCG's "Medical Incident Report" as part of the *ICS-206 WF, Medical Plan*, helps link firefighters to response resources. The "Medical Incident Report" can also be found on the final pages of the *Incident Response Pocket Guide*. Crews of all types, dispatch/coordination centers, and Incident Management Teams should practice using this resource.

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

Andy Palmer's death, commonly referred to as the Dutch Creek Incident, led to significant changes within the wildland fire community's medical response planning and capability. Numerous groups, both formal and informal, worked to improve our response capability. Notably, several additions were made to the *Incident Response Pocket Guide*, to include adding "Emergency Medevac Procedures/Plan" to the Risk Management Process, the "Planning for Medical Emergencies" page and the "Medical Incident Report." Further, the ability to order arduous duty, fireline qualified, emergency medical personnel through the resource ordering system was streamlined as an outcome of this incident. Additionally, Dutch Creek highlighted the need to clearly establish command on an incident within an incident using known Incident Command System (ICS) terminology such as Incident Commander and to transfer command as necessary following standard ICS processes. Finally, a greater emphasis on preparedness and training for medical emergency response by crews and Incident Management Teams is a direct outcome of Andy Palmer's death. Due to these changes the wildland fire community is better prepared to deal with medical emergencies.

Links to more information on this incident:

https://lessons.fs2c.usda.gov/incident/dutch-creek-tree-felling-fatality-2008
https://www.nwcg.gov/committee/6mfs/dutch-creek-incident
https://www.nps.gov/articles/dutch-creek-andy-palmer-fatality.htm
https://wlfalwaysremember.net/2008/07/25/andy-palmer-dutch-creek/
https://wildfiretoday.com/2011/11/05/andrew-palmer-tragedy-and-the-dutch-creek-protocol/

Video:

- https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/irdoc/We%20Will%20Never%20Forget%20You-%20Remembering%20Andy%20Palmer.mp4

The Wildland Fire Lessons Learned Center offers an excellent site which provides information on many wildland incidents: Wildland Fire Lessons Learned Center's Incident Review Database (IRDB) (wildfire.gov)	
This summary page was proudly provided by: Chad Fisher, alumni Asheville Hotshots and Alpine Hotshots	September 2023

Andrew Jackson Palmer