

Point Fire Case Study

student handout (adapted from PMS 419, BLM Engine Operator Training)

You will only be concerned with the mistakes you feel that were made by the engine operators in Engines 10 and 11 under the topics given. The incident overview is presented on pages 2 to 5, with maps on pages 6 to 8. Additional background material can be found at www.coloradofirecamp.com/point-fire.

Topics to consider while watching video:

7. Accident Investigation

| es to consider white watering video. | | | | |
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| 1. Communication | | | | |
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| 2. Maintenance | | | | |
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| 3. Driving | | | | |
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| 4. Engine Protection | | | | |
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| 5. Experience | | | | |
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| 6. Troubleshooting | | | | |
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Point Fire Case Study

Overview

Date of Incident: July 28, 1995

Time of Incident: 1829 MDT

Incident Name: Point Fire

Note: To follow along with the events in the video, engine identifiers are:

| $\mathbf{E-67} =$ | Engine 1 | $\mathbf{E-83} =$ | Engine 5 |
|--------------------|----------|-------------------|-----------|
| $\mathbf{E-425} =$ | Engine 2 | $\mathbf{E-61} =$ | Engine 6 |
| Type 6 = | Engine 3 | K620 = | Engine 10 |
| $\mathbf{E-09} =$ | Engine 4 | K622 = | Engine 11 |

Late in the afternoon of July 28, 1995, thunderstorms began to move into southwestern Idaho from northern Nevada. The thunderstorms produced little or no moisture, and the lightning associated with them sparked dozens of wildfires.

At 1829, the Danskin Lookout reported a wildfire northeast of Initial Point, about 16 miles southwest of Boise, Idaho. The wildfire was also reported by several citizens and the Ada County Dispatch Center. At 1835, the Bureau of Land Management's Boise District Dispatch sent the "Wild West" Unit to the wildfire. The Wild West Unit consists of two Type 4 wildland engines (Engine 67 and Salmon District Engine 425) and a Type 6 slip-on. The crew boss, Dave Kerby, drove to the wildfire in a Suburban.

More resources were soon dispatched. BLM's "Unit C" included three "Type 4" engines (Engine 09, Boise National Forest Engine E-61, Engine 83) and a Suburban driven by Unit Leader Blas Telleria. Additionally, one "Type 2" water tender and a transport with a bulldozer were sent.

The Wild West Unit was first to arrive on the scene about 1900. Crew Boss Kerby assumed the role of Incident Commander (IC).

The Point Fire was actively burning in sagebrush and cheatgrass with moderate rates of spread and 3- to 5-foot flame lengths along the flanks. Because of higher-than-normal moisture in the area in the spring, cheatgrass growth was especially dense, estimated in excess of 3,000 pounds per acre, about ten times the volume of a year with normal precipitation. Mature sagebrush from 3- to 4-feet high also added to the fuel problem. The fire size, when the Wild West Unit arrived, was estimated at 60 to 65 acres. Winds were generally from the west at 4 to 6 miles per hour.

Kerby, the Point Fire IC, was contacted by Boise BLM Dispatch and asked if the Kuna Rural Fire District (Kuna RFD) was on the scene. Kerby said that he had not seen any rural fire department equipment or personnel. Kerby was then contacted by Kuna Fire Chief Rich Cromwell (Kuna 650) and asked if assistance was needed. The BLM IC replied that he could use a brush truck and a water tender. At 1907, Kuna 650 radioed Ada County Dispatch and requested three vehicles to respond. Kuna Engine 620, a 1,500-gallon brush truck; Kuna Engine 622, a 1,750-gallon brush truck; Kuna Tender 625, a 2,500- gallon water tender responded. The Kuna vehicles departed from their fire stations at 1911 for the wildfire.

The Wild West Unit arrived at the southeast corner of the wildfire on Swan Falls Road. The initial strategy was to keep the fire from crossing Swan Falls Road to the east and to minimize the loss of resources and property in the Snake River Birds of Prey National Conservation Area. (See Map #1.) The IC tactically positioned the Type 6 slip-on along Swan Falls Road (a two-lane paved road running north-south). The assignment was to burn out along the road to keep the fire from crossing the road. Engines 67 and 425 followed the IC to an area near the point of origin at the southwest corner. The engine crews were instructed to anchor and split up and directly attack the flanks, using water pumped through their hoses, called "live reels." Engine 425 worked the southern flank east toward Swan Falls Road, while Engine 67 worked the northern flank eastward, also toward Swan Falls Road. Shortly after the flanking operation began, the BLM dozer arrived and was assigned to work the southern flank, constructing a line behind Engine 425 to the east.

A helicopter departed the Boise airport at 1857 en route to the Point Fire. The helicopter picked up the IC for a reconnaissance flight. During the flight, BLM Unit C arrived on the scene along Swan Falls Road. Two of the Unit C engines, 61 and 83, were assigned to directly attack the northern flank, west from Swan Falls Road. Engine 09 was sent to directly attack the southern flank west from Swan Falls Road. Telleria, the Unit C leader, assisted the Type 6 Wild West slip-on with securing Swan Falls Road.

Kuna RFD Engines 620, 622, and 625 arrived just behind Unit C at about 1930. IC Kerby assigned the brush trucks to work behind Engines 61 and 83. Doyle McPherson, the Kuna captain (6803), came to the scene in Engine 620 and was dropped off on Swan Falls Road with Tender 625 to act as Kuna Command, as directed by Chief Cromwell.

Shortly thereafter, Engine 61 and Engine 83 began flanking the north line, working west from Swan Falls Road. Kuna Engines 620 and 622 drove around them in tandem and 620 began working a flare-up on the fireline, using nozzles attached to the front bumper while driving next to the fire's edge. Engine 622 trailed Engine 620 conserving water.

At 2010, IC Kerby stated that engines on both flanks had met and the spread of the fire had been stopped. He estimated the size of the fire at 120 acres. The dozer continued working the southern edge toward Swan Falls Road.

Red Flag Warning

At 2022, BLM Boise Dispatch issued a "red flag warning" for dry lightning and locally strong winds. Red flag warnings are given to alert fire personnel to potentially dangerous conditions. At the Point Fire, wind gusts of up to 50 miles per hour were predicted from a thunderstorm, or cell, that was moving northward at about 30 miles per hour. Telleria radioed Kerby and requested that he reinforce the fire's northern perimeter. Upon receiving the red flag warning, IC Kerby positioned Engines 61, 67, and 83 along the northern perimeter in anticipation of the gusty winds.

Kuna RFD Engines 620 and 622 continued to mop-up along the perimeter working west along the northern flank, then south, around the west end, turning east. They passed the BLM dozer, Engines 425 and 09, ending up at a fence on the southeast corner of the fire line. There, Kuna RFD Engine 622's crew met with Brian Barney, driving the Wild West slip-on. Kuna RFD Engine 622 received directions over Barney's radio to refill and continue working the line. Kuna RFD Engines 622 and 620 left (respectively), heading west on the southern perimeter. The two Kuna engines, still in tandem, turned north and worked along the western perimeter, where they ran out of water. Kuna RFD 622 contacted IC Kerby for instructions. The IC told Kuna RFD Engine 622 to refill and stand by due to predicted high winds. Kuna RFD Engine 620 had momentarily passed Kuna RFD Engine 622 on the northwest perimeter. Kuna RFD Engine 622 pulled alongside of Engine 620 and the crew members told Engine 620's crew that they were going to refill. Kuna RFD Engine 622 then took the lead, pulling off the line and turning toward Swan Falls Road. Kuna RFD Engine 622 headed east, through the burned-over area.

Kuna RFD Engine 622, just prior to reaching Swan Falls Road, was contacted by Kuna RFD Engine 620 on radio (BLM tactical Channel 16). Engine 620's crew said that the vehicle was overheating. Kuna RFD 622 instructed the crew to remove the screen from the radiator. Kuna RFD Engine 620 acknowledged, "Remove the screen." After a time, Kuna RFD 622 pulled onto Swan Falls Road, turned south, and met with Tender 625, located south of the southeast corner of the fire, where refill operations started. Kuna RFD Engine 620 was not with Engine 622.

Sometime after Kuna RFD Engine 622 went to refill, Kuna RFD Engine 620 passed Engine 61 and Engine 67 on the west end of the fire line. Soon afterwards and for unknown reasons, Kuna RFD Engine 620 turned north on a two-track road at its intersection along the fire's northern perimeter. (See Map 3, Point A.) Kuna RFD Engine 620 traveled along the two-track road for 1,945 feet (Point C), where it turned off the road and drove east and then north-northeast cross country another 1,786 feet through heavy sagebrush. At this point, the vehicle became disabled (Point E). The vehicle was 713 feet west of Swan Falls Road and 1,750 feet north of the northern fire perimeter.

At about 2046, the fire escaped from the northern perimeter at several locations, fanned by strong, southerly winds from the thunderstorm. Telleria and Bob Stroud, a BLM fire investigator, were in a Suburban and immediately drove north on Swan Falls Road, about 2,000 feet from the original northern perimeter to assess fire behavior. To their surprise and horror, they witnessed a stationary Kuna engine in the path of the oncoming flame front. Telleria repeatedly attempted to radio the Kuna Engine and also Kuna Command on the BLM tactical channel, but received no response. Telleria then radioed Engine 83's foreman, Lance Lane, a trained medical responder, and advised him that his skills soon may be needed. Telleria also radioed Boise BLM Dispatch and requested an ambulance and police assistance.

At 2049, Kuna RFD Engine 620 contacted Kuna Command on the Ada County South frequency and reported, "We're on the north line, Doyle, we got fire coming hard and this thing has died." The speaker was Bill Buttram, a 31-year old volunteer fireman with Kuna RFD. The second fireman in the vehicle was 18-year old Josh Oliver. A minute later, Engine 620 contacted Kuna Command again on the same channel. "It's not going to let us out of here!"

Kuna 650 asked Engine 620, "What kind of problem do you have?" Buttram's reply was, "We're surrounded by fire!" Kuna 650 asked him to repeat. "The truck's been overtaken by fire!"

That was the last transmission from Kuna RFD Engine 620.

The fire was moving rapidly and burning intensely. Flame lengths were at least 20 feet high, and the flame spread was about 560 feet per minute. It took about 4 minutes from the point of escape for the fire to overrun the truck.

Rescue Attempts

Rescue efforts were hampered by the duration and high intensity of the fire caused by the heavy fuel consisting of mature sagebrush.

After the flame front passed, several rescue attempts were made by members of Kuna RFD and BLM crews. The residual heat from the sagebrush made the first few attempts to reach the engine impossible. At 2121, Kuna RFD 622 and Engine 425 were able to approach the vehicle. Engine 620 was still on fire. Engine 622 extinguished the flames and gained access to the vehicle. Kuna Command was notified that two fatalities had occurred.

Most fatalities that occur on wildfires are not the result of a single mistake or circumstance. Rather, they occur as a chain of unfortunate events. Such is the case in the deaths of Bill Buttram and Josh Oliver. Taken individually, the three primary events that led to the accident were all survivable, and perhaps, not even remarkable. But when the decision to leave the burned area and drive into heavy, unburned fuels was grouped with Kuna RFD Engine 620 stalling and the advent of 40 to 50 mile-an-hour winds from the thunderstorm, it proved to be a fatal combination of events.





