

LAUDER FIRE  
ACCIDENT INVESTIGATION REPORT  
SEPTEMBER 29, 1987

Dennis Lee Cullins Death  
Four Employees Seriously Burned

Investigation Team:

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## I. ACCIDENT SUMMARY

On September 29, 1987, at approximately 1005 AM, helitack crew 102, stationed at Kneeland in Humboldt Co., was working on the right flank (north side) of the Lauder Incident in Lake Co., when fire conditions caused the five-person crew to enter the burn to escape a portion of the main fire which was extremely hot, serious burn injuries were received by all the crew members; one crewman died at the scene. Shelters were deployed by all of the crew members shortly after entering the fire which probably saved the lives of the four members. While the crew member that died (Cullins) partially deployed his shelter, MacDonnell stated Cullins had some difficulty deploying the shelter properly because of burns already received and panic. He was found partially outside of the shelter by rescue personnel.

The Kneeland Copter Crew was composed of Fire Captain Douglas MacDonnell, Firefighters Jeff Smith, Robert Munias, Dennis Lee Cullins and Tommie Brown loaned from the Howard Forest Copter Crew.

After landing at the incident, the crew (102) went up the right flank of the fire and met with several engine crews. They worked with the engine crews in line construction up the right flank. After working approximately two hours, they received a radio message asking them to go to the ridgetop to assist Copter Crew 101 with spot fires. This occurred about one-third of the way up the slope.

Copter Crew 102 proceeded up the slope approximately 500 feet and were in extremely heavy brush, with an overstory of oak and madron and

numerous 60 year old fir snags. The slope had increased to over 70 percent in spots.

A short time after starting to the top of the hill, their chainsaw, which was borrowed from Engine 1166, was heard running further up the slope and near the main fire's edge. The crew was cutting a way through the extremely dense brush to gain access and provide an escape rout should one be needed.

At the point where Copter Crew 102 ultimately entered the burn, they became aware of a minor flare-up below them. N. Moulett, Copter Pilot on 0102, had just previously warned of increased fire activity below them, which they acknowledged. With the flare-up, the crew became extremely concerned for their safety and the activity was approaching panic. Their escape route had been overrun by the fire. It was much too hazardous and difficult to try to cross the brush field to get further into the green, and Capt. MacDonnell told them their escape would be into the burn. Prior to the flare-up, the fire was described as light to moderate by some of the crew members, and they did not feel endangered in any way. The first flare-up was followed shortly by a significant increased activity described as 20 ft. flame lengths and a "wall of fire" just below their position.

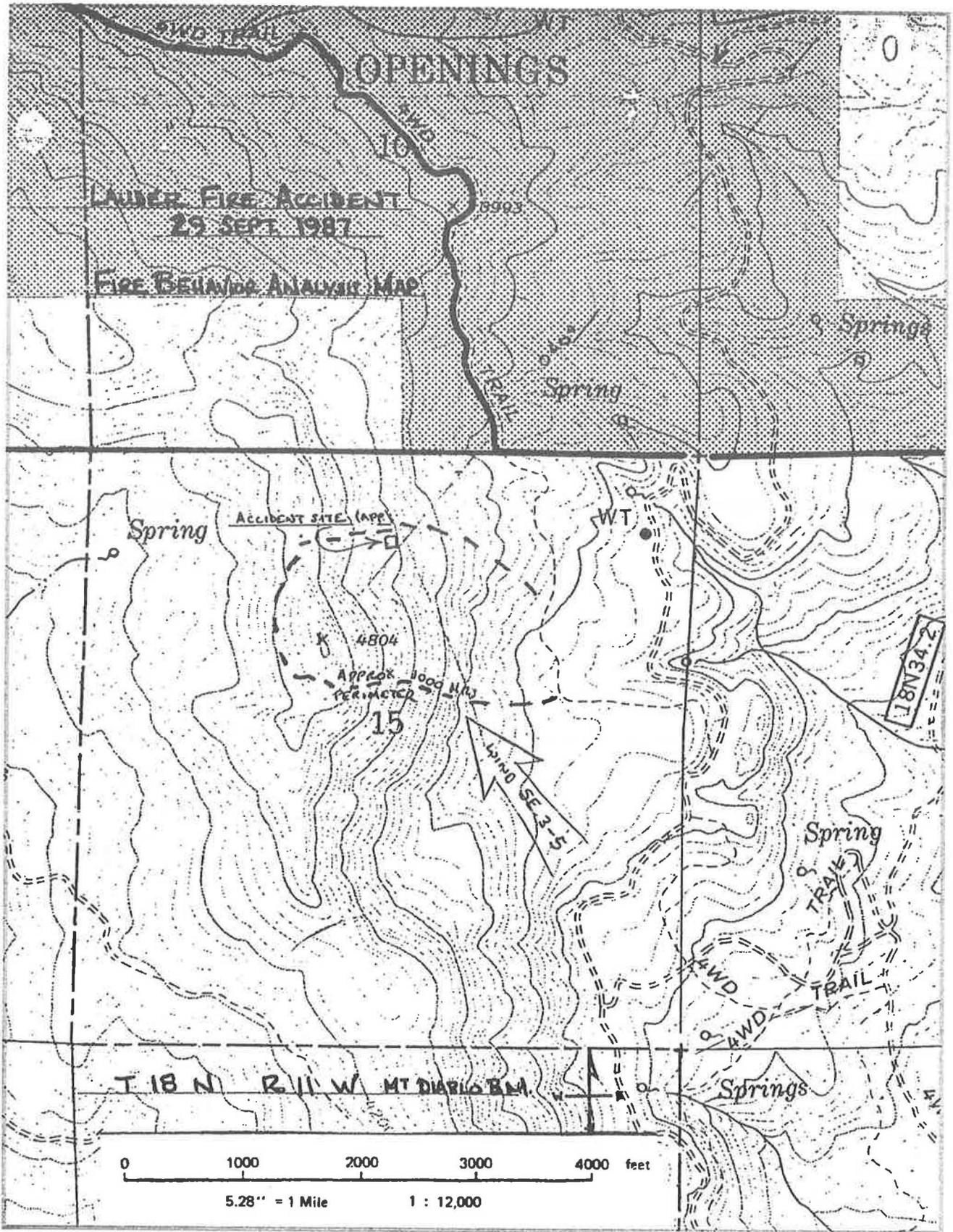
The crew entered the burn approximately 70 to 80 feet in a southeasterly direction. Because of large, burning old down logs and the intense heat, they turned back momentarily and deployed their shelters in a small opening. The heat was much too intense and all received burns before shelters were deployed. All had difficulty in

deploying shelters because of burns on their hands and panic. Firefighter Cullins tried to deploy next to a burning log and had to be moved several times because he kept getting up and seemed out of control to Capt. MacDonnell. The fuel bed where the shelters were deployed indicates brush stumps protruded from thick duff mantle. The ground fuel bed is a smoldering fire having burned approximately 15 mins. prior to their entry. The ground temperature was so intense, they had to keep changing positions in the shelters every 20 seconds or so. They may have sustained additional burns from holding the shelters against the hot ground.

A message was broadcast from the crew on Yellow Air that they were in trouble and needed water. The pilot on Copter 102, overheard the message and began dropping water on the crew. After several water drops from Copter 102, airtankers began dropping retardant on and below them.

Radio messages from the trapped firefighters were heard by several units and additional rescue operation were begun. Rescue included Copter 101 Crew, with Capt. Wattenburger and four firefighters, coming down from the top of the ridge; Engine Captain Robertson coming up from the lower right flank, and later they were joined by engine crew personnel and two Eel River crews. Additionally, two Coast Guard helicopters and an advanced life support helicopter from Santa Rosa were ordered. Initial rescue plans considered moving the victims down the hill in litters but that plan was abandoned by Fire Captains Robertson and Wattenburger because of

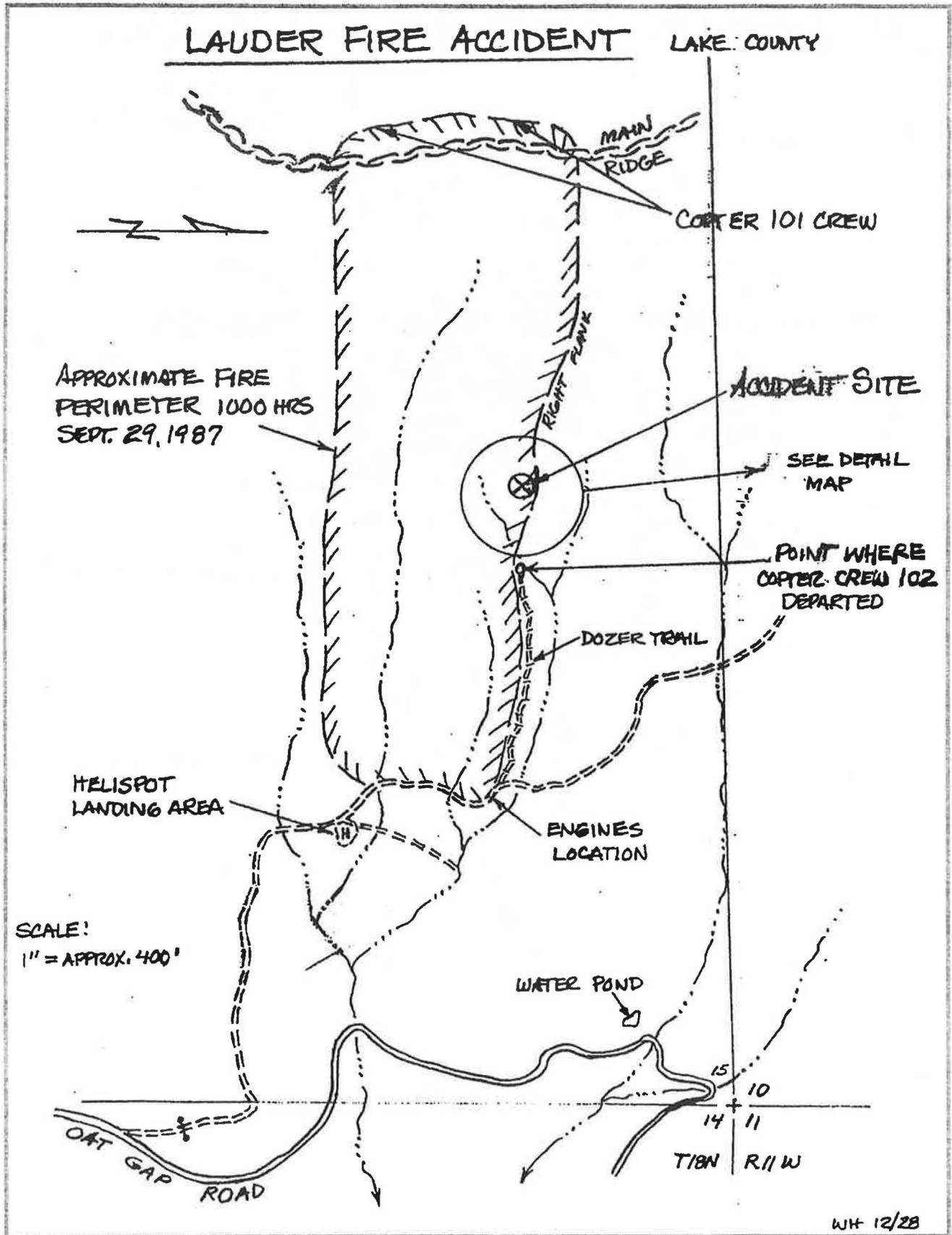
steepness of the hill, distance to an evacuation landing point and the additional trauma that it would cause victims. All injured were removed in litters by long cables from two hovering Coast Guard helicopters and transported to a nearby mill site for medical stabilization prior to transporting to the Chico Burn Center. The deceased was carried downhill to the road and turned over to the Lake Co. Coroner.



Case Study 4-10

# LAUDER FIRE ACCIDENT

LAKE COUNTY



# LAUDER FIRE ACCIDENT SITE DETAIL

