

GREEN SHEET

California Department of Forestry and Fire Protection

Informational Summary Report of Serious CDF Injuries, Illnesses, Accidents and Near-Miss Incidents



Hotshot Injury Falling Limb Accident

September 5, 2004

Powerhouse Fire

CA-AEU-015580

California Southern Region

A Board of Review has not approved this Summary Report. It is intended as a safety and training tool, an aid to preventing future occurrences, and to inform interested parties. Because it is published on a short time frame, the information contained herein is subject to revision as further investigation is conducted and additional information is developed.

SUMMARY

On September 5, 2004 at approximately 1700 hours, a 36 foot long green limb from a live oak tree broke off its trunk and hit a crewmember from the El Dorado Interagency Hotshot Crew (IHC-6). The crew was constructing direct line on the right flank (Division Z) of the Powerhouse Incident when the accident occurred.

CONDITIONS

Temperature: 1300 hours, high of 98° and 9% humidity
1700 hours, 89° and 12% humidity
Winds: No winds in the understory.
Fuels: Fuel type is mixed conifer, dominated by live oak and ponderosa pine with scattered brush in the understory.
Elevation: 2700 feet.
Slope: Slopes in Division Z ranged from 40% to 70%.
At the accident site slope was 50%.
Aspect: South to Southeast.

In Division Z the fire was backing down a shaded draw, flame lengths were 1-2 feet. The crew was not working the head of the fire and in many places along Division Z the fire was not active. Air tankers had worked the area over the accident site, however due to the thick canopy of oaks and pines very little of the retardant had reached the ground. Helicopters had been working a spot fire east of the accident site but no rotor wash was felt by crews working Division Z.

SEQUENCE OF EVENTS

On September 5, 2004 at 1254 hours the El Dorado Interagency Hotshot Crew (IHC-6) was dispatched to a fire just west of the Tiger Creek Powerhouse. IHC-6 arrived on scene at approximately 1400 hours. IHC-6 was assigned to Division Z, the right flank of the fire, which ran from River Road due north to Drop Point One (DP-1). IHC-6 was cutting direct fire line from the River Road up towards DP-1.

The fire was on a south facing slope however it did back into several draws that bisect the area. Fuels on the Division are classified as Fuel Model 10, mature timber. Ground fuels were light; there had been little or no logging activity in this area.

At 1700 hours IHC-6 was cutting line on Division Z, south and west of Tiger Creek Road. USFS and CDF hand crews in conjunction with engine crews were constructing hand line and laying a 1 ½" hose lay. Their objectives were to stop the fire as it backed down into the drainage to the east. The crews had constructed approximately 1800 feet of line prior to the accident. IHC-6 saw teams were cutting brush and trees in a leap-frogging fashion, clearing the line for the

remainder of the crew who was constructing the actual the fire line. Snags and other hazards were being identified as the line was constructed.

A saw team consisting of two crewmembers, a sawyer and a swamper, were working on the fire's edge, 40 feet above a creek. The sawyer was cutting small trees and brush approximately eight feet in front of the swamper. Flame lengths were one foot or less, leaving little fire damage on the small trees and brush.

Despite the noise of the chainsaw, at approximately 1700 hours the sawyer heard a loud pop he then looked to the right and saw a large tree limb falling towards his swamper. The sawyer called to the swamper in an attempt to warn him of the falling limb. Despite the attempt to warn the swamper he was struck by the falling limb which knocked off his hardhat then hit him in the back. After striking the swamper and forcing him to the ground the limb rolled downhill freeing the swamper from entrapment. The sawyer immediately went to the aid of the swamper and began administering first aid; he then called the squad boss on his radio requesting help.

Emergency Medial Technicians (EMT's) from the Hotshot crew began administering aid to the injured swamper within one minute of the injury. Additional EMT's from engine crews working in the area responded to the accident site to aid in the transport of the victim. At 1712 hours the Incident Commander (IC) requested an air ambulance to transport the injured firefighter. The Hotshot crew along with CDF hand crews cleared a path from the fire's edge across the creek to the road where the victim was loaded into a pick-up truck for transport to the helicopter. An air ambulance helicopter (CALSTAR 3) was dispatched to the scene landing at DP-1 at 1741 hours. At 1804 hours CALSTAR 3 left DP-1 in route to Sutter Roseville Hospital. CALSTAR 3 had an estimated time of arrival to the hospital of 1825 hours.

INJURIES

A 30% compression fracture to his T12 vertebrae, slight concussion, laceration on his tongue, numerous cuts and abrasions to his face and his right knee was injured. He has been treated for all of the injuries at this time except his knee injury. An evaluation on his knee to determine the extent of that injury is pending.

SAFETY / TRAINING ISSUES FOR REVIEW

Trees, especially oak trees are stressed by dry conditions, limbs and branches may fall without warning or any outward signs of damage and decay. The injuries were the result of a unpreventable accident there are no safety issues for review