

CDF GREEN SHEET

Investigation Summaries of Serious Injuries, Illnesses, Accidents
and Near-miss Accidents

DEPARTMENT OF FORESTRY & FIRE PROTECTION



1SLU003123

**San Luis Obispo Unit
South Region**

July 12, 2001

**Near-Miss Incident
SLC Engine 42**

SUMMARY

On Thursday, July 12, 2001, at approximately 1200 hours, a San Luis Obispo County Fire/CDF Engine Crew participating in fire suppression activity was involved in a near-miss incident resulting in minor injuries to one firefighter. The injuries occurred as a result of the firefighter coming in contact with a 12 KV power line and receiving an electrical shock. After an examination at a local hospital, the firefighter was evaluated and released to full duty.

CONDITIONS

The incident occurred on Soda Lake Road approximately ½ mile south of Highway 58 in San Luis Obispo County. The legal description of the incident site is GPS coordinates N 35 degrees, 20 minutes, 37.4 seconds by W 120 degrees, 00 minutes, 15.8 seconds. The road is a well-maintained paved two-lane county road.

WEATHER

The weather was clear, warm, and dry and the winds were light. The weather at the scene of the incident at 1200 hours was 90 degrees, 38% RH, wind E at 3 – 5 MPH. The weather conditions were not considered to be a factor in this incident.

SEQUENCE OF EVENTS

San Luis Obispo County Fire Engine 42 is a Type 2 engine staffed with a permanent Fire Apparatus Engineer (FAE) and a seasonal firefighter assigned to Station 42 (Simmler) in the San Luis Obispo Unit. On July 12, 2001, at 1145 hours, they self-dispatched themselves to a visible smoke column north of the station. They notified SLU ECC of a smoke column approximately ½ mile north of Station 42 on Soda Lake Road. Upon arrival they noticed an opening in a fence at what appeared to be the origin of the fire. The fire was small, burning in cut oat straw. Prior to leaving the roadway the FAE saw that there were power lines overhead with flame and smoke underneath. He believed that the power lines appeared intact. He then drove off the roadway to anchor the fire that was directly threatening a small blue Toyota pickup.

In a mobile attack mode they successfully contained the fire and worked their way back to the road to complete their line. The fire was less than ¼ acre. The firefighter was wearing full wildland firefighting personal protective clothing and equipment (PPE). During the mobile attack mode, the FAE observed the firefighter pointing to active flame approximately 50 feet south of their location along the shoulder of the road. As they were moving into position to extinguish the spot, the firefighter felt a "surge" that dropped him to the ground. While on the ground he felt more "surges." The firefighter continued to roll away until the "surges" stopped. The FAE saw him roll on the ground and saw what appeared to be a wire on the ground. He then saw a wire hanging from the power pole to the south and immediately put the engine in reverse realizing what was happening. He backed up approximately 2 – 3 feet and saw the firefighter standing and dusting him-self off. The FAE notified SLU ECC of the down power line, and injured firefighter. The FAE requested the California Highway Patrols (CHP's) advanced life-support (ALS) helicopter to transport the firefighter. The FAE

initiated patient care until the ALS helicopter arrived and transported the firefighter to Twin Cities Hospital in Templeton.

From witness statements and the fire investigation, it appears the power line was the cause of the fire.

It is believed the firefighter stepped on the down power line, which was one phase of a 12 KV system. The line-to-ground potential was 7200 volts. When the firefighter stepped on the power line the current grounded through the 1 ½ inch hose and/or nozzle, as evidenced by the exit wounds in his left hand.

INJURIES

The firefighter sustained minor injuries to his left hand. The injuries consisted of two small burns, one on his index finger and one on the small finger. These burns were the exit wounds where the electricity went to ground through the hose and/or nozzle (the nozzle was closed).

SAFETY ISSUES FOR REVIEW

1. When fighting fire aggressively, provide for safety first.
 2. When fighting fire in close proximity to power lines, close attention must be paid to the condition of those lines at all times from the initial size-up throughout the entire incident.
-