# **CDF GREEN SHEET**

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

# DEPARTMENT OF FORESTRY & FIRE PROTECTION



**9RSS000211** 9MVU007367

San Diego Ranger Unit Sierra-South Region

October 17,1999

Near-Miss Incident CDF Engine 3393

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### SUMMARY

On Sunday, October 17, 1999, at approximately 1500 hours, a CDF Engine engaged in initial attack fire suppression was involved in a burn over. The incident resulted in two CDF firefighters being medically airlifted. All injuries were considered minor and all victims were released after overnight observation. The CDF Engine (5x13) E3393, a CDF Model #15, suffered moderate damage from exposure to the fire. The accident occurred in the southeastern part of San Diego County near the town of Boulevard. All personnel injured were scheduled to be off for three days.

### CONDITIONS

The accident occurred along a 15' wide unimproved dusty and rutted dirt road, south of Lake Domingo.

Legal description of the location is Section 10, Township 18 South, Range 7 East. The fire was supported in a fuel model 6. Fuel loading was 10 tons per acre with a 70% closure. The fuel canopy extended across the road in various locations.

Tcpographic features include a saddle to the north of the east-west roadway. A seasonal stream runs easterly between the saddle and the road, converging toward the road. The terrain south of the road is an upslope, increasing to approximately 80%. High on the slope is a rocky rim with deep side draws. These combined topographic features created a chimney effect.

#### WEATHER

The accident occurred at approximately 1500 hours. Weather recorded from the RAWS unit located at the Cameron Fire Station was as follows.

At 1500 hours – Relative Humidity - 7%. Temperature - 80 degrees F. Winds – Northeast winds 3 – 5 mph with gusts to 18 mph.

## **SEQUENCE OF EVENTS**

On Sunday, October 17, 1999 at approximately 1247 hours, a vegetation fire was reported in the Jewell Valley area of the San Diego Ranger Unit. First arriving CDF fire suppression units discovered a fire burning in heavy brush, adjacent to the San Diego/Eastern Arizona Railroad. Engine 3393 was part of the initial dispatch and arrived on scene at approximately 1345 hours.

The initial fire suppression effort was to hold the fire directly south of the origin area along an east west powerline road. The burning conditions resulted in the fire spotting across the road. The fire continued burning to the south. Another suppression effort was made along the next dirt road to the south. The fire also spotted across this road, resulting in the fire burning farther to the south.

Five engines were redeployed to the southwest corner of the fire. The engines were assigned to conduct a firing operation along an unimproved east west dirt road. E3393, E3393R, E3373, CNF E41 and CNF E42 were given this assignment. The operator from E3393R parked the engine west of the fire and proceeded on foot as the Firing Officer. Using one crewmember from E3373 and one from E3393, the FAE from E3393R began firing the north side of the dirt road. E3393 was positioned approximately 100' behind the firing team. E3393 deployed one firefighter on the ground with a 1 ½" hose line. The hose line was the engine protection line and also provided support for the Firing Team. E3373 was positioned approximately 100' west of E3393 and was extinguishing flare-ups as they occurred next to the road. The Firing Team progressed in an easterly direction, down an approximately 20% grade. The firing operation progressed according to the burn-in, which was spasmodic, i.e. ranging between slow to rapid burning.

At Approximately 1500 hours the Firing Team had progressed approximately 500° down the unimproved road. The fire intensity began to increase. The gusty wind increased fire activity in the drainage directly to the north and northeast of the road. The fire crowned out and spread to the south in the twelve to fifteen foot fuels, engulfing E3393. The fire also cutoff the Firing Team's escape routes isolating the Team on the road bed. The Firing Team was able to avoid heat and flame exposure by moving back and forth along the road. E3393 received flame impingement along the left front quarter of the engine. The engine operator was enclosed within the cab and the firefighter with the hoseline was able to seek refuge at the right rear corner of the engine.

The fire continued burning to the south. Suppression action was suspended temporarily in order to account for personnel and access injuries and damage to E3393.

#### INJURIES

Two CDF Firefighters were injured and were transported by air ambulance to the hospital. One firefighter on the Firing Team sustained minor burns to the left side of his face, cheek and ear. The firefighter with 1 ½" hoseline on E3393 complained of respiratory distress. Both firefighters were held overnight for observation. Both firefighters were scheduled off for three days, returning on October 21, 1999.

## DAMAGE

CDF Engine 3393 (5x13) sustained moderate fire and heat damage to the driver's side of the cab, top of cab, and the front of the cab. All plastic lenses and covers that were exposed were melted. The exposed painted surfaces were also burned and blistered. The engine also suffered a burned airbrake line. Initial damage estimates are \$5000.00.

## SAFETY ISSUES FOR REVIEW

Ensure all personnel are aware of Situations That Shout Watch Out before any
operation, particularly:

- 1. Getting frequent spot fires across the line.
- 2. Winds increasing or changing direction
- 3. Engines are attempting a frontal assault on the fire
- 4. Terrain and fuels make escape to safety zones difficult.







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