

GREEN SHEET

California Department of Forestry and Fire Protection (CAL FIRE)

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



AEU Firefighter Serious Injury/Backing Incident

July 10, 2011

11-CA-NEU-015334

SART # 11-CA-NEU-015342

California Northern 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 Sunday, July 10, 2011 at 6:30 P.M., prior to the release from their cover assignment at Nevada-Yuba-Placer Unit, an Amador-El Dorado engine strike team stopped at a local restaurant to eat. While attempting to back E2751 into a space immediately adjacent to E2782, E2751's right rear tire rode up on the curb. When the operator attempted to move the engine off of the curb, the engine rolled back, pinning the back-up person (Firefighter I) between the two engines. The firefighter received a serious head injury and was transported by ground ambulance to a local trauma center for treatment.

CONDITIONS

E2751 was being backed into a 10-foot wide and 22-foot long parking space located in a paved restaurant parking lot with 6" concrete curbs. The grade in the area of the lot was about 5% (running downhill from east to west). The parking surface was dry with no identifiable hazards.

Weather conditions in Auburn at 6:35 P.M. on July 10, 2011 indicated:

- Temperature 84 deg F
- Relative Humidity 27%
- Wind WSW at 6.9 mph
- Rain 0.0 inches
- Visibility 10 miles

The vehicle involved in the accident was a Rosenbaur Model 34 four-wheel drive wildland fire engine with a 180" wheel base. The overall length of the engine is 26 feet and the width is 8 ½ feet.

SEQUENCE OF EVENTS

On July 10, 2011 at about 6:00 P.M., Strike Team 9270C was to be released from their cover assignment in the Nevada-Yuba-Placer Unit. The strike team was reconfigured at the CAL FIRE Auburn Fire Station before they proceeded to a local restaurant located at New Airport Road and State Highway 49 in North Auburn to dine.

As the strike team entered the parking area, an urban mall type area of over three acres, the strike team leader motioned to the lead engine a recommended parking area for the engines. The strike team leader then parked his vehicle and entered the restaurant to organize seating and make payment arrangements. The engines then proceeded to the parking area referred to by the strike team leader.

The engines stacked up in the parking lane waiting for the lead engines to back into the angled parking spaces. E2751 was the last engine in line. In order to get out of the flow of traffic, the engine proceeded past the parking lane to circle back until the other engines had parked. When E2751 returned to the parking area of the other engines, the travel lane widths were reduced due to the other engines being parked in the spaces. Travel was also restricted by private vehicles in spaces across from the engines.

E2751 pulled into the parking lane and was attempting to park in the last space in the line next to the other strike team engines. E2751 was parking next to E2782. Due to the limited travel area, the operator had to reposition E2751 multiple times. Two spotters and a back-up person were used to get the engine into the parking space.

The back-up person was the front seat firefighter of E2751. The passenger side spotter was the other firefighter on the engine. The driver's side spotter was a Captain from another engine in the strike team. Both spotters were positioned at the front of E2751 and the back-up person was on the driver's side rear quarter panel.

The parking spot was bordered by E2782 on one side and a concrete curb with landscaping on the other. It was part of the operator's plan to back over the curb with the passenger's side rear duals in a backing "S" pattern in order to get the engine to fit into the parking space.

The operator of E2751 backed up at an approximate 45 degree angle to E2782. When he was about 2 ½ feet from E2782 and his passenger's side duals were up on the curb, the back-up person gave him the signal to stop. The engine needed to be pulled forward and repositioned in order to complete the backing turn into the space. As the operator placed the transmission into drive and took his foot off the brake, the engine rolled backward. This was due to the rear duals hanging over the curb to the rear but not touching the pavement. The movement to the rear was sudden and unexpected by the operator. The engine rolled back and struck the passenger rear compartment of E2782 with the driver's side rear corner of E2751's bumper, leaving a small dent and minor scratches.

In the process of repositioning himself after giving the stop signal, the back-up person was looking towards the rear of E2751 when the engine made the sudden movement to the rear. The back-up person got his legs out of the way of being caught between the bumper of E2751 and the compartment of E2782. However, his head got pinched momentarily between the driver's side rear compartment of E2751 and the passenger side rear compartment of E2782. The back-up person's left ear was caught in the door latch of the driver's side rear compartment of E2751 and his head left a small dent in the passenger side rear compartment door of E2782.

The operator immediately moved the engine forward after the contact. The back-up person remained conscious and on his feet but was bleeding significantly from his avulsed left ear. Immediate first aid was rendered to the back-up person and an ambulance was dispatched through the Grass Valley ECC at 6:35 P.M. The back-up person was transported to Sutter Roseville hospital and underwent surgery to reattach his left ear and control bleeding.

The California Highway Patrol responded to conduct an Accident Investigation Report.

INJURIES/DAMAGES

- The firefighter sustained an avulsion to his left ear.
- E2782 received minor damage to the passenger side rear compartment door.

SAFETY ISSUES FOR REVIEW

- Review Section 4313.7 of the 4300 Fire Protection Training Handbook and Section 6786 of the 6700 Mobile Equipment Handbook regarding backing.

INCIDENTAL ISSUES/LESSONS LEARNED

(For Near-Miss and Non-Serious Accidents)

- Operators need to closely assess “risk-vs-gain” when backing in non-emergency situations.
- Spotters and backers need to inform the operator of potential risks when they become aware of the risks.
- All personnel should familiarize themselves with fire-engine-sway potential when the engines are traversing uneven ground.

SITE MAP
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