

# **GREEN SHEET**

## **California Department of Forestry and Fire Protection (CAL FIRE)**

### **Preliminary Summary Report of Serious CAL FIRE Injuries, Illnesses, Accidents and Near-Miss Incidents**



#### **Traffic Collision with Firefighter Injury**

**July 25, 2012**

**Skunk Ranch Road SART**

**12-CA-TCU-006811**

**12-CA-CSR-000053**

**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.

**Lookout**

**Communications**

**Escape Routes**

**Safety Zones**

## SUMMARY

On Wednesday, July 25, 2012, during initial attack operations on the Penn Fire, a Firefighter 1 suffered a major lower leg injury when struck by a civilian vehicle. CAL FIRE Engine 5579 sustained moderate damage as a result of a side impact from the civilian vehicle. The civilian vehicle sustained major front end damage.

Note: Engine 5579 is normally assigned to the CAL FIRE Academy. It was being used by the Tuolumne-Calaveras Unit as a front line engine in place of a San Andreas Station engine which was out of service.

## CONDITIONS

The incident occurred in an oak/woodland (fuel model 2) covered area. The roads in the immediate area are winding with narrow dirt shoulders. Skunk Ranch Road is a single lane, asphalt paved, dead-end road that runs east/west. No centerline or fog line markings are painted on the pavement. A gradual uphill grade occurs from west to east (average- 13.6%).

Visibility at time of the accident was rapidly diminishing due to heavy smoke. The road surface was dry.

Weather conditions at the time of the incident from Esperanza RAWS weather station, 9.3 miles northwest of the incident:

- Temperature: 89° Fahrenheit
- Wind: West at 4 miles per hour (mph)
- Relative humidity: 20%
- 10 hour fuel moisture: 3%

## SEQUENCE OF EVENTS

On Wednesday, July 25, 2012, at approximately 3:25 P.M., Engine 5579 (Model 15) was dispatched to a structure fire with extension to the vegetation on Skunk Ranch Road, east of Pennsylvania Gulch road. Upon arrival at scene, Engine 5579--Fire Captain, Firefighter (A), Firefighter (B)--was assigned to Division A. They proceeded east on Skunk Ranch Road en route to their division assignment.

The crew of Engine 5579 observed fire sheeting on the south side of Skunk Ranch Road and spotting to the north of the road. The Fire Captain planned to go through a gate where a green pasture was observed. The Fire Captain's plan was to anchor from the green pasture for fire suppression operations and use it as a safety zone.

Due to the narrow width of the roadway and a steep embankment located on the south side of the road, the Fire Captain was unsuccessful in gaining access to the field through the open gate. As the engine blocked the roadway, the Fire Captain quickly determined that best access into the field would be by cutting the field fence located just west of the open gate.

The Fire Captain gave direction to both firefighters: to cut the fence and assist with backing the engine. Firefighter (A) was positioned in the right front seat while Firefighter (B) was positioned in the right rear seat. Firefighter (B) exited the fire engine. Firefighter (A) handed a pair of fence pliers to Firefighter (B). Due to smoky conditions, the visibility surrounding the engine deteriorated to approximately 6 to 8 feet. Firefighter (A) exited the fire engine, donned web gear and began to walk toward the right rear of the fire engine to assist with backing. Firefighter (B) walked toward the right front corner of the fire engine to cut the fence. Firefighter (A) felt something from behind and heard a loud noise. Firefighter (A) turned around and saw a vehicle (Mazda Miata) with front end damage and multiple air bag deployment next to the fire engine on the roadway.

Firefighter (B)'s left foot was momentarily pinned during impact between the Miata's right front bumper and the fire engine's right front tire/rim. This impact caused Firefighter (B) to lose the ability to stand and subsequently fell to the ground landing on the north shoulder of the road. As a result of the impact, Firefighter (B) received a major lower leg injury.

Firefighter (A), who was uninjured, saw the Miata's driver exit the vehicle and made contact with the driver who denied injuries. Firefighter (A) requested the driver to get back into the Miata for her own safety and welfare. Firefighter (A) heard moaning and saw Firefighter (B) lying on the westbound shoulder of Skunk Ranch Road and rendered aid.

Concurrently, the Fire Captain felt a violent impact to the fire engine (which was the Miata striking the right front wheel/fender and diesel fuel tank area of the engine). The Fire Captain, who was wearing a seat belt, was uninjured and remained secure in the driver's seat. Due to the impact from the Miata, the front end of the fire engine was moved sideways a short distance. The Fire Captain estimated the time that he was blocking the road was no more than two minutes. During this time, it was determined that the engine's headlights, clearance lights and emergency lights were in use.

The Fire Captain saw Firefighter (A) through the right rear passenger window waving arms to let the Fire Captain know Firefighter (A) was okay. Through the smoke, the Fire Captain could now see the Miata had struck the fire engine. The Fire Captain immediately made contact with the Incident Commander to report the vehicle collision and request EMS.

The Fire Captain exited the fire engine and walked around the back side of the fire engine not knowing Firefighter (B) had been struck by the Miata. The Fire Captain saw the Miata driver who was standing outside of the Miata and noticed Firefighter (A) treating Firefighter (B).

The Fire Captain made radio contact with the Incident Commander with a report on conditions. Engine 4485 responded from the incident to assist. Firefighter (B) was stabilized, packaged and transported by air to the nearest trauma center. The Miata's driver was evaluated and re-evaluated during the course of the incident; however, the civilian driver consistently refused any first aid treatment by fire personnel at scene.

## INJURIES/DAMAGES

### Injuries:

- The Fire Captain was uninjured as a result of the collision.
- Firefighter (A) was uninjured as a result of the collision.
- Firefighter (B) received a major crushing injury to the lower left leg.
- The Miata's driver denied injury as a result of the collision.

### Damage:

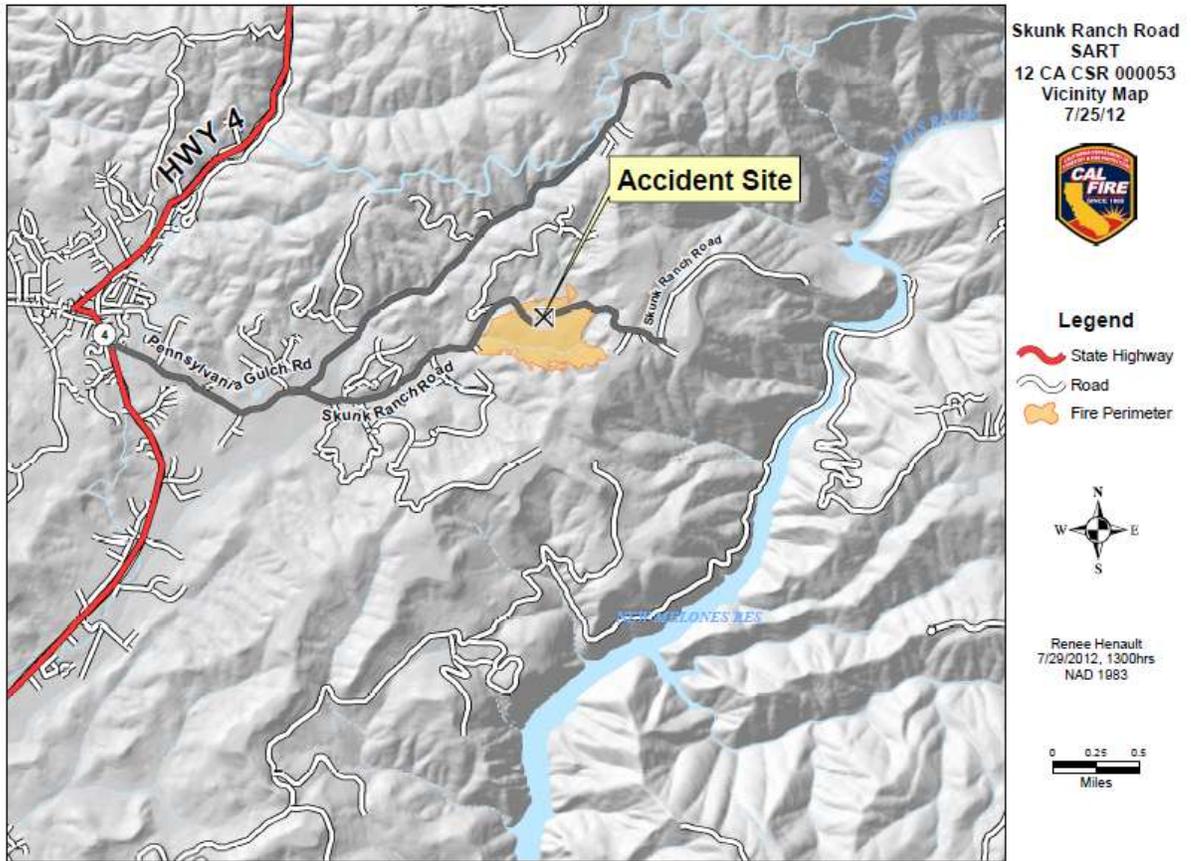
- Engine 5579 is a 1992 International 4900 Model 15. It received moderate damage to the steering system, fuel tank supports, lower right front fender, and right front tire/rim.
- The Mazda Miata (light blue) received major front end damage.

## SAFETY ISSUES FOR REVIEW

- Assume **ALL** roads have the potential for heavy traffic conditions and panicked drivers during emergency incidents.
- Low visibility creates greater hazards for personnel and equipment when working on or around roadways.
- Fire engine emergency warning lights should remain in use when in low visibility conditions.
- Seat belt use prevents injuries.

## INCIDENTAL ISSUES/LESSONS LEARNED

- Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are directly applicable to crew safety while working on or along any roadway.
- Scene safety for emergency responders and the general public is an ongoing process that must continue throughout the incident as conditions change.
- Mental preparedness and repetitive training will greatly prepare the emergency responder for reacting to unexpected incidents.



Lookout

Communications

Escape Routes

Safety Zones



Case Number: 12-CA-CSR-000053 Date: 07/25/12

Location: Skunk Ranch Road

Description:  
Vehicle accident, .2 miles west of 2983 Skunk Ranch Road

