

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



Partial Building Collapse with Injuries

November 11, 2011

GLEN SIDE

11CATCU009920

11CACSR000067

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 November 11, 2011 at approximately 2233 hours, Copperopolis Fire Protection District (CFPD) and CAL FIRE engine companies were dispatched to a residential structure fire in Copperopolis (Calaveras County). The first unit arrived at 2241 hours and reported heavy smoke showing from the roof of a single family residence. The responding CFPD Fire Captain assumed command at 2242 hours.

At approximately 2349 hours, while performing an exterior attack, a CAL FIRE Captain sustained serious injuries due to a partial building collapse. The CAL FIRE Captain was struck by a portion of a wall and roof as it collapsed.

Assisting firefighters moved the injured captain away from the structure and began rendering treatment. The injured captain was transported by ambulance to a landing zone and airlifted to a hospital and is still listed in serious condition.

A CFPD Firefighter received an ankle injury responding to the collapse and a CAL FIRE Firefighter received a burn injury to the right wrist area unrelated to the roof collapse.

The two minor injuries were treated and released.



(Photo taken November 12, 2011)

CONDITIONS

Weather Conditions from a nearby RAWS Weather Station:

- Temperature 49.6° Fahrenheit
- Dew Point 45.8° Fahrenheit
- Wind – Calm
- Relative Humidity 87%

Structural Features:

- The house was approximately 2450 square feet
- Single family, single story residence with the appearance of a second story due to a vaulted great room.
- Wood frame structure
- Exterior walls were 2x4 stud construction with foam insulation and stucco exterior covering
- Some gable ends had decorative wood features that resembled structural features, but these features were not located on the collapsed portion.
- Interior walls and ceiling covering were sheetrock with a plaster finish coat
- Composition roof
- Constructed in 2007

SEQUENCE OF EVENTS

The first arriving CFPD Unit (paramedic in a Quick Response Vehicle) arrived on scene at 2241 and reported heavy smoke showing from the roof of the involved structure.

The first arriving CFPD Engine arrived on scene at approximately 2242 hours and assumed Incident Command. The Incident Commander (IC) gave his crew instructions, confirmed that all occupants were out of the structure, secured the utilities, and conducted a walk around of the structure. The IC reported seeing fire showing from the roof, at the base of the chimney, near the “B/C” corner. The IC assigned the first arriving CAL FIRE Engine to interior attack and gave instructions to enter through the front doorway, pull ceiling, and attack the fire near the fireplace. The IC established the Incident Command Post (ICP) at the front of the structure.

The IC observed that the volume of fire was increasing despite the efforts of the interior attack operations. The IC walked to the front door of the structure and verbally instructed the interior attack crew to withdraw. The IC updated his original Report on Conditions by advising the local Emergency Command Center (ECC) that the structure had 50% attic involvement. The IC told the interior attack leader that the new strategy was to go defensive. The interior line was repositioned to the “B/C” corner of the structure. A second hand line was also pulled to the middle of the “B” side and placed in service.

The second CAL FIRE Engine arrived on scene at approximately 2304 hours. After a face-to-face meeting with the IC, the second CAL FIRE Captain at scene was assigned as the Operations Section Chief (OPSC).

The OPSC requested that the IC have a second Type 1 or Type 2 CFPD Engine secure a second water source for additional hose lines due to the volume of fire showing. The second engine was placed in service and three additional 1 ¾” attack lines were placed in service. The OPSC directed the third arriving CAL FIRE Engine to staff a 2 ½” hose line near the two-car garage on the “A” side of the structure to stop the extension of the fire. Salvage operations were initiated in conjunction with the fire attack. At the time of the collapse, there were five 1 ¾” hand lines working from the “B”, “C”, and “D” sides of the structure. The 2 ½” line was gated down to a 1 ¾” line working in the interior of the two-car garage.

The first arriving CAL FIRE Captain and a CFPD Firefighter were working exterior operations in the area of the “B/C” corner. At approximately 2349 hours there was a partial building collapse near the “B/C” corner. The collapse struck the CAL FIRE Captain and CFPD Firefighter.

The collapse is best described as the eave and gable end truss from the “B/C” corner forward to the “A/B” corner. The length of the collapsed section was approximately 47’ in length. The collapsed section also included the stucco covering of the gable end truss that hinged from the area of the top plate and remained partially attached. The initial indications are that as the gable end truss failed, it swung from the hinge point and struck the CAL FIRE Captain and the CFPD Firefighter, knocking them both to the ground.

Immediately after the collapse, two CFPD Firefighters (including the CFPD Firefighter that was struck by the collapse) removed the injured CAL FIRE Captain from the collapsed area to a safe area and began assessing injuries and rendering aid.

The IC received verbal notification of a firefighter down, when a firefighter came around the “A/B” corner and yelled, “firefighter down.” The IC immediately requested an ambulance through the ECC to the incident. The IC walked to the “B” side and saw numerous firefighters rendering aid to the injured CAL FIRE Captain.

The injured CAL FIRE Captain was treated at the scene and transported by ground ambulance to the helicopter landing zone located at Copperopolis Station #1. The CAL FIRE Captain was then flown by medical helicopter to a local trauma center.

After the CAL FIRE Captain was transported all fire suppression personnel at the incident were withdrawn to the ICP, briefed, and then reassigned to continue fire suppression operations.

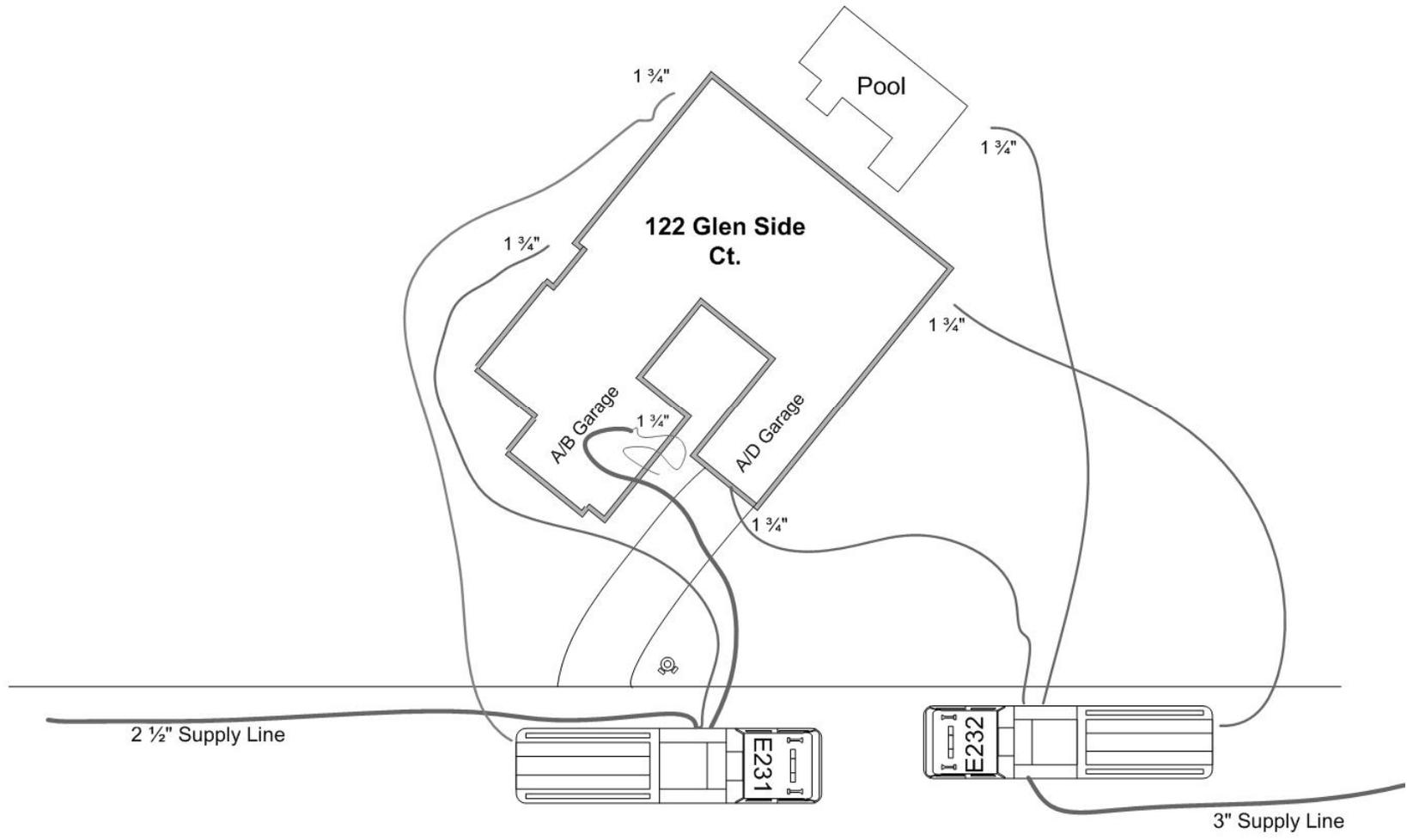


(Photo taken November 12, 2011)



Not to Scale

11 CATCU 009920 GLEN SIDE INCIDENT



Apparatus and Hose Placement

R. Henault 11/13/11

Lookouts

Communications

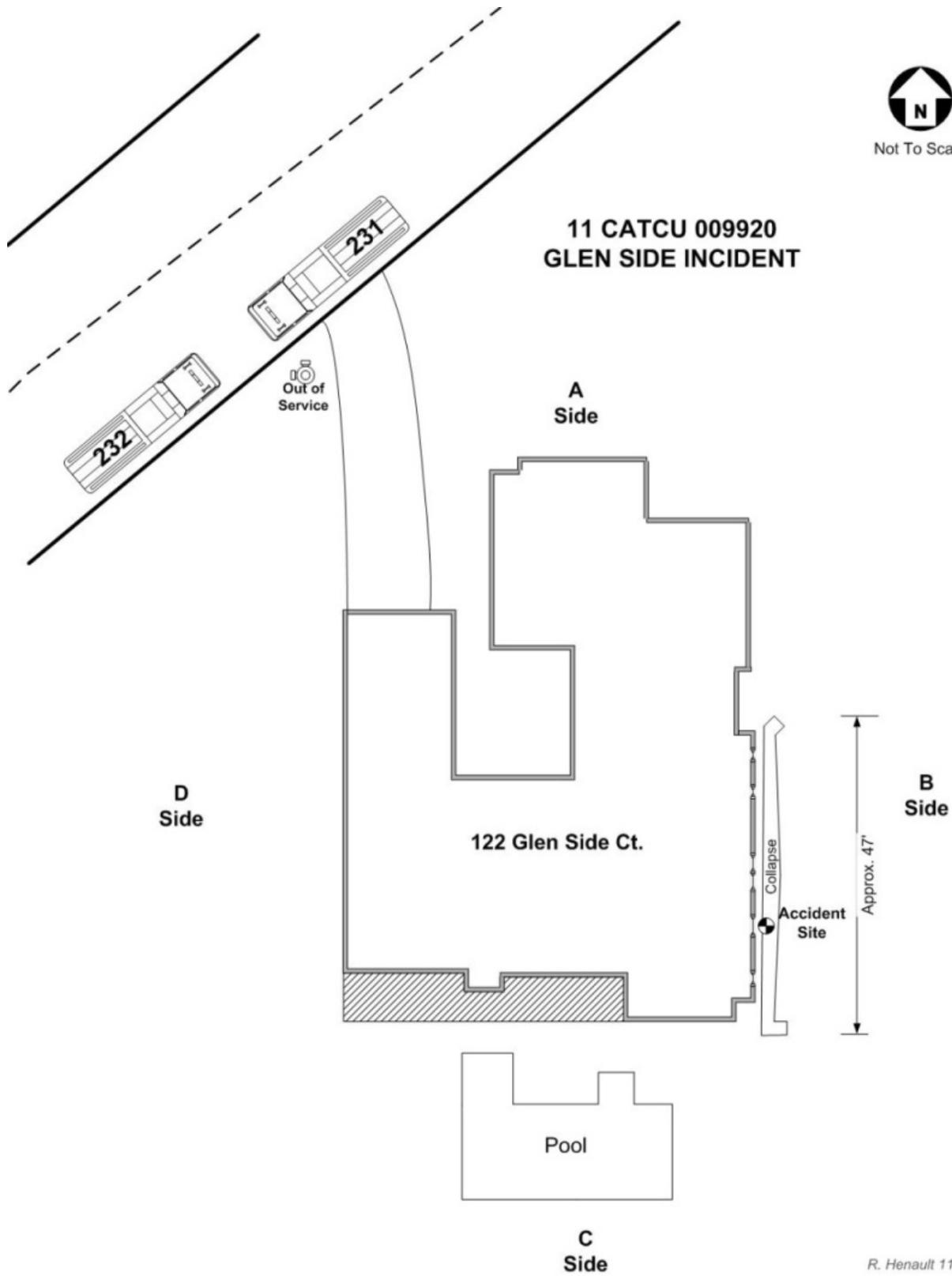
Escape Routes

Safety Zones



Not To Scale

11 CATCU 009920 GLEN SIDE INCIDENT



Lookouts

Communications

Escape Routes

Safety Zones

R. Henault 11/17/11

INJURIES/DAMAGES

The CAL FIRE Captain sustained serious injuries and was transported to a local trauma center.

The ankle injury to the CFPD Firefighter occurred when he stumbled on an unknown item taking medical equipment to the injured CAL FIRE Captain. The firefighter was treated at a local hospital and released.

The burn injury to the CAL FIRE Firefighter occurred when molten metal dripped from above and landed on the gauntlet of the firefighter's turnout coat. The CAL FIRE Firefighter was initially seen locally and later transported to U.C. Davis Burn Center where the firefighter was treated and released.

SAFETY ISSUES FOR REVIEW

- Maintain fire ground accountability at all times.
- Staff ICS functions as needed.
- Inspect all PPE for serviceability, cleanliness, and compliance identification (labeling).
- Incident personnel should always assess risk vs. gain.
- L.C.E.S. shall be applied to incident operations.
- Review building construction techniques.
- Conduct interagency and multi-company training.
- Report all injuries immediately.