

# Report of Initial Findings

## Modesto Fire Department

Informational Summary Report of Serious MFD Injuries, Illness,  
Accidents, and Near-Miss Incident



Coston Incident  
**Structure Fire**

01/01/2010

\$MF10000129

A Board of Review has not approved this Summary Report. It is intended to provide initial information and to inform interested parties. As this is published on a short time frame, the information contained herein is subject to revisions as further investigation is conducted and additional information is developed.

## **SUMMARY**

On January 1, 2010, at 23:36 hrs, Modesto Fire Department was dispatched to the report of a working structure fire on Coston Avenue. Engine 6 (E6) was the first to arrive on scene and reported heavy smoke showing from a single family residence. E6 established command and secured their own water supply. Engine 5 (E5) was assigned E6's firefighter for an interior attack. Truck 5 (T5) was assigned vertical ventilation over the garage. Battalion 2 (BC2) assumed command and assigned Engine 4 (E4) as RIC and Engine 11 (E11) to a second hose line. All first alarm units were on scene prior to entering the structure.

An initial hose line was stretched into the residence from the front door. T5 laddered the unburned "A" side of the structure and went to the roof to vertically ventilate over the garage. The roof was continuously sounded and a path was followed along the ridge board over the garage. As Firefighter T5 attempted to make his initial cut, the saw stalled due to smoke. As Firefighter T5 attempted to restart the saw, he felt the roof immediately soften. He then attempted to order an evacuation of the roof. The roof catastrophically failed.

Both Firefighter T5 and Engineer T5 were dropped into the garage with the collapse. Captain T5 was on the ladder as the roof failed and called a "Mayday".

Firefighter T5 was able to self extricate and suffered 2<sup>nd</sup> and 3<sup>rd</sup> degree burns. Engineer T5 was extricated by the fire attack crew and RIC team and suffered 3<sup>rd</sup> degree burns. All personal protective clothing was worn and both individuals were "on air."

## **SEQUENCE OF EVENTS**

On January 1, 2010, at 23:35 hrs, SR911 received a call reporting a generator had started a house on fire on Coston Avenue. Everyone was out of the residence and the reporting party was calling from a neighbor's residence.

At 23:36:51, SR911 dispatched a Modesto Fire Department first alarm to a working structure fire. A first alarm dispatch consists of 1-Battalion Chief, 4-Engine companies and 1-Truck company. Each company consists of 3 personnel for a total of 16 personnel.

E6 arrived first on scene at 23:43:15 (6 minutes and 24 seconds total response time). E6 reported heavy smoke showing from a single story, single family residence, taking an interior attack. E6 spotted on the "A" side of the structure.

E6 retained Command and assigned E5 to assist his firefighter with the initial interior hose line (1¾" combination fog 160 GPM). T5 was assigned vertical ventilation over the garage. BC2 arrived on scene, met with Captain E6 and assumed command. BC2 assigned E4 RIC and E11 to assist with a second interior hose line. Engineer E5 assisted Engineer E6 securing a hydrant with E6's 5" hose.

Captain E5 reports entry was made through the front door, "A" side, with Firefighter E6 and Firefighter E5. Heavy smoke without heat was encountered in the hallway leading to the "B" side garage. Firefighter E6 was met by smoke and flames as he opened the garage man door. Captain E5 reports it was obvious that a failure of some sort had occurred in the garage area. A "Mayday" was sounded over the tactical channel reporting two firefighters had fallen through the roof. Firefighter E5 was assigned to assist Rescue 4 (E4) with the RIC hand line. Firefighter T5 self extricated and came through the man door into the residence. Firefighter T5 gave a general area as to where Engineer T5 should be, but he was unable to locate him. Firefighter T5's turnouts were extinguished and he was assisted out of the structure for medical attention. Engineer T5 was located 6'-8' in from the garage man door, under roof debris. Firefighter E5 and Firefighter Rescue 4 extricated Engineer T5 and removed him from the structure through the interior hallway.

Firefighter T5 and Engineer T5 laddered the residence from the unburned "A" side. Engineer T5 sounded the roof to the ridge board and along the ridge board past the garage/residence fire wall to the area where the ventilation hole was going to be cut. Firefighter T5 followed Engineer T5's path. Captain T5 was preparing to step on the roof as the roof collapsed.

While preparing for the initial cut, Firefighter T5 reports the saw dying due to smoke conditions. He pulled the saw out of the smoke to restart it. Firefighter T5 reports he then felt the roof soften. Before he could relay this information to Engineer T5, the roof catastrophically failed. Captain T5 radioed a "Mayday" with 2 firefighters through the roof.

Both "Mayday" firefighters were extricated in under 2 minutes.

The roof collapsed within 5 minutes of the first company arriving on scene.

Both firefighters suffered burns and were immediately treated on scene. Due to the "Mayday" a second and third alarm was dispatched.

A helicopter was ordered but was unable to fly due to fog. Both firefighters were ground transported to local hospitals. Engineer T5's injuries were most severe and he was later taken to UC Davis Burn Center by ambulance with Modesto PD Code 3 escort.

The initial investigation has found that the structural integrity of the roof may have been compromised in the garage area prior to the fire. The resident reports she did not have utilities to the house. She was fueling the generator and was using a candle for light. The combination of a flammable liquid fire and the possibility of compromised structural integrity may have led to the catastrophic failure of the roof.

## **INJURIES/DAMAGE**

Firefighter T5:

2<sup>nd</sup> and 3<sup>rd</sup> degree burns to 10% of his body  
Buttocks, ears, arms, legs

Engineer T5:

3<sup>rd</sup> degree burns to 35% of his body  
2<sup>nd</sup> degree burns to 7% of his body  
Total burns 42%  
Buttocks, arms, legs, head

## **SAFETY ISSUES FOR REVIEW**

Initial finding's shows that all relevant MFD procedures were followed. Assignments were made consistent with Rules of Engagement Procedure and with the conditions presented to the first in Company Officer. A coordinated fire attack and ventilation plan was in place. Crews are to be commended for their discipline, and command and control of the incident after the "Mayday" was called.

Additionally, proper use of PPE's and breathing apparatus appeared to play a significant role in the survival of the individuals involved.

Operational Procedures that were successfully followed:

- III:B:01 – Rules of Engagement for Interior Structural Firefighting
- III:B:02 – Engine and Truck Company Responsibilities at Structure Fires
- III:B:03 – Arrival Reports and Initial Command Actions for Emergency Incidents
- III:B:04 – Assuming and Transferring Command at Emergency Incidents
- III:B:05 – Fire Ground Strategies and Operational Modes
- III:B:12 – Roof Responsibilities and Objectives