BULLETIN

NO.: 22-088

DATE: June 7, 2022

TO: All Personnel

FROM: Robert Logan, Deputy Fire Chief, Employee Services

SUBJECT: Green Sheet – Cal Fire Durango Incident – Firefighter Burn Injury

On Tuesday, December 8, 2020, at approximately 2:40 AM, five CAL FIRE firefighters were injured during structural firefighting operations at a single-family dwelling in the City of Indio, California. The firefighters were injured while exiting the structure under rapidly deteriorating conditions. Two firefighters suffered burn injuries, two suffered from smoke inhalation, and one suffered a musculoskeletal injury. All five firefighters were initially transported to John F. Kennedy Memorial Hospital. Two firefighters were transferred to Arrowhead Regional Medical Burn Center for further treatment. One firefighter remains hospitalized.

I have attached the information summary report - Green Sheet.

- Refer to SDFD Operations Manual
 - o SI 10 Section 04 Safety Communications
 - Serious Accident Review Team (SART)

Any questions should be directed through the chain of command.

Don't hesitate to contact the Health and Safety Office at SDFDHealth&Safety@sandiego.gov with comments or areas of improvement. For all other questions, contact HSO/Battalion Chief David Picone at 619.533.4466 or dpicone@sandiego.gov





Informational Summary Report of Serious or Near Serious CAL FIRE Injuries, Illnesses and Accidents



GREEN SHEET

Firefighter Injuries

December 8, 2020

Durango Structure Fire

20-CA-RRU-157870

20-CA-RRU-157891 (SART)

California Southern Region

SUMMARY

On Tuesday, December 8, 2020, at approximately 2:40 AM, five CAL FIRE firefighters were injured during structural firefighting operations at a single-family dwelling in the City of Indio, California. The firefighters were injured while exiting the structure under rapidly deteriorating conditions. Two firefighters suffered burn injuries, two suffered from smoke inhalation, and one suffered a musculoskeletal injury. All five firefighters were initially transported to John F. Kennedy Memorial Hospital. Two firefighters were transferred to Arrowhead Regional Medical Burn Center for further treatment. One firefighter remains hospitalized.

CONDITIONS

Weather:

Weather data provided by Dos Palmas Weather Station on December 8, 2020, at 2:00 AM:

Temperature: 65° Fahrenheit

Relative Humidity: 22%

Winds: Average 4 mph out of the ENE

Visibility: Clear

Structural Features:

The structure is a single-story tract home located in a residential neighborhood in the City of Indio, California. Constructed in 1990, the 1,700 square foot, wood-framed structure has a stucco exterior, with a tile roof, attached garage, and three exterior wood-framed patio covers. The home has three bedrooms, two bathrooms, den, living room, kitchen, and two connecting hallways. The home has elevated or vaulted ceilings throughout with a large attic space above the bedrooms and kitchen.

Fire Behavior:

The first arriving Company Officer reported smoke and fire from the rear of the structure (C-Side). Prior to entry, smoke conditions at the front door were observed to be light and non-pressurized. The fire behavior appeared to be consistent with a room and contents fire.



Photo 1: The A-Side of the structure and point of entry through the front door.

SEQUENCE OF EVENTS

On Tuesday, December 8, 2020, at 2:22 AM, Indio Police Department (IPD) received a 911 call reporting a residential structure fire at 81185 Durango Drive, in the City of Indio, California. The 911 call was transferred to the Perris Emergency Command Center (ECC). At 2:24 AM, the ECC dispatched a first alarm residential structure fire response consisting of four Engine Companies (E), one Truck Company (T), one Paramedic Ambulance (M), and one Battalion Chief (BC). Smoke from the structure fire was observed by firefighters from outside the apparatus bay of the first due fire station.

E1 staffed with a Fire Captain (FC1), Fire Apparatus Engineer (FAE1) and Firefighter (FF1) arrived on scene at 2:29 AM and spotted at the front of the structure. M1, staffed with two firefighters (FF2 and FF3), arrived on scene at 2:30 AM and spotted in the driveway of the neighboring structure.

At 2:30 AM, FC1 transmitted the following report on conditions: single-story, single-family dwelling with smoke and fire to the rear of the structure. FC1 assumed the Durango Incident Command and requested the next due engine establish a water supply. FAE1 remained at E1 to perform fire ground pumping operations. FF1 was directed to pull a line to the front door. FF1 deployed the rear pre-connected hoseline, composed of 200 feet of 1¾" hose with a selectable gallonage combination nozzle. FF2 and FF3 proceeded with FF1 to the front door and conducted a personal protective equipment (PPE) check prior to entering the structure.

FC1 confirmed with IPD that all occupants were out of the structure. FC1 initiated a 360° size-up from the A/D corner of the structure, secured the utilities, and observed active fire in the C/D corner. FC1 continued towards the B-Side, made face-to-face contact with FF2, and relayed that all occupants were out of the structure and the fire was located in the C/D corner. FAE1 charged the line. FF1 was in the Nozzle position, FF2 was in the Backup position, and FF3 was in the Control position. At approximately 2:32 AM, the Interior Fire Attack Crew entered the structure standing up, with good visibility. FF2 performed an interior scan of the living room with a thermal imaging camera; no visible fire was observed.

The Interior Fire Attack Crew advanced to the right, passed through a heavily cluttered den, at which point they assumed an athletic stance due to increasing heat and smoke conditions; suppression activities were initiated. They continued their advancement into the master hallway towards the C/D corner. Upon completion of the 360° size-up, FC1 returned to the A-Side and remained in a command role.

FC1 requested a Conditions, Actions, Needs (CAN) report from the Interior Fire Attack Crew. FF2 reported the interior conditions as warm and advised they were still trying to locate the seat of the fire. FF2 realized his flash hood needed to be adjusted, advised



Photo 2: Floorplan of the structure

FF3 and FF1, and exited the structure; FF3 moved up to the Backup position. FF2 adjusted his hood, retrieved a long hook from E1, and re-entered the structure, assuming the Control position at the corner of the den and master hallway.

At 2:33 AM, E2 and E3 arrived on scene. E2 staffed with FC3, FAE3 and FF6 was assigned to assist with Fire Attack, and FC3 was assigned Interior Operations. E3 staffed with FAE4, FF7 and FF8 was assigned to Water Supply and established a 4" supply line from the hydrant to E1 at 2:36 AM.

At 2:34 AM, T1 arrived on scene, staffed with FC2, FAE2, FF4 and FF5. The approach of T1 was blocked by an IPD vehicle forcing them to spot three houses from the fire. T1 Crew prepared for

At 2:36 AM E4 arrived on scene, staffed with FC4, FAE5, FF9 and FF10. E4 was assigned to Rapid Intervention Crew (RIC).

vertical ventilation while FC2 proceeded to the structure for an operational size up.

At approximately 2:36 AM, FC1 told FC2 the fire had vented through the roof. FC1 requested a second CAN report from the Interior Fire Attack Crew on the Tactical Net. FF2 gave the second CAN report indicating FF3 and FF1 believed they were at the seat of the fire, making a push. FC1 replied if conditions did not get better, they should pull out.

At 2:37 AM, BC1 arrived on scene.

FF2 observed interior conditions deteriorating, with increasing heat, decreasing visibility, lean flash, and rollover conditions. FF2 told FF3 and FF1 to start retreating.

Simultaneously, near the front door, FAE3 advised the Interior Fire Attack Crew over the tactical frequency of heavy fire in the living room behind them. FAE3 relayed the updated conditions face-to-face to FC3 and FC1. On the tactical frequency, FC1

Durango Incident Green Sheet Page **5** of **12**

ordered an evacuation and a switch to defensive operations, followed by ordering FAE1 to pull a second line from E1.

FAE2 laddered the garage at the A/D corner, ascending with FF4 and FF5 behind. While sounding the roof, the rubbish hook of FAE2 plunged through the roof, confirming an established attic fire just past the firewall of the garage.

FF3, upon receiving the retreat order from FF2, grabbed the shoulder of FF1, and relayed the order. FF2 begins his retreat. FF3 heard the water flow from the nozzle shutoff and began to exit the structure. Passing back through the den, FF3 heard movement from behind, and assumed FF1 was following. FF3 was forced low to the ground by intensifying heat and smoke while hearing sounds like glass breaking. In the living room area,

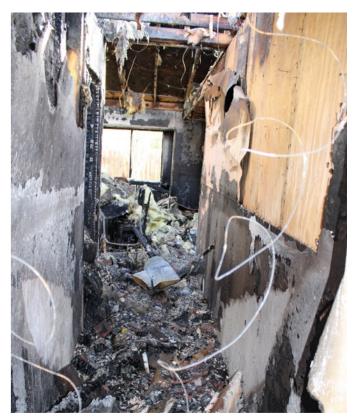


Photo 3: View from master hallway looking towards C/D corner

FF3 observed the carpet beginning to auto-ignite and pre-flash indicators in the overhead environment. FF3 followed the hoseline with limited to no visibility. Guided by yelling from the front door, FF2 and FF3 exited the structure, with fire rolling out above them, at approximately 2:39 AM.

FF1 did not hear the retreat order given on the tactical frequency nor the communication from FF3. FF1 observed the conditions deteriorate and yelled to back the hose out. FF1 turned and did not have a visual of FF3. FF1 began backing out while flowing water at the ceiling to cool the interior environment. FF1 felt debris falling from overhead. While backing out, FF1 tripped over wires or debris and fell, losing contact with the hose. FF1 has no further recollection of events until outside the structure.

From the roof, FAE2 heard the commotion and saw two firefighters rapidly exiting the structure. From the ground, FC2 looked up and told FAE2, FF4, and FF5 that there was something going on and not to overcommit. FC2 started towards the front of the structure. FAE2, FF4, and FF5 descended the ladder.

Immediately following the exit of FF3 and FF2, FC1 shouted, "Where's FF1?" FF3 and FF2 both realized FF1 had not exited the structure with them and was still inside. FF1

Durango Incident Green Sheet Page 6 of 12

was still inside. FC1 declared a "MAYDAY" on the tactical frequency. FAE2, with FF4 and FF5, heard the mayday and started towards the front door.

FAE3 entered the structure through the front door to locate FF1. FAE3 observed FF1 standing in the den area of the structure, thrashing around, and yelling, "I'm on fire, put me out." FAE3 wrestled FF1 to the floor to orient FF1 to the hoseline and attempted to lead FF1 to the front door. FAE3 continued to struggle with FF1 with debris falling from overhead, striking them.

Outside, FF3 observed FAE3 enter the structure and re-entered seconds later. FF3 saw movement in the den and, mistaking FAE3 for FF1, grabbed FAE3 from behind. FAE3 attempted to maintain contact with FF1 while yelling, "Let me go, I've got FF1." FF3 forcibly pulled FAE3 out the front door, causing FAE3 to lose contact with FF1. FAE3 yelled to the firefighters at the front door that FF1 was still inside. At some point during the struggle, the structure boot of FF1 was dislodged.

From the front door, FF6 observed deteriorating fire conditions and retrieved the second hoseline to begin flowing water into the interior of the living room and den. As smoke conditions lifted, FF6 observed a structure boot inside. FF6 relayed the observation of the structure boot to FC2, who was positioned near the front door.

FC2 entered the structure through the front door in an attempt to locate FF1. FC2 heard the Personal Alert Safety System (PASS) alarm sounding in the den. FC2 moved toward the sound and located FF1 lying face down in the southwest corner of the den. feet towards the front door. Under heavy fire conditions and with debris falling onto them, FC2 repositioned FF1 and dragged FF1 to the front door. FAE2, FF5 and FF6 assisted FC2 in removing FF1 from the structure. While assisting with rescue operations, the mask of FF6 was displaced resulting in smoke inhalation.



Photo 4: View from the living room at front door looking through den towards master hallway



Photo 5: Fire conditions moments after all firefighters exited the structure

As the rescue operations were occurring, the RIC Team from E4 was establishing a tool staging area on the A-Side of the structure, adjacent to the garage. The RIC Team was advised of the Mayday, but was not in a position to effect the rescue. As the rescue was completed, FAE5 assisted with assessing FF1; FF9 and FF10 continued suppression efforts.

At 2:42 AM, BC1 advised the ECC of the MAYDAY on the command frequency and assumed Incident Command. At 2:43 AM, the ECC dispatched a second alarm assignment in accordance with standard operating procedures. At 2:45 AM the ECC confirmed that all firefighters were accounted for.

FF1 was relocated to the front yard of the structure by multiple firefighters. The PPE of FF1 was removed and an initial injury assessment was performed. At approximately 2:46 AM, FF1 was placed in M1 attended by FF2 and FF3. M1 was driven by FAE3 to John F. Kennedy Memorial Hospital (JFK). FF1 was transported via air ambulance to Arrowhead Regional Burn Center.

FC2 was transported by ambulance to JFK and later transferred to Arrowhead Regional Burn Center for treatment. FF6 and FC3 were subsequently transported by ambulance to JFK for treatment. FF6, FC3, and FAE3 were treated and released.

INJURIES/DAMAGES

- FF1 suffered first, second, and third-degree burns covering approximately 38% of the body including the neck, shoulders, abdomen, forearms, hands, one knee, and one foot.
- FC2 suffered second-degree burns covering approximately 1% of the body including the head, neck, and back.
- FAE3 suffered a musculoskeletal injury to the right knee.
- FF6 suffered a smoke inhalation injury.
- FC3 suffered a smoke inhalation injury.

SAFETY ISSUES FOR REVIEW

- Ensure Two-In/Two-Out compliance in accordance with CCR Title 8 5144(g)(3) and (4).
- Maintain fireground accountability at all times.
- Recognize modern fire behavior characteristics and the effects of prolonged fire involvement in attic/hidden spaces. Water flow onto the fire should be constant, uninterrupted, and at maximum capability until the environment is tenable.
- Monitor overhead conditions and adjust tactics as conditions improve or deteriorate.
- Ensure communications are understood and acknowledged.
- Survival is dependent on the ability to stay calm during adverse conditions.
- Review CALFIRE Policy 1736.1.1- Minimum Requirements for Interior Operations within IDLH Atmosphere.
- Review CALFIRE Policy 1722- Head Neck and Ear Protection.
- Review CAL FIRE Policy 7036 Structure Fires.

INCIDENTAL ISSUES/LESSONS LEARNED

- Competent Fireground Leadership and Command presence was exhibited in this Incident.
- Personnel demonstrated quick and decisive action under adverse conditions.
- Expect the modern fire environment in lightweight construction, with extended burn times, to involve attic and void spaces.

PHOTOS/SITE DIAGRAMS/MAPS

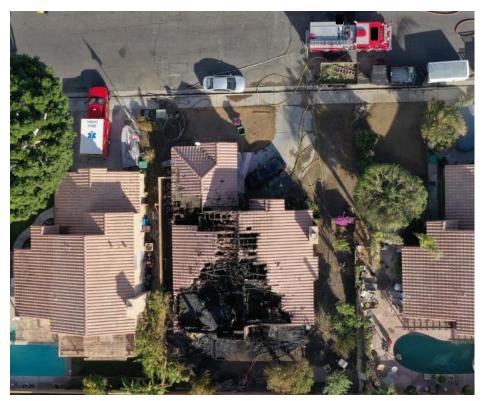


Photo 6: Aerial view of structure



Photo 7: Aerial view of C/D corner of the structure



Photo 8



Photo 11



Photo 9



Photo 10



Photo 12





Photo 13

Photo 14

Photos 13-14: PPE from FC2







Photo 16



Photo 17

Photos 15-17: PPE of FF2



Photo 18: PPE of FF3



Photo 19: PPE of FAE3