

Summary Report of an Incident Within an Incident,  
Near Miss Event, Serious Accident, or Significant Injury



# GREEN SHEET

## Unified Fire Authority Green Sheet

### Gasoline Ignition, Riverton Garage Fire

11/09/2024, 12:53 PM

Riverton

MA120

## SUMMARY

The following is a summary of an incident that occurred during the suppression of a garage fire. Two UFA firefighters received minor injuries: one with minor burns on both legs; the other received injuries to their right ear, primarily from the hose line being used to suppress the fire on the firefighter's turnouts, as well as small burns. Additionally, a Draper City firefighter that was injured with minor injuries was treated and released on scene.

The Green Sheet is a summary report of any event that meets or exceeds a pre-determined threshold and is intended to provide factual information created and distributed to UFA personnel within 7 days of the event. To that end, it is published and distributed to improve situational and safety awareness. Information contained within may be subject to revision as further investigation is conducted, and other reports and/or documents are received. A Green Sheet may warrant a Safety Stand Down for dissemination of the information to assigned personnel.

## CONDITIONS

November 9, 2024, was a clear and sunny day with temperatures around 51° F with relatively no wind at the time of the incident.

## SEQUENCE OF EVENTS

At 12:53 PM, a garage fire was reported, and crews were dispatched to 1230 W 13200 S in Riverton. ME124 had gone to the east side of the valley to change into a reserve apparatus. MA120 had been working out when they received a medical call and had transported to IMC. When they got back to 124 to retrieve items they had left at the gym, the dispatch came across, so they turned out, one with their PT shorts on underneath their turnout gear and the other firefighter stripped down to underwear underneath the turnout gear. The fire residence was located 0.7 miles to the south from Station 124.

MA120 was the first to arrive on scene, providing an initial size-up. When suppression units arrived, ML21 started fire suppression efforts while ML61 was working on access/egress. The fire was knocked down relatively quickly and crews started going into overhaul. It was identified that there were multiple gas cans—most of them were 5-gallon cans—that lined the B (bravo) side of the garage wall that had fire impingement. Several of the plastic gas cans had been removed just outside of the garage man-door during and directly following suppression efforts. During suppression efforts, the garage door had been cut with an inverted L cut, allowing for access and egress.

The garage itself had a lip towards the front of the garage floor that didn't allow for proper draining and flow of liquid out of the garage, thus creating a pool of liquid inside the garage. Several of the gas cans had been breached and had leaked their contents into the mixed liquid pool inside the garage. During overhaul, several more of the gas cans were being removed. One firefighter from MA 120 (firefighter 1) was exiting the garage when they felt and heard a large 'whoosh' and looked back and saw their partner from MA 120 (firefighter 2) on fire. Firefighter 1 also had flames that went underneath the turnout pant ensemble and up between the boots and pants. Firefighter 2 came out of the garage with assistance and several firefighters jumped on firefighter 2 while the suppression hose was pulled from the garage to extinguish the fire that was on the firefighter. Firefighter 2 was hit in the ear with the hose, causing additional injury to the burns they had sustained. Firefighter 2's ensemble was completely soaked in a water and gas mix which had led to the firefighter catching on fire.

When the gasoline ignition occurred, the gas cans on the bravo side of the structure also ignited, and the additional spray of water/gas mix also ignited. When the additional water spray occurred, one Draper firefighter from ML 21 (firefighter 3) that was on the B side

was showered in fuel that had also ignited. The two firefighters were quickly taken to the Medical Group (A91) to be checked out. Firefighter 3 was assessed by MA63 and released back to their crew. The two UFA firefighters were transported to Riverton Emergency Department for a medical check and observation. Both firefighters were released to their families and went home following the incident.

## **INJURIES/DAMAGES**

One firefighter had minor burns to both legs. One firefighter had small burns to their right ear as well as an ear injury sustained when the suppression hose line was used on the firefighter to put out the fire. A third (Draper) firefighter was assessed on scene and released.

## **SAFETY ISSUES FOR REVIEW**

Although fire was declared out and the incident had transitioned to the overhaul phase, all firefighters were still in their protective ensembles and on SCBA air. This was one of the critical factors in reducing the injuries sustained by the firefighters. It is important to remain in full PPE and on air throughout salvage and overhaul post-fire for many reasons, including protection against carcinogens, post-fire contaminants and to avoid injuries due to unforeseen circumstances such as this.

Additionally, being fully turned out, including Nomex under the turnout ensemble is recommended. Had firefighter 1 been wearing Nomex underneath the turnout ensemble, it is highly likely they wouldn't have received any of their injuries..

References for Review:

[Operations SOG's and SOP's – 450-18 – Single Family Dwelling Fires](#)

[Operations SOG's and SOP's – 450-28 – Overhaul](#)

[Operations SOG's and SOP's – 450-38 – Post Fire Decontamination](#)

NFPA 1971 – Standard for Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

NFPA 1975 – Standard for Emergency Services Work Apparel

## **INCIDENTAL ISSUES / LESSONS LEARNED**

[Utilization of Fire-Resistant Underclothing](#)

It is common practice for UFA firefighters to strip down to shorts or underwear when responding to structure fires. This does not provide the Thermal Protective Performance (TPP) that is an added component of Nomex under turnouts. Heat may be a factor in

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decisions when firefighters strip down to shorts or underwear, but there is an issue with flash flame or flame impingement when this occurs.

It is recommended that crews watch and review the Workrite webinar (registration required to watch the video) regarding “What You Wear Under Your Turnout Gear Matters”. <https://www.fireengineering.com/all-events/what-you-wear-under-your-turnout-gear-matters-2/>. Although this comes from Workrite, it is a good video to review to demonstrate why wearing meltable clothing (polyester or poly/cotton blend) becomes problematic.

Also, review the testing of Nomex/Kevlar station wear vs cotton when directly impinged by flame (<https://www.youtube.com/watch?v=IFUEBKBA4SQ>) to see the differences of fire resistant (FR) workwear with Nomex and cotton.

An identified gap in our general practices is not wearing the additional layer of FR Nomex protection underneath as is recommended by NFPA and industry standards.

#### Continued Utilization of PPE During Overhaul

The continued use of PPE and being on SCBA air throughout overhaul is a best practice and needs to continue forward. The crews did a great job of staying on air and fully turned out, which prevented significant injuries.

## PHOTOS / SITE DIAGRAMS / MAPS



*Image 1 - View of the A/B corner of the garage*



*Image 2 - View of the B (bravo) side of the interior garage where the fuel was stored*



*Image 3 - Interior of Garage (Notice the Pooling of the Water/Fuel on the Ground)*



*Image 4 - Gasoline Infused Turnout Pants of FF2*