

# Rapid Lesson Sharing



**Event Type:** Lightning

**Date:** July 31, 2021

**Location:** Johnny Canyon Fire, Colorado

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*A lightning strike hit very close by . . . The firefighter immediately felt tingling and cramping in his feet and lower back.*

*Another firefighter . . . felt a jolt go through his arm and his arm tingling.*

## Are You Prepared for Lightning Storms?

### Background

The Johnny Canyon Fire, first reported by the Colorado Multi-Mission Aircraft (MMA) on the night of July 28, had an estimated size of 1/10<sup>th</sup> acre and an estimated location of north of the Baldy Mountain Trail at 9,500 feet elevation.

Prior to committing resources, the Duty Officer decided to have the fire flown again on July 29 due to the fire's small size and significant rainfall in the area. The fire still showed heat at that time. A plan was developed to engage the fire early the following day before the predicted storms moved into the area. This plan was discussed between the District Ranger and the District's Assistant Fire Management Officer. Both individuals felt comfortable with the plan.

Additional new fires that afternoon took priority over engaging the Johnny Canyon Fire on the following day, July 30.

### The Story

On the morning of July 31, three members of the Pagosa Ranger District Fire Crew were dispatched to the Johnny Canyon Fire. When this three-person squad was briefed on engaging the fire, they were told that if at any time they felt uncomfortable they could disengage from their mission.

The crew drove to the access point at the trailhead of the Baldy Mountain Loop OHV trail on the Columbine Ranger District. They then used a UTV for a three-mile trip to access a starting point for their hike into the fire. They began this hike into the fire at approximately 1030 hours. The weather was mostly clear with a few scattered clouds. The crew hiked approximately 1½ miles and located the fire, which was approximately 5-feet by 5-feet in size and was barely smoldering.

### Nearby Thunderclap Becomes Decision Point to Hike Out

The crew began mopping-up the fire. They were in contact with other fire personnel, who informed them of two storm cells to their north and northeast. The cell to the northeast was moving southwest toward their location. The crew contacted Dispatch about these cells and were advised that they looked to be about 1-1½ hours out from their location. Just after this call to Dispatch, the crew heard a loud thunderclap nearby. This became a decision point for them to begin their hike out.

While hiking out, the crew was hit by an intense thunderstorm with heavy rain, hail, and continuous lightning. They donned rain gear and stopped momentarily to hunker down and wait out the storm, but quickly decided the storm wasn't abating and began hiking again. They described the trail as running water like a creek and the lightning and thunder being constant.

### **Lightning Strike Impacts Firefighters**

The crew was passing through a metal fence gate when a lightning strike hit very close by. One firefighter saw the strike and thought it split between a tree and the fence. He immediately felt tingling and cramping in his feet and lower back.

Another firefighter was in the process of latching the metal fence gate. He felt a jolt go through his arm and his arm tingling. Everyone was shaken up by the experience, but no one appeared to have serious injuries.

They decided to hike to the UTV as quickly as possible and get inside it to have the rubber tires as some form of grounding. It was then necessary to traverse Baldy Mountain in the open where they were the tallest object in the area. This three-mile UTV ride back to the truck was in pounding rain and hail. The UTV didn't have a windshield, making it difficult to see and further exposing everyone to the hazardous elements.

All three firefighters began shivering badly and were experiencing early stages of hypothermia. When they arrived at the truck, they sat with the heat on for 30 minutes to warm up before they could start driving.

### **Firefighters Decline Medical Follow-Up – An AAR is Conducted**

When the crew arrived back at the station, the firefighters were asked if they wanted to get checked out medically, but all three declined. The two firefighters who experienced effects from the strike completed CA-1 forms. The third firefighter completed a "near-miss" report.

An AAR on this incident was conducted.

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*Lightning does not have to directly strike you to cause injury or worse.*

### **Lessons**

- ❖ Know the forecast. The forecast for that day was 100% chance of wetting rain and a lightning activity level of 5—meaning lightning is frequent and intense. The crew knew the forecast and planned to be in and out before the storms. Storms during the several previous days had all moved in around 1600-1700 hours. This storm moved in several hours earlier.
- ❖ Lightning does not have to directly strike you to cause injury or worse.
- ❖ Just because the sky is clear does not mean you can't be struck by lightning. The first thunderclap they heard was very close, in a different direction from the approaching cells, and the sky was clear in their area.
- ❖ We are located in an area without good radar coverage. Don't rely on weather apps. No one here is a meteorologist. If possible, call the National Weather Service or ask Dispatch to call them for you. Request a SPOT weather forecast.
- ❖ Temperatures drop quickly at elevation during monsoon season. When combined with rain and hail, hypothermia can set in rapidly.
- ❖ During monsoon season, get an early start to your day.
- ❖ Having a windshield on the UTV would have prevented considerable discomfort and increased safety.

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**This RLS was submitted by:**

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