

Post Incident Analysis



Mission

To protect life, prevent harm, and preserve property. We serve to meet the ever-evolving needs of our citizens with honor and integrity.

Values

Respect Others
Pursue Excellence
Be Accountable
Be Better Today

Motto

Our family is always here to help your family!



Quint 5

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Grapevine Quint 5 Incident Summary

On the morning of June 22, 2007, Grapevine Truck 561 (Truck 1) went to the City Shop to check on their regular truck. When they arrived, they were told it was ready. The crew fueled the apparatus and swapped all of their equipment from the reserve unit to their regular truck. After doing so, two members put the reserve unit back into the Reserve Facility while the others moved the truck to the front area on the Reserve Facility to finish their apparatus checks. The apparatus driver activated the warning lights, emergency flashers, and the aerial PTO. He then started a clock-wise walk around, checking all of the functions of the apparatus and the associated equipment. During the walk around, the jacks were activated and the truck leveled. The apparatus driver climbed into the bucket and raised the aerial. During this, he heard a loud boom and saw sparks from the area of the front tires. This happened two times. He was able to lower the aerial down and safely exit the bucket of the truck. The aerial had come in close proximity of overhead power lines (138,000 volts) that ran across the property of the City Shop. Fortunately, there were no injuries during this incident. The incident was

publicized around the department and the area in front of the Reserve Facility was marked with caution stripes.

In December of 2021, a maintenance list was sent out from the Fleet Department to inform members when apparatus was scheduled for preventive maintenance at Fleet. The custom is to swap onto a reserve piece of equipment the night before so Fleet can have access to the apparatus first thing in the morning. On the schedule for January was apparatus 10319 (Quint 5) for January 24th. On January 23rd, the acting Battalion Chief failed to consult the list and did not notify Quint 5's crew to swap out for the upcoming preventive maintenance.

On the morning of January 24th, the oncoming Captain of Quint 5 was notified during a morning conference call that they had to swap apparatus for the preventive maintenance that was scheduled and that their ground ladders were going to be tested at the Reserve Facility also. While on the call, the Captain of Station 2 (Reserve Quint located there) said that they were going to be training that morning and that they would bring the reserve quint to Fleet for the members of 5's to swap onto. This was mutually agreed upon and Station 2 brought the

VISION

To be recognized by its citizens for providing exceptional Community Safety, Fire Prevention, Emergency Medical Services, and Fire Protection.

Will build and sustain a culture of family, preparing for the future, remaining community focused, and embracing the diversity of those we serve.



Always Consider

Situational Awareness

Use a Spotter

Maintain a Distance of 10 Ft. or More

quint to Fleet and parked it nose out in front of the Reserve Facility. A contractor hired to test the ground ladders arrived and when the crew from Station 5 arrived, they let him into the Reserve Facility and parked their apparatus to the east of the reserve quint. They removed their ground ladders and placed them inside the Reserve Facility for testing. The crew then began swapping their equipment from their apparatus to the reserve quint.

Once all of the equipment was swapped over, it was decided that an operational check should be completed prior to leaving and returning to their station. The acting Driver put the apparatus into pump gear and started checking out the pump. The firefighter started checking the saws and then went to the rear of the quint and started putting the outriggers down. All safety equipment was working while doing these operations. The Officer was putting the last objects into the cab and was standing on the step of the cab. The firefighter went to the opposite side and stepped up on the step and they began discussing items in the cab and their placement. As this was taking place, the acting driver started raising and extending the aerial ladder. As he did this, the top fly section of the ladder came in contact with one of the electrical transmission lines.

The contact with the transmission lines resulted in three very loud explosions with bright flashes of light. The electricity traveled down the ladder,

through the body of the vehicle, through the outriggers, and into the rebar in the concrete. From there it traveled to the Reserve Facility where it blew pieces of concrete from the driveway around the overhead doors. The electricity burned the bottom of two doors, went through the grounding circuit of the Reserve Facility, blew the electrical panels out, damaged all the interior lights, damaged the heaters, and damaged the reserve ambulance stored in the building. All members were able to jump free of the apparatus and ran to the parking lot in front of the apparatus and out from underneath the power lines. One member was hit with concrete in the left rear shoulder area and received significant bruising. No other injuries were received.

The explosions shook the building and the garage doors that were open were vibrated closed. The contractor that was inside the building took refuge in his pickup truck that was also in the building. After approximately 10 minutes, he got out of his truck and tested the doors to see if it was safe to exit the building. Once it was deemed safe, he exited through the door on the east side of the building.

The electric company was notified and they were able to verify that the line had locked itself out. Canyon Electric grounded the line and the apparatus was able to be removed to Fleet for evaluation.

ALWAYS

Check

For

Overhead

Obstructions!

CONTRIBUTING FACTORS

- Complacency (Acting Driver and Firefighter had attended Aerial Operator Class at TCC)
- Checking equipment the way we do at the station
- Not paying attention to warning labels
- Not following industry safeguards, Check for Overhead Obstructions
- Inattention to detail (PM schedule and ladder check)
- Not swapping the night before
- Not swapping at Station 2
- Not having situational awareness
- No Spotters
- Not saying something
- Officer inattention
- Sterile environment



Training... Training... Training...

Never stop training. GFD has made a commitment to learning by educating every member of our organization. All information learned during this incident will be passed on, with the common goal of continued excellence in fire fighting and Fire Fighter Safety.

KEY RECOMMENDATIONS

- **Maintain Situational Awareness**
- **Maintain a Safe Distance From Electrical Lines**
- **Utilize Spotters**
- **Check Warning and Danger Labels**
- **Restripe the area in front of Reserve Facility**
- **Signs on the columns, “Do Not Raise Aerial Apparatus Here”**
- **Listen, Hear Outriggers being set, Look for Overhead Obstructions**
- **Reminder between ladder controls**
- **Defined roles on setting the ladder**
- **Consult Peer Support**
- **Drug Test Employee**
- **Relieve of Duty (May Not Be Thinking Clearly)**
- **Department training!**

