

# Post Incident Analysis



## Mission

*To combine strengths and resources for the purpose of enhancing service delivery to our communities across all jurisdictional boundaries.*

## Values

Collaboration  
Service Excellence  
Accountability  
Transparency  
Visionary  
Community-Focused



7012 Hardisty St.

Incident Review **P.1**

Contributing Factors **P.3**

Key Recommendations **P.4**

## Residential Fire Incident Summary, 7012 Hardisty

On January 4, 2019, North Richland Hills Alarm dispatched a one alarm structure fire to a single family residence located at 7012 Hardisty Street in the city of Richland Hills, Texas. The residence was built in 1963 and had an area of 1,421 square feet. The residence was frame construction with brick veneer on a pier and beam foundation. Investigation after the fire found that very few brick ties were used during construction and the exterior brick walls had cracking from foundation movement. The roof was sawn and framed with composition shingles installed. The roof was a hip design with an approximately 18-inch clearance over the garage and an approximately 30-inch clearance over the living area of the residence. There was evidence that the attic was divided between the garage and the living area approximately where the roof line changed heights. Metal awnings and metal siding were installed over the eaves and the windows.

At 0711, the homeowner called reporting that their attic was on fire. Dispatched to the scene was Richland Hills Engine 291 and Medic 291, North Richland Hills Engine 222, Hurst Medic

211, Haltom City Quint 472, and Hurst Quint 203 along with Chief 290. Haltom City Battalion 47 also responded with their company. Chief 290 arrived at 0714 and reported out with a small one story residence with heavy smoke and fire showing. He declared a working fire and an offensive strategy with Chief 290 in Command. Chief 290 observed the "A", "B" and "D" sides of the house but did not complete a 360 because of locked gates on each side of the house. He observed several plastic trash cans and bags on fire in front of the garage, fire coming from the top of the garage door, and smoke coming from the attic and pushing from the eaves. At 0715, Engine 291 arrived with two personnel and Medic 291 with two personnel. The residents were in the front yard and confirmed that everyone was out of the house. Engine 291 was assigned fire attack and the officer pulled a crosslay to the garage and trash fire on the A-D corner. The line was charged and he started knocking down the visible fire. Medic 291 was assigned to team up with the Officer from Engine 291 and move to the interior of the house. Engine 222 arrived and staged at the hydrant. They were assigned water supply. Medic 211 arrived and staged but did not

## VISION

To be a reliable and sustainable organization

Strengthen the continuity of operations and partnership

Industry leader in regional partnerships that provide specialty services

Identify and evaluate opportunities for additional collaboration

Promote a culture of safety for our members



## Always Consider

Command and Control

Communications

Building Construction

Tactical Priorities

Span-of-Control

Continual Size-Up

notify Command. Engine 291 made entry and poked a hole in the ceiling and did not observe anything. They moved into the living room towards the Delta side of the house and poked another hole. They still did not see anything. They then moved a few feet and poked another hole and they saw fire in this hole. During this time, Command was trying to reach the Officer of Engine 291 but he did not hear Command. The firefighters with the Officer heard Command order them out of the house because Command could not communicate with Engine 291. Engine 291 exited the house without applying any water to the fire in the attic. Engine 291's Officer checked his radio and found it on the wrong channel. Command was not informed about the fire that was found in the attic. Battalion 47 arrived and assisted Command. Quint 472 arrived and was assigned to control the utilities. Quint 472 proceeded around the house from Alpha to Bravo and in the process turned the gas meter off, closed the rear door to the living room, and was going to the rear garage door to access the electrical panel in the garage. Engine 222 had their crew together and was assigned to pull a second attack line off Engine 291 and assist with fire attack. When Engine 291 came out of the house, Engine 222 went in to take over fire attack. Engine 291 was assigned to re-enter and take their line towards the Bravo area of the house and cut the fire off in the attic. Quint 203 had arrived and was assigned to On Deck. They gathered

their hand tools and proceeded towards Command to stand by.

As Engine 222 went into the house with Engine 291, they poked a hole inside the front door and saw fire above them. They opened the hole and applied water for a short time. Engine 222 then moved a few feet towards their right (Delta) and pulled another hole. When they did this, a smoke explosion occurred forcing sheetrock and insulation down and knocking one firefighter down. All companies exited the house under the direction of Command and a Personal Accountability Report was taken. All companies were accounted for and a switch was made to defensive operations. The fire burned through the roof in the area where the garage roof transitioned to the roof over the living area and the smoke lifted inside. Lines were repositioned to extinguish the fire from the exterior. After a few minutes of this application, the residence was evaluated for structural stability so that crews could re-enter the house for interior operations. During the smoke explosion, the brick veneer walls on the Bravo and Charlie sides fell and the sheetrock was cracked on the interior walls. Interestingly, none of the windows on the house were damaged by the smoke explosion. The structure was deemed safe for interior operations and crews were rotated inside to hit hot spots and overhaul the fire. Command called for Investigators to respond to the incident.

# CAN REPORT

Conditions

Actions

Needs

## Investigation

- Fire started in the attic and is thought to be electrical in nature
- Extended burn time and dropped into the garage through an open scuttle hole
- Radiated heat set the items in front of the garage door on fire
- Fire burned for some time above garage and pressurized the adjoining attic space
- Oxygen deprived attic space ignited when enough air was introduced through ceiling openings
- Force of the ignition of the smoke was downward through the opening that had been made

## Contributing Factors

The following were part of the Contributing Factors:

- **Must maintain Situational Awareness**
- **Attic construction features**
- **Early identification of ventilation needs**
- **Communications**
- **Smoldering fire for an extended length of time – Smoke is Fuel**

## STRENGTHS

### THINGS THAT WENT WELL

- **Response time was good**
- **Initial hoseline stretch and water supply went well**
- **Apparatus placement to access the building.**
- **Company integrity.**
- **No injuries**



# Training... Training... Training...

Never stop training. NEFDA has made a commitment to learning by educating every member of our 14 organizations. 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

### COMMAND AND CONTROL

- Continually size up the building.
- Fire in the attic or suspect the fire is in the attic– Vent the roof!
- Consider the second line off the second engine.
- Consider dual pumping.
- Pull ceiling – hit it – get up in the attic.
- Remove all of the garage door early.
- Arrive at assignment fully bunked out and with correct tools for assignment.
- Companies should have a minimum of three personnel assigned.
- Add a company to the first alarm response.

### BUILDING CONSTRUCTION

- Remember the limitations of ordinary construction (time, weight, connectors, etc...)
- Renovations or building features may divide areas of the building making them act completely different from other areas.

### COMMUNICATIONS

- Communicate the information that impacts strategic decisions.
- Utilize face-to-face communications as much as possible when dealing with tasks.
- All companies check in with Command.
- Make sure radios are on the correct channel.

