STATE FIRE MARSHAL'S OFFICE

Firefighter Fatality Investigation

Investigation Number FY 08-02

Chief Robert Leland Knight

Teague Volunteer Fire Department
July 5, 2008

Texas Department of Insurance
Austin, Texas

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ACKNOWLEDGEMENTS

The State Fire Marshal's Office wishes to thank the following entities for their assistance in preparing this report:

- City of Teague Volunteer Fire Department
- City of Teague Police Department
- Freestone County Sheriff's Office
- Texas Commission on Fire Protection
- City of Stephenville Fire Department
- City of Fairfield Volunteer Fire Department
- City of Mexia Fire Department
- Texas Fire Chiefs Association
- State Firemen's and Fire Marshals' Association
- Southeast Texas Forensic Center
- National Institute for Occupational Safety and Health

Executive Summary

On July 5, 2008, City of Teague Volunteer Fire Department (TVFD) Fire Chief Robert Knight was fatally injured during firefighting operations at a commercial property structure fire. At 5:47 PM the Freestone County Sheriff's Office 911 dispatcher received a report of a commercial property structure fire in the downtown area of Teague, Texas.

The involved property was an automotive repair and upholstery shop. The wood frame building with corrugated metal siding and roofing was approximately 40 feet wide and 140 feet long. The south, front end of the building had a brick façade that rose to the peak of the roof 20 feet high. The fire rapidly traveled through the open roof structure, aided by the unprotected wood members and the many and varied highly combustible materials stored inside.

Fire Chief Knight responded on Tanker 96 at 5:50 PM from a brush fire to the downtown fire scene, arriving on the south end of the structure approximately 10 minutes after being dispatched. Knight was operating a nozzle at a doorway of the south end of the building when the two story brick façade collapsed outward, pinning him as he was running away. Knight was immediately extricated by fellow firefighters and civilian witnesses and treated by the on-scene medic unit. He was transported by ground ambulance to the local heli-pad and flown to the East Texas Medical Center in Tyler, Texas.

Chief Knight succumbed to the extensive injuries, dying at 9:38 PM on July 5, 2008.

Chief Knight was a 19-year veteran of the Teague Volunteer Fire Department and served as the Fire Chief for nine years. He was married to Teri Jo Knight and had three children; Trent, Layla, and Laura.

More than 50 volunteer firefighters with 19 apparatuses representing eight departments from the Freestone County area contributed to activities associated with this incident.

Introduction

On Saturday, July 5, 2008, the Texas State Fire Marshal's Office was notified of a firefighter fatality by the Teague Volunteer Fire Department (TVFD). Lisa Glenn, a dispatcher for the Mexia Fire Department, initially contacted the State Fire Marshal's Office to report that a life threatening injury occurred to a firefighter during operations at a commercial property fire. Ms. Glenn advised that the victim, TVFD Fire Chief Robert Knight, was transported to the East Texas Medical Center in Tyler, Texas, by helicopter. The serious injury resulted in the death of the firefighter.

The State Fire Marshal's Office (SFMO) commenced the firefighter fatality investigation under the authority of Texas Government Code Section 417.0075. The statute requires the SFMO to investigate the cause and origin of the fire, the condition of the structure, and the suppression operation, to determine the factors that may have contributed to the death of the firefighter. The State Fire Marshal is required to coordinate the investigative efforts of local government officials and may enlist established fire service organizations and private entities to assist in the investigation.

SFMO Investigator Edward Cheever was assigned to respond to the fire scene, initiate an assessment of the scene, and assist the TVFD. Investigators Dean Shirley, Harry Bowers, Jay Evans, Accelerant Detection Canine Officer Tommy Hubertus, and Fire Safety Inspector Richard Bishop were dispatched to respond. Investigator Shirley was assigned as the SFMO firefighter fatality investigation Incident Commander (IC).

The investigation began on July 5, 2008, with the initial assessment and survey of the involved property, and a review of the records of the incident at the Teague Volunteer Fire Department. Periodic updates regarding the incident were provided to SFMO IC Shirley as investigation team members responded to the incident location.

Incident briefings from SFMO staff at the scene were communicated to SFMO IC Shirley and an action plan of assignments and objectives for the investigation was established. Investigator Cheever was assigned to lead the Origin and Cause Investigation. Inspector Bishop was assigned to lead the Building Structures and Systems Group. Investigator Evans provided assistance as a liaison between the investigations team, local fire departments, and the media.

The Texas Fire Chiefs Association was requested to provide assistance on examining and assessing fireground tactics and Stephenville Fire Department Fire Chief Jimmy Chew responded. Chief Chew serves in a community and department roughly the size of Teague. The Texas Commission on Fire Protection (TCFP) assisted in the evaluation of the personal protective equipment. The National Institute for Occupational Safety and Health (NIOSH) Fire Fighter Fatality Investigation and Prevention Program was notified. The State Firemen's and Fire Marshals' Association provided assistance to the family members and Teague Fire Department personnel.

Building Structure and Systems

The property at 509 Elm Street was a one-story wood frame 40' X 140' commercial building constructed in late 1929. The building was of wood frame Type V (000) construction with metal siding and roofing. A two-brick thick decorative façade covered the front of the building and extended from the foundation to a point just above the peak of the pitched roof. The building was site-built on a concrete slab foundation. The building was oriented north and south and the south-facing front of the building was set back approximately 20 feet from Elm Street. Electrical and water utilities supplied the building. There was no connected natural gas service. There was no fire detection and alarm system installed. A 34' X 40' addition, built at an unknown date, was constructed at the northeast side of the building. The addition was of wood frame Type V (000) construction with metal siding and roofing on a concrete slab foundation and contained a work shop and metal paint booth. An automatic fire suppression system did not protect the commercial paint spray booth. A metal carport abutted the southeast corner of the building. The building housed both a work area and an apartment. The work area was utilized for custom upholstery, vehicle painting, general automobile repair, and vehicle restorations.

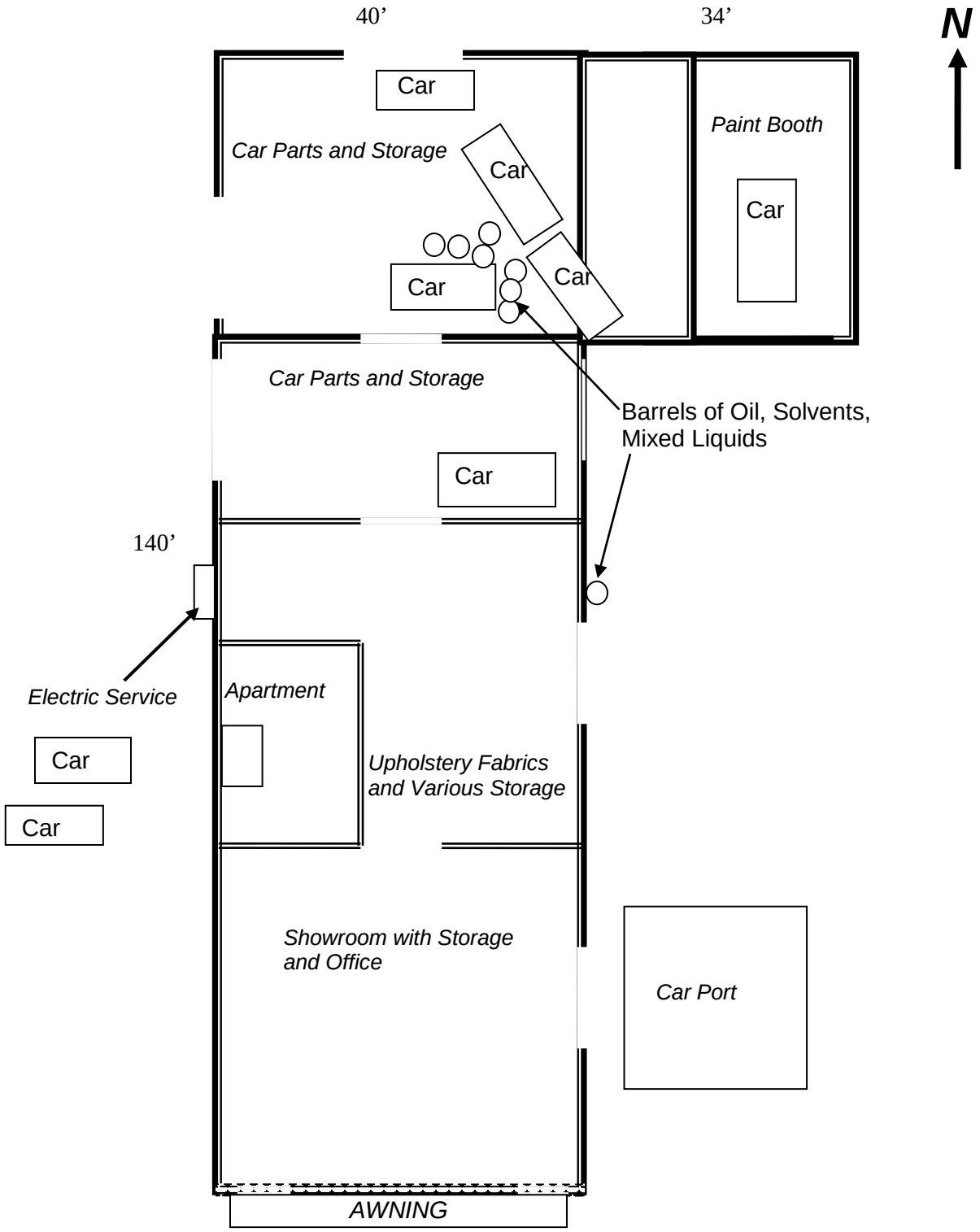
Interior construction included a showroom with gypsum wallboard and ceiling finish. Due to water leaks, some wallboard ceiling panels were replaced with expanded foam insulation board. A wall separated the showroom from the apartment and upholstery storage and work area with double doors for access. The apartment had an eight-foot ceiling and the work area was open to the roof deck with unprotected wood framing. A storage area with car parts and the general maintenance area also had exposed wood building framework, rafters, and wood truss roof members. The one-room apartment was located along the west wall of the maintenance area and the occupant was present at the time of the fire. He was alerted by witnesses and escaped without injury.

Building contents included barrels of oil, solvents, and mixed flammable liquids, with multiple cans of paints, thinners, and other highly combustible materials, all contributing to the rapid spread of the fire. Fuel loads also included seven vehicles in various stages of repair or storage and many car parts, including plastics and foam materials. Small pathways were reportedly the means to walk through the building among the various materials and contents.

The involved structure was located between a four-bay metal automotive shop building to the west, single-family residences to the east and south across Elm Street, and commercial buildings across an alley to the north. Multiple vehicles awaiting repair were located within the building, in front of the building parked at the curb, and adjacent to the west side of the building near the metal automotive shop. The fire and subsequent building collapse damaged or destroyed many of these stored vehicles.

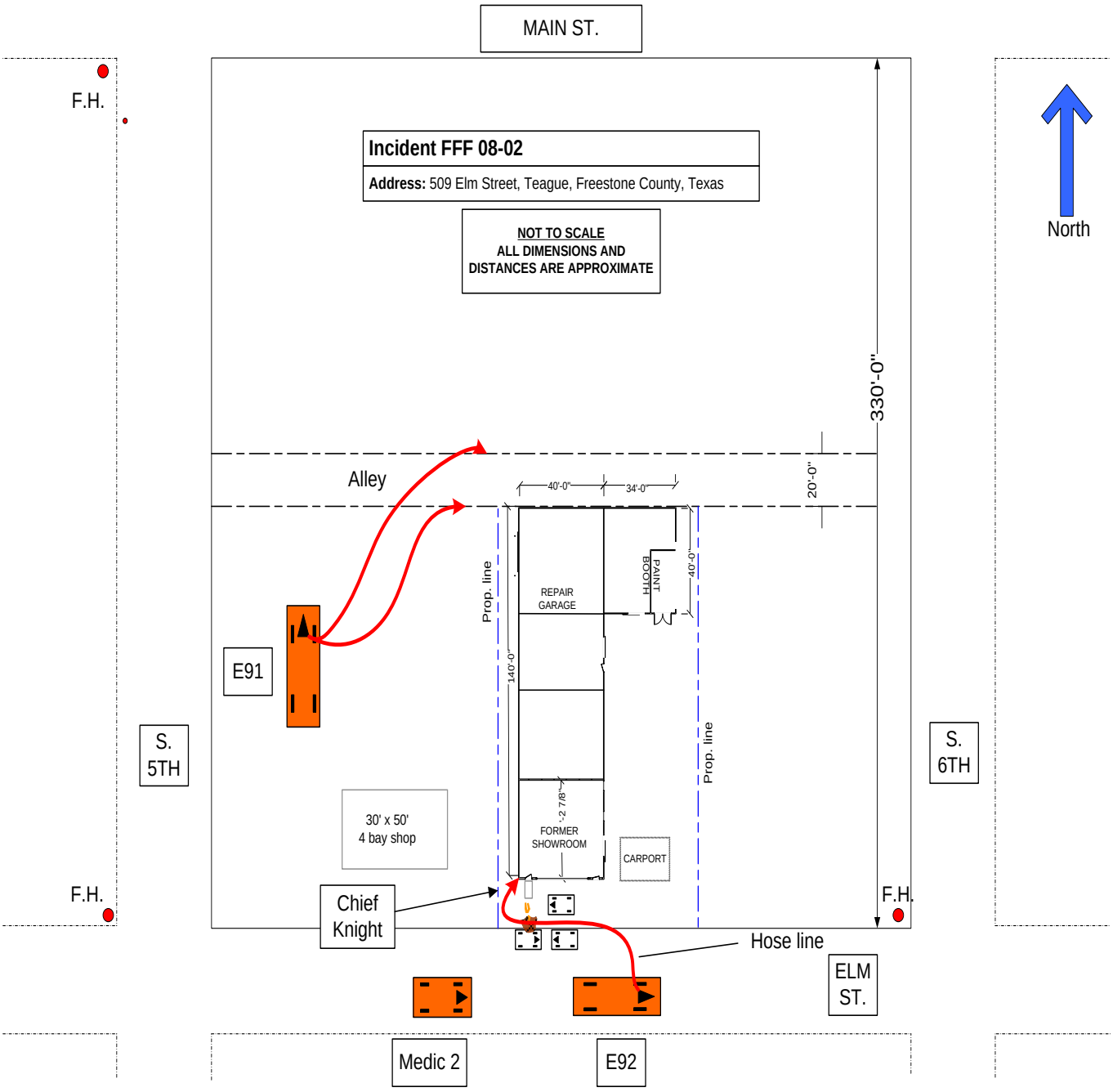
The brick façade at the south, front of the building became unstable as the fire attacked wood structural attachments and subsequently collapsed almost as a unit to the southwest, while some of the facade on the east end of the front fell into the building interior toward the north. A wood awning along the entire width of the south end was attached to the brick wall exterior by steel rods. Due to the collapse of the building from the fire, it was not possible to determine the presence of other fire protection equipment, including portable fire extinguishers. The City of Teague previously initiated code enforcement actions on the facility dealing with abandoned autos, rubbish, and general building condition.

Diagram 1


40’
34’
N
Car
Car Parts and Storage
Car
Paint Booth
Car
Car
Car
Car Parts and Storage
Barrels of Oil, Solvents,
Mixed Liquids
Car
140’
Electric Service
Apartment
Car
Upholstery Fabrics
and Various Storage
Car
Showroom with Storage
and Office
Car Port
AWNING

The construction type and condition of the building is shown in this 2003 photograph provided by the Freestone County Appraisal District.

Diagram 2


MAIN ST.
F.H.
Incident FFF 08-02
Address: 509 Elm Street, Teague, Freestone County, Texas
NOT TO SCALE
ALL DIMENSIONS AND
DISTANCES ARE APPROXIMATE
North
330'-0"
Alley
20'-0"
40'-0"
34'-0"
Prop. line
REPAIR
GARAGE
PAINT
BOOTH
40'-0"
140'-0"
E91
S.
5TH
S.
6TH
30' x 50'
4 bay shop
2 7/8"
FORMER
SHOWROOM
CARPORT
Prop. line
F.H.
F.H.
Chief
Knight
Hose line
ELM
ST.
Medic 2
E92

Origin and Cause Investigation

The origin and cause investigation began on July 6, 2008, and was led by State Fire Marshal's Office (SFMO) Investigator Edward Cheever. Documentation of the fire scene included measurements and photographs of the structure including the location of the victim, responding apparatus, equipment, hose lines, and the building contents.

The origin and cause examination of the scene was conducted using a systematic approach identifying the least and most damaged areas. Debris was examined and removed to reveal locations of furnishings, appliances, and electrical equipment.

The scene was photographed prior to beginning the scene excavation. During this time it was noted that there were several drums of unknown contents on the scene and some of these appeared to have ruptured. There were also numerous metal cans which appeared to be paint-style cans containing various unknown liquids. The electrical service entered on the west side of the building and was fed from the meter and service drop at the adjacent shop located on the west side of the involved structure. There were no signs that an explosion had occurred.

The structure was entirely involved in fire and the combustible building components were nearly consumed, resulting in a total collapse. The area where the most structural and fire damage occurred was the north half of the building from the wall between the apartment and parts storage area, and the north wall of the structure. There was less damage to the wood framing in the area around the showroom, apartment and materials storage area. This area was somewhat insulated from the fire early on by the ceiling and interior wall finish. This was also where the elevated master stream had been deployed.

An examination of the service entry revealed there were two meter boxes with associated weather heads. According to the owner neither of these had an active meter since he ran all of his service through the one meter at the adjacent shop on the west side of the involved structure. An examination of the distribution panel box on the inside of the wall revealed that the breakers were totally destroyed along with some of the service cables. One of the service cables was spliced by twisting the wires together but it was unknown if it was one of the energized conductors or the ground. The electrical distribution circuits throughout the structure were damaged so that some portions were missing and others had been moved or destroyed during the building collapse.

There were several large drums in the work area near the north end of the structure which had unknown contents. According to the owner some may have contained hydraulic oil, others may have contained oil or mixed contents, and numerous containers stored unknown contents. As the owner performed limited vehicle painting, there were numerous containers of paint and solvents. A large quantity of upholstery material of all types was stored in various areas of the building but was mostly concentrated in the showroom and material storage areas. The vehicles, associated parts, and the large quantities of ignitable liquids stored throughout the building added significantly to the fuel load and the rapid spread of the fire.

The area of origin was determined to be in the north end of the structure. This was based on the statements of witnesses who discovered the fire and the conclusions of the scene examination, and the determination is consistent with the extent of destruction of the structural components in this area. The mechanism of ignition could not be determined.

Fireground Operations and Tactics

Note: The following sequence of events was developed from times of events based on radio transmissions and firefighter witness statements. Those events with known times are identified. Events without known times are approximated in the sequence of events based on firefighter statements regarding their actions and observations. It should be noted that recorded times on the dispatchers log and time stamps on the audio recordings vary considerably (16-17 minutes). Photographs taken at the scene also assisted in establishing times and are used to approximate the actual times. Also it should be noted that radio traffic does not indicate that all units checked out at the scene upon arrival.

On July 5, 2008, at 5:47 PM, Freestone County Sheriff's Office (SO) dispatch received a 911 call reporting a large structure fire in Teague. Over the next 20 minutes dispatch received several more calls reporting the same fire.

At 5:49 PM, the Teague Volunteer Fire Department (TVFD) was dispatched to the reported structure fire at 509 Elm St., McDonald's Trim Shop in Teague, by the Freestone County SO dispatcher. Dispatcher reported all occupants were out of the building.

At the time of dispatch, Teague VFD was responding to an earlier reported brush fire.

TVFD acknowledged receipt of the call and Engine 91 responded from the Teague Fire Station with two personnel on board. Neither the time of response, nor the unit's arrival on the scene, were reported.

Tanker 96 radioed to dispatch that it was responding from the previous brush fire at 5:50 PM. Tanker 96 had three men on board, Firefighter Travis Martin, Lt. Bryan Teer and Chief Robert Knight. The Freestone dispatcher acknowledged the unit en route and repeated "everyone is out of the building." While en route, Tanker 96 asked dispatch to get Fairfield VFD en route as a mutual aid response. According to interviews, while en route to the fire, Chief Knight told his firefighters to drop him off at the front of the fire building on Elm Street and that he would do a "360 walk around" and size up the situation while they continued on to the station and changed to Engine 92. Chief Knight was in fact dropped off at the scene according to interviews with Martin and Teer, but the time is unknown. Due to the number of bystanders on the scene and activity at the front of the building, it is unclear if Chief Knight was able to conduct this walk around.

An Emergency Medical Service (EMS) unit, Medic 2, from Teague Hospital District (THD) staffed by William Flippin and Joseph Harris, left their station located at 802 N. 8th Street at 5:51 PM and responded to the fire. They proceeded down 6th Street and turned onto Elm Street, headed west and passed in front of the building on fire, stopping the ambulance west of the fire at the corner of 5th and Elm. Harris radioed a size up of "heavy smoke showing through the roof, several structures threatened at this time, the closest hydrant is at the corner of 6th and Elm Streets, flames are showing and the structure is fully involved" to dispatch and incoming units at 5:53 PM. Flippin and Harris are Texas Commission on Fire Protection certified firefighters.

Freestone SO dispatch acknowledged receipt of the size up, and then repeated it over the radio to all units. They also dispatched Donie and Dew Volunteer Fire Departments for mutual aid on the recommendation of a Dew firefighter, Dusty Cockrell, who was on the scene in a private vehicle.

Department photographer, Dennis Martin, responded from his home and began taking pictures before fire units arrived.

5:53 PM Photograph of the east side of the structure from the front southeast corner prior to fire unit arrival. (Photo courtesy of Dennis Martin, Teague VFD)

Engine 91, staffed by Firefighter William Steen and Firefighter Dickie Moore, turned south on 5th Street from the fire station and upon seeing the fire impinging on structures behind the fire structure, turned into a vacant lot on the west side of the fire building and pulled two, 1¾ inch lines to the alley to protect exposures. The building on fire was separated from several older two-story buildings in the downtown area by a narrow alley. The wind was from the south to the north, blowing the fire and heat to these buildings. Engine 91 began its operations using the 1000 gallons of tank water it carried.

5:56 PM This photo shows the extent of involvement of the west side of the structure. (Photo courtesy of Teague VFD)

5:57 PM This photo shows the condition of the fire at the north end of the building. (Photo courtesy of Teague VFD)

5:58 PM Engine 91 arrived and pulled lines for the west side and alley. The structure is fully involved and the fire has moved to the south end. Partial collapse has occurred. (Photo courtesy of Teague VFD)

Between 5:54 PM and 6:04 PM, after changing from Tanker 96 to Engine 92, Firefighter Travis Martin and Lt. Bryan Teer responded south on 5th Street and dropped a supply line at the hydrant at 5th and Elm. Lt. Teer got off the truck to make the connection and Firefighter Martin continued on and positioned Engine 92 on Elm Street in front of the involved building. Firefighter John Lester, a member of the Dew VFD, had seen the smoke and responded in a personally owned vehicle (POV) and assisted Lt. Teer in laying the supply line. He then went to Engine 92 and helped Chief Knight put on his Self Contained Breathing Apparatus (SCBA) and pull a 1¾ inch pre-connected line. They stretched the line to the east to get out the kinks and then pulled it back towards the fire. Chief Knight took the nozzle at the east end of the structure and proceeded to the front door of the building on the southwest corner. Photographs show Chief Knight putting water into the doorway with the hand line.

No radio transmission establishing who was in command was heard; however, it is assumed from interviews and the fact that he was the ranking officer on the scene that Chief Knight was serving as Incident Commander.

No Command Post was established and the Incident Commander was not stationary and had a limited view of the fire.

Firefighter Maya McClain arrived by POV at approximately 6:04 PM and reported to Chief Knight. She was in full PPE without SCBA. Chief Knight was in full PPE with SCBA and headed for the front door of the building. He kicked the front door in and he and Firefighter McClain pulled the door out of the way and Chief Knight extinguished the door with his hand line. Firefighter McClain advised the Chief that she did not believe the building was safe and that they should not enter. After several attempts to

convince him not to enter, the Chief told Firefighter McClain twice that when Fairfield VFD arrived for mutual aid, to advise them that he was “a single going in” the building. Firefighter McClain then advised Chief Knight to wait on her while she got a SCBA to go in with him. Firefighter McClain went to Engine 92 to get a SCBA and was assisted by Firefighter Keith Misseldine, a member of the Dew VFD.

6:04 PM Chief Knight is at the SW doorway of the structure.
(Courtesy of Teague VFD)

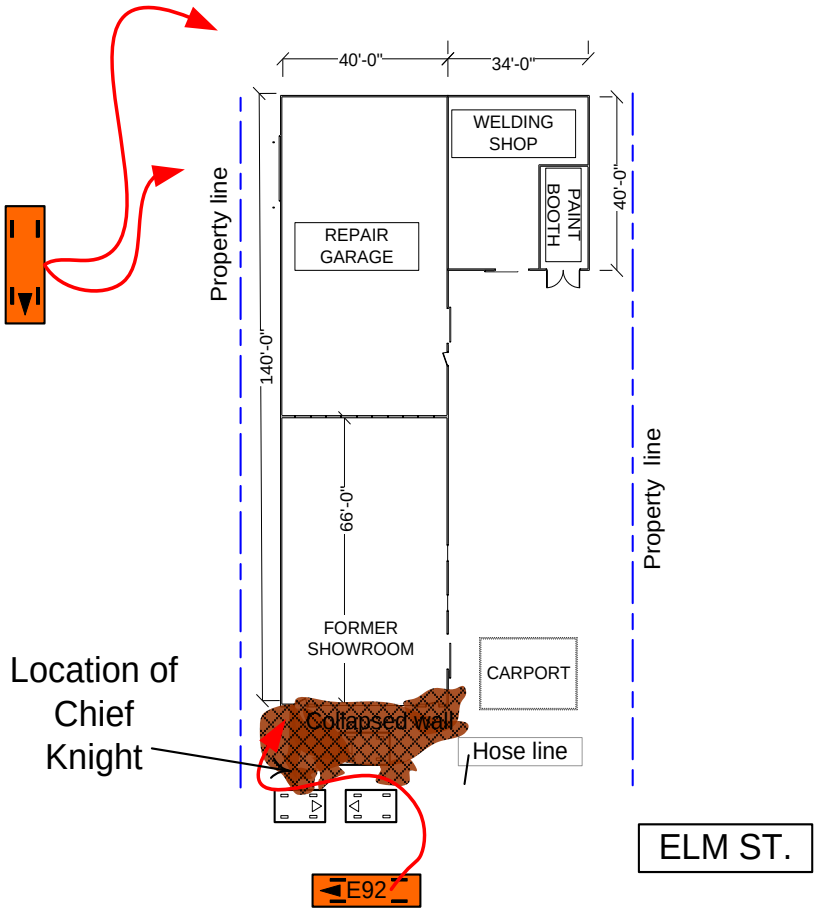
At approximately 6:04 after charging the supply line, Lt. Teer proceeded from the hydrant on 5th and Elm to Engine 92. As he was making his way, he “had a feeling” that the wall was not going to stand and went to Firefighter Martin and told him to “watch the wall” as he was afraid the wall could strike the truck if it fell. His intent was to then go to Chief Knight and convey the same message to him.

At 6:05:05 PM Fairfield Ladder 81 called Teague IC by radio. Teague IC acknowledged with “go ahead.” Ladder 81 asked for instructions for coming to the fire and received no answer.

At 6:05:49 PM Freestone dispatch received a 911 call from Debbie Cox stating that there had been an explosion in Teague and that more ambulances were needed. From interviews it is assumed that this explosion was in fact the collapse of the wall. The time of the wall collapse is therefore believed to be between the time of the radio traffic of Ladder 81 at 6:05:05 PM and the 911 call at 6:05:49 PM.

Just prior to the collapse, Lt. Teer and Firefighter Lester were located at Engine 92 and observed the wall move. Lester shouted to warn Chief Knight of the danger. Firefighter Lester stated in an interview that Chief Knight seemed to look up, turn and try to run directly away from the wall toward the street. Chief Knight was caught by the collapse and pinned by bricks and debris on the western end of the area in front of the fire building between the structure and a parked pickup truck.

Diagram 3



Chief Knight was wearing full PPE. A verbal “firefighter down” or “May Day” was shouted according to witness interviews but no radio transmission of firefighter down was noted. Interviews confirm the lack of radio transmission, as several firefighters on the back of the building did not become aware of a firefighter being injured for several minutes.

While no Rapid Intervention Team (RIT) had been established, several firefighters, the EMS crew from Teague Hospital District EMS and civilian bystanders immediately ran to the aid of the Chief and began moving him out of the debris. The bricks were hot and several of the rescuers received minor burns from handling the hot material.

Chief Knight was conscious when he was extricated and moved to a safe area west of the building. He was treated on the scene, and then transported to a local helipad and flown to East Texas Medical Center in Tyler.

This photo shows the site of the collapse at Chief Knight's location. (Courtesy of Teague VFD)

Chief Knight died at 9:38 PM on the evening of July 5, 2008, during surgery. Dr. Van Dusen of the Southeast Texas Forensic Center in Tyler, Texas, performed an autopsy on July 7, 2008. The cause of death is attributed to blunt force injuries to the chest, abdomen, and pelvis.

Photograph of the south end collapse zone

Overhead photograph from the south end of the site.

Personal Protective Equipment Evaluation

The Texas Commission on Fire Protection (TCFP) was contacted and requested to conduct an evaluation of the firefighter's personal protective equipment for performance. Volunteer Fire Departments in the State of Texas are not required to meet performance and compliance rules of the TCFP. Although findings from the medical examiner's report and the on-scene investigation indicate that the PPE had no contributing factor in the fatality, documentation of its condition was performed.

The protective equipment was evaluated by TCFP Compliance Officer Lamar Ford for compliance with Texas Administrative Code Title 37, Part 13, Chapters 435.1, *Protective Clothing* and 435.3, *Self-Contained Breathing Apparatus* and NFPA standards adopted by TCFP. Photographs taken during the examination are on file at the Texas Commission on Fire Protection. The TCFP reports are located in the reference materials of the SFMO investigation file.

The examination of the protective equipment took place at Teague Police Department on July 10, 2008. The gear was secured in a locked area maintained by Teague Police Chief Dennis Cox.

The helmet is a Paul Conway brand and was in several pieces, having been damaged during the collapse. The largest piece remaining of the shell with the shield attached had a brick and piece of metal flashing stuck to it. The label indicated the helmet met requirements of the National Fire Protection Association Standard 1971 – 2000 edition.

The bunker coat is a Morning Pride Pbi/Kevlar purchased in December 2006, meeting NFPA Standard 1971 – 2000 edition and had no remarkable damage.

The bunker pants also manufactured by Morning Pride are Pbi/Kevlar purchased in December 2006, meeting NFPA Standard 1971 - 2000 edition and had no remarkable damage other than being cut up the inseams by EMS personnel during rescue.

The gloves are Pro Tech brand, the boots are Crosstech, and the hood is PGI. All were certified to meet NFPA 1971 - 2000 edition and none had significant damage.

The Scott airpack is certified under NFPA Standard 1981 - 2002 edition and had received several large gouges and scrapes to the bottle. The metal frame was separated where the neck of the bottle is attached to the backpack.

The mask had no real damage other than a large amount of tar stuck to the front of the facepiece.

The last flow test records made available were dated February 2007, and the last available breathing air test was dated May, 2007.

Findings and Recommendations

These recommendations were formed through a review of the fatality report and timeline. Recommendations are based upon nationally recognized consensus standards and safety practices for the fire service. All fire department personnel should know and understand nationally recognized consensus standards, and all fire departments should create and maintain SOGs and SOPs to ensure effective, efficient, and safe firefighting operations.

Finding 1 – Members of the first arriving company committed to protecting exposures with an exterior attack; however, Chief Knight was inside the collapse zone.

Recommendation: With the limited number of personnel on the scene and the condition of the building at the time, a defensive attack, with all personnel clear from the collapse zone, which is defined as one and one-half times the height of the wall, would have been a more effective strategy for protecting exposures and conducting safe firefighting operations. No firefighters' lives should be put in jeopardy where no possibility of saving property and lives exists.

Reference:
NFPA 1561, Chapter 4, Section 4-1.2
The following risk management principles shall be utilized by the incident commander.
(a) Activities that present a significant risk to the safety of personnel shall be limited to situations where there is a potential to save endangered lives.
(b) Activities that are routinely employed to protect property shall be recognized as inherent risks to the safety of personnel, and actions shall be taken to reduce or avoid these risks.
(c) No risk to the safety of personnel shall be acceptable where there is no possibility to save lives or property.

International Fire Service Training Association, *Essentials of Fire Fighting and Fire Department Operations*, 5th edition, p. 154, Paragraph 3
… collapse zone (area extending horizontally from the base of the wall to one and one-half times the height of the wall)

Reference:
Texas Commission on Fire Protection Standards Manual, Chapter 435, Section 435.15
(b) The Standard operating procedure shall:
(1) specify an adequate number of personnel to safely conduct emergency scene operations;
(2) limit operations to those that can be safely performed by personnel at the scene;

Finding 2 – Firefighters used an accountability system by which each individual firefighter attached a tag to a cone showing that they were on the scene. Not all firefighters that were on the scene had reported in accordance with this system. Additionally, there was no system in place to track individual duties and activities on the scene.

Recommendation: ***Fire departments must use a system of accountability whereby the Incident Commander can easily and immediately determine that a firefighter is on the fire ground, as well as their location and task assignment at any given time.***

Reference:
NFPA 1561, Chapter 2, Section 2-6 Resource Accountability, Paragraphs 2-6.2 & 2-6.3
The Emergency Service Organization (ESO) shall adopt and routinely use a system to maintain accountability for all resources assigned to the incident. This system shall also provide a process for the rapid accounting of all personnel at the incident scene.

All supervisors shall maintain a constant awareness of the position and function of all personnel assigned to operate under their supervision. This awareness shall serve as the basic means of accountability that shall be required for operational safety.

Texas Commission on Fire Protection Standards Manual, Chapter 435, Section 435.13, Part b, Paragraphs 3 & 4, and Part d
(*b) The accountability system shall:*
(3) require that all fire protection personnel operating at an emergency incident actively participate in the personnel accountability system; and
(4) require that the incident commander be responsible for the overall personnel accountability system for the incident.
(d) the personnel accountability system shall meet the minimum standards required by the NFPA 1561, Standard on Fire Department Incident Management system.

Finding 3 – No Stationary Command Post was established and an Incident Commander had not been announced for the incident.

Recommendation: An easily visible, stationary command post should be continually staffed. Having an established command post gives incoming units a reporting position and lends itself to better organization.

Reference:
NFPA 1561, Chapter 3, Section 3-1.1
The incident management system shall clearly identify who is in overall command at the scene for the duration of the incident.

Fire Command, Second Edition, *The Essentials of Local IMS* by Alan V. Brunacini, Chapter One, The Command Post, Paragraphs 1 & 2
… the stand-command position for the incident commander is a stationary one; located outside the hazard zone … It should be situated in a standard and predictable location that affords the IC a good view of the scene and the surrounding area.

To a major extent, command effectiveness (or ineffectiveness) is directly connected to regular command positioning, and the entire command system revolving around the rapid establishment of a stationary, remote IC operating in a stand command post.

Finding 4 – While the department has a designated safety officer, in his absence no one was appointed to fill this position.

Recommendations: An Incident Safety Officer or Accountability Officer, separate and independent of the Incident Commander, should be established on scene early in the incident to assure that accountability is accomplished, a Rapid Intervention Crew is in place and hazard zones are monitored.

Also any member of the department should be empowered to shut down any operation which is deemed unsafe.

Reference:
NFPA 1561, Chapter 3, Section 3-2.2.2
The incident safety officer or assistant safety officer(s) shall have the authority to immediately correct situations that create an imminent hazard to personnel.

Everyone Goes Home, 16 Firefighter Life Safety Initiatives, number 4
All firefighters must be empowered to stop unsafe practices.

Finding 5 – No Rapid Intervention Team (Crew) was in place.

Recommendations: Fire departments must familiarize themselves with, and train on, the use of Rapid Intervention Crews (RIC). An RIC should be formed once a fire has progressed beyond the incipient stage, and when personnel work inside of an Immediate Danger to Life and Health (IDLH) atmosphere. Once an RIC is formed, they must actively monitor and report changes in fire conditions to the Incident Commander and not take on other duties. Unless victims are trapped, interior operations should not begin until a Rapid Intervention Crew has been assigned and is in place.

Reference:

NFPA 1710, Chapter 4, Section 5.2.4.2.2

The initial full alarm assignment shall provide for the following:

(8) Establishment of an IRIC that shall consist of a minimum of two properly equipped and trained individuals.

NFPA 1500 8.8.7

At least one dedicated RIC shall be standing by with equipment to provide for the rescue of members that are performing special operations or for members that are in positions that present an immediate danger of injury in the event of equipment failure or collapse.

Finding 6 – No pre-fire planning had been done on the involved building. This would have been very helpful due to the construction and the type of occupancy that was involved. Also there were no written Standard Operational Procedures established for a fire response to a commercial structure fire.

Recommendation: Fire departments should visit and preplan responses to commercial structures in their jurisdiction. This will better prepare them for the hazards which may be found in the event of a fire or other situation.

Standard Operational Procedures or Guidelines should be put in writing and every member of the department should be familiar with this document and its effect on his or her assignment on the scene.

Reference:

NFPA 1620, Chapter 4, Section 4.1.1 and 4.4.2

4.4.1 The pre-incident plan should be the foundation for the decision-making during an emergency situation and provide important data that will assist the incident commander in developing appropriate strategies and tactics for managing the incident.

4.4.2 The pre-incident plan should help responding personnel identify critical factors that will affect the ultimate outcome of the incident, including personnel safety.

Texas Commission on Fire Protection Standards Manual, Chapter 435, Section 435.15

(a) The fire department shall develop, maintain and use standard operating procedure for fire protection personnel operating at emergency incidents.

APPENDIX

TIME LINE

*Noted times are compiled from the radio logs and photographs and may be +/- 2 minutes. *

17:47:28 A 911 call was received at Freestone County Sherriff's Office (SO) in which caller states there is a fire at McDonald's Trim Shop on Elm St. in Teague.

17:48:54 Freestone County Sherriff's Office dispatches Teague Volunteer Fire Department (VFD) to a fire at McDonald's Trim Shop.

17:49:39 Freestone County SO advises Teague VFD that the fire is at 5th and Elm Streets; Teague Volunteer Fire Department acknowledges the transmission; Tanker 96 clears the grass fire en route to the fire station; dispatcher states "**everyone is out of the building**;" someone asks dispatch on the radio to get Fairfield en-route and Freestone SO pages out Fairfield VFD; Teague EMS Medic 2 advises dispatch they are en-route to the fire.

17:52:01 Teague Medic 2 advises Freestone County SO and Teague VFD that "you have heavy smoke showing through the roof, several structures threatened at this time and the closest hydrant is at the corner of 6th and Elm Streets, flames are showing and the structure is fully involved." Freestone County SO repeats this traffic and someone on the radio states received.

17:54:01 Unit 800 (Fairfield VFD Fire Chief Bill Brown) calls Teague VFD and asks if they need to bring their Quint (Ladder 81). Someone with Teague VFD (possibly Chief Knight) states he is not sure what is en route or what is needed at this time. 800 advises that due to the location of the fire in a commercial area he will bring their Quint.

17:57:11 Fairfield VFD ladder 81 (Quint) goes in route to Teague.

18:01:53 SO Dispatcher states to caller on the phone that the Fire Department is on the scene.

While no radio transmissions are available to indicate, it is believed that Engine 91 and possibly Engine 92 were on scene by this time.

18:02:22 Brush 97 is en route; Brush 97 calls on the radio to anyone at the station to bring the tanker.

18:03:47 Freestone County SO calls Teague EMS for a medical emergency across from 502 Spruce; Teague EMS responds on the radio stating they are evacuating and to call Fairfield EMS.

18:05:05 Ladder 81 called Teague IC. IC acknowledged with "Go Ahead." Ladder 81 asked for instructions for coming to fire and received no answer. *Interviews indicate that Chief Knight was acting as IC at this time.*

It is believed that the collapse of the front wall occurred at approximately this time (between 18:05:05 and 18:05:49).

18:05:24 Fairfield 800 attempts to contact Teague 900 with no response.

18:05:49 Debbie Cox calls 911 and states “it just exploded and we need more ambulances.”

18:05:53 Unit 206 calls Freestone County SO and states “we need a helicopter;” Brush 14 states they are en route; Medic 2 radios Freestone County SO, stating “I need help and a helicopter. I got a Firefighter down and I need a helicopter and gone.” Freestone SO dispatch at this time telephones Mexia FD for mutual aid.

18:06:54 John Lester of Dew VFD calls Freestone County 911 via the phone and advises to get either Air Med or PHI en-route, whichever is quicker, and that EMS is going to go to the old hospital.

18:07:57 Freestone County SO dispatcher calls Air Med to get them to respond to the old hospital in Teague.

18:09:18 Brush 97 radios they are on the scene.

18:10:12 Freestone County SO dispatcher calls PHI on the phone and requests they respond to Teague.

18:11:27 Medic 2 radios Freestone County SO to have the helicopter come to the old hospital helipad. Air Med 53 and PHI Medic 6 are en route. Air Med 53 advises they will be there in 5-6 minutes and asks what they have. Medic 2 advises they have a 40-year-old male with an open, broken left arm, he was involved in a structural collapse of a front of a building and that they are packaging him for transport and going to finish examining him.

18:16:21 Medic 2 radios Freestone County and advises they have left the scene en route to the landing zone approximately 2-3 minutes ago. Teague VFD Command (Lt. Teer) radios to incoming units that he has 2 structures on fire and several cars. He also states “he has supply lines and hand lines on the ground, he just needs manpower.”

18:18:14 PHI calls Freestone County SO on the phone and states they have a unit en route and would be there in approximately 12 minutes and also asks where the landing zone is located.

18:19:18 PHI Medic 6 and Air Med 53 talk on the radio to each other and Air Med 53 states they will be on the scene in 2 minutes.

18:20:56 Air Med 53 advises on the radio that he is “on a short final to land.”

18:22:42 Air Med 53 is on the ground.

18:23:35 Rescue 51 radios PHI Medic 6 to disregard.

18:33:02 Rescue 51 asks “all the units to clear the net for the helicopter to launch.”

18:34:00 Rescue 51 radios Freestone County and advises them to show Air Med off the ground and the landing zone is clear.

Notes:

- There is no audible radio traffic stating when Unit 900 (Chief Robert Knight) arrived on the scene nor any traffic stating when any fire engines arrived on the scene.
- Freestone County SO received numerous calls about the fire.
- Freestone County SO also received a medical emergency call and another fire call during this incident.
- There is no audible radio traffic pertaining to a May Day, only the telephone call about an explosion (presumably the collapse) and radio traffic requesting a helicopter to transport the victim.
- There is no audible radio traffic about a wall collapse until the medic unit was advising the air medic unit of what had transpired.

DOCUMENT LOG

Document Number	Source	Description
1	Freestone County Sheriff's Office	Incident Log and call records
2	Teague VFD	Incident Report
3	Fairfield VFD	Incident Report
4	Donie FD	Incident report
5	Dew VFD	Incident Report
6	Wortham VFD	Incident Report
7	Mexia FD	Incident Report
8	Kirvin VFD	Incident Report
9	SE Texas Forensic Center	Autopsy Report
10	State Fire Marshal's Office	Statement of Donald Nemons (witness)
11	SFMO	Statement of Dexter McDonald (witness)
12	SFMO	Statement of Ricky McDonald (witness/occupant)
13	SFMO	Statement of Cleophus McDonald (owner/witness)
14	SFMO	Statement of Dennis Martin (photographer/witness)
15	SFMO	Statement of Police Chief Dennis Cox
16	SFMO	Statement of Joseph Harris (1st on scene Medic)
17	SFMO	Statement of William Flippin (1st on scene Medic)
18	SFMO	Statement of Dickie Moore (E91)
19	SFMO	Statement of William Steen (E91)
20	SFMO	Statement of Maya McClain (E92)
21	SFMO	Statement of Bryan Teer (E92, IC after collapse)
22	SFMO	Statement of Travis Martin (E92)
23	SFMO	Statement of John Lester (E92)
24	SFMO	Statement of Shane Reeves (Brush 97)
25	SFMO	Statement of Melvin Mims (E91)
26	SFMO	Statement of Ty Scuggs (E91)
27	SFMO	Statement of Kieth Missildine (E92)
28	SFMO	Statement of Dusty Cockerell (E92)
29	SFMO	Statement of Gustavo Ramirez (witness)
30	SFMO	Statement of Lia Buchanan (witness)
31	SFMO	Statement of Martin Buchanan (witness)
32	SFMO	Statement of Trent Cox (witness)
33	SFMO	Statement of Bradley Cox (witness)
34	SFMO	Statement of Mateo Hernandez (witness)
35	Freestone Co. Appraisal Dist.	Property Information / Photos
36	Teague Code Enforcement	Enforcement Info / Violations Letter
37	City of Teague	Rate Info
38	Teague VFD	Dennis Martin photographs
39	Internet	Weather Information
40	SFMO	Origin and Cause Report