

STATE FIRE MARSHAL'S OFFICE

Firefighter Fatality Investigations



ANNUAL REPORT FY 2008

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Executive Summary

During the state of Texas fiscal year 2008, the State Fire Marshal's Office (SFMO) conducted two firefighter fatality incident investigations, each involving one fatality.

The following table provides information on each fiscal year 2008 Texas firefighter fatality incident.

Table 1: 2008 FFF Descriptions

| Firefighter Name | Date of Death | Incident Description |
|-----------------------------------|----------------------|---|
| Firefighter Joe Pat Jordan | July 4, 2008 | Heart attack while responding to vehicle accident |
| Fire Chief Robert Knight | July 5, 2008 | Structural collapse in commercial building fire |

Texas Firefighter Fatality Investigation Authority

The State Fire Marshal's Office (SFMO) is statutorily required to conduct an investigation if a firefighter dies in the line of duty in connection with a firefighting incident in the state of Texas, as prescribed by Texas Government Code Section 417.0075.

The statute requires the SFMO to investigate the circumstances surrounding firefighter deaths to determine factors that may have contributed to the death. These factors include:

- the cause and origin of the fire,
- the condition of the structure, and
- the suppression operation.

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. Additionally, the State Fire Marshal may appoint an Advisory Committee to provide Firefighter Fatality Investigation Program policy guidance. The following entities serve on the Firefighter Fatality Advisory Committee:

- State Firemen's & Fire Marshals' Association of Texas;
 - Texas State Association of Fire Fighters;
 - Texas Fire Marshal's Association;
 - Texas Fire Chiefs Association;
 - Texas Commission on Fire Protection;
 - Texas Forest Service;
 - Texas Engineering Extension Service, Emergency Services Training Institute, Texas A&M University System; and
 - Texas metropolitan fire departments (including Austin, Dallas, El Paso, Fort Worth, Houston, and San Antonio).
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FY 2008 Investigation Summaries

Firefighter Joe Pat Jordan

On July 4, 2008, Pickton-Pine Forest Volunteer Firefighter Joe Pat Jordan, age 71, died from myocardial infarction and ventricular fibrillation (heart attack).

Firefighter Jordan was responding to a dispatch call from Hopkins County Fire Department to a motor vehicle accident on July 2, 2008. Firefighter Jordan was a passenger in Rescue Truck 7 when he went into cardiac arrest. He was taken to Hopkins County Memorial Hospital and transferred to East Texas Medical Center where he later died.

Firefighter Jordan was a founding member of the Pickton-Pine Forest Volunteer Fire Department where he served as secretary/treasurer since its creation in 1976.

Fire Chief Robert Knight

On July 5, 2008, City of Teague Volunteer Fire Department (TVFD) Fire Chief Robert Leland 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 end of the building had a brick façade exterior that rose to the peak of the roof, 20 feet high. The fire rapidly traveled through the open roof structure.

Fire Chief Knight responded from a brush fire to the 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 veneer wall collapsed outward, pinning him as he was running away. Knight was immediately extricated by fellow firefighters and civilian witnesses and transported by the on-scene medic unit to a waiting helicopter. Knight was then transported 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. He was a 19 year veteran of the Teague Volunteer Fire Department and served as the Fire Chief for nine years.

FY 2008 Firefighter Fatalities

In FY 2008, one firefighter fatality investigated occurred during fire ground operations and the other resulted from medical conditions.

Some factors which assist in preventing fatalities associated with fire ground operations include:

- maintaining firefighter accountability,
- establishing safety zones,
- adhering to an accepted Incident Command System,
- appointing an Incident Safety Officer,
- maintaining effective fire ground communication,
- requiring use of Personal Protective Equipment on the fire ground,
- utilizing fire ground resources safely and effectively,
- identifying fire ground hazards associated with roof and floor truss systems,
- following accepted practices regarding location and perimeter designations,
- developing Standard Operating Guidelines that require crews to perform a complete scene size-up before beginning operations,
- training on the use of Rapid Intervention Crews, and
- training on the proper techniques for vertical and horizontal ventilation.

Some factors which assist in preventing fatalities associated with medical conditions include:

- providing mandatory pre-placement and annual medical evaluations to all firefighters consistent with NFPA 1582,
- performing an annual physical performance (physical ability) evaluation, and
- ensuring that firefighters are cleared for duty by a physician.

Each published firefighter fatality report contains incident specific findings on factors contributing to the fatality and recommendations for future practices. These reports can be located at the SFMO's website, <http://www.tdi.state.tx.us/fire/fmloddiinvesti.html>.

National Firefighter Death Composite, 2007

The United States Fire Administration (USFA) released “Firefighter Fatalities in the United States in 2007” in June 2008. This report provides an in-depth analysis of 118 on-duty deaths that occurred in the United States during 2007. The report continues a series of annual studies by the USFA of on-duty firefighter fatalities in the United States.

The unique and specific objective of *Firefighter Fatalities in the United States* is to identify all on-duty firefighter fatalities that occurred in the United States and its protectorates, and to present in summary, narrative form the circumstances surrounding each occurrence. In addition to the 2007 overall findings, this study includes information on the hazards to firefighters presented by the lack of seatbelt use. In 2007, 27 firefighter fatalities resulted from vehicle-related incidents. In 19 of the 27 incidents where seatbelt status was known, 11 firefighters were confirmed as not wearing seatbelts at the time of the event.

The USFA is the single, public agency source of information for all on-duty firefighter fatalities in the United States each year, and this information can be located at their website, www.usfa.dhs.gov/fireservice/fatalities.

The following is the USFA’s overview of the 118 firefighters that died while on duty in 2007:

- 68 volunteer firefighters and 50 career firefighters died while on duty.
- There were 7 firefighter fatality incidents where 2 or more firefighters were killed, claiming a total of 21 firefighters' lives.
- 11 firefighters were killed during activities involving brush, grass, or wildland firefighting, the lowest in over a decade.
- Activities related to emergency incidents resulted in the deaths of 76 firefighters.
- 38 firefighters died while engaging in activities at the scene of a fire.
- 26 firefighters died while responding to or returning from emergency incidents.
- 11 firefighters died while they were engaged in training activities.
- 15 firefighters died after the conclusion of their on-duty activity.

- Heart attacks were the most frequent cause of death for 2007, with 52 firefighter deaths.

According to the USFA, 97 firefighters have died while on duty in 2008, as of November 5.

Strategies for Preventing Future Fatalities

Ongoing efforts to reduce firefighter fatalities include the following:

- Communicating “lessons learned” from firefighter fatality investigations through the publication of investigation reports, dissemination of information to the Firefighter Fatality Investigation Program Advisory Committee, and presentations at fire service conferences.
 - Upon release, firefighter fatality investigation reports are sent to the affected fire departments and placed on the agency’s Internet site for access by the fire service, media, and the public.
 - Since the inception of firefighter fatality investigation reporting in September 2001, there have been more than 146,982 individual report downloads.
- Participating in the Firefighter Safety Stand Down, sponsored by the International Association of Fire Chiefs and the International Association of Fire Fighters.
- Participating in the “Courage to be Safe” (CTBS) program which emphasizes the message “Everyone Goes Home.” Information on the CTBS program is available online at <http://www.everyonegoeshome.com>.
- Implementing or expanding existing fire prevention programs to assist in reducing fires.
- Participating in the National Fire Service Seat Belt Pledge, which encourages firefighters to wear seat belts when riding in a fire department vehicle. Information on the Seat Belt Pledge can be located online at <http://www.everyonegoeshome.com/seatbelts/>
- Exploring safer strategies and tactics for fighting fires in enclosed structures.

Statistics and Trends in Firefighter Fatality Investigations

The SFMO has investigated 30 firefighter fatalities since the program's inception in 2001, as directed by the 77th legislative session. All investigated findings fell into three categories: *Medical Conditions*, *Fire Ground Operations*, and *Motor Vehicle Incidents*.

Table 2: Number and Category of Finding

| Number of Firefighter Fatalities Investigated | Category |
|--|-------------------------|
| 44% (13) | Medical Conditions |
| 33% (10) | Fireground Operations |
| 23% (7) | Motor Vehicle Incidents |

Table 3: Number and percentage of fatalities for paid and volunteer fire departments

| <i>Paid</i> | <i>Volunteer/Combination</i> |
|--------------------|-------------------------------------|
| 40% (12) | 60% (18) |

Table 4: Fatalities Reported by Year

| <i>Fiscal Year</i> | <i>Number of Fatalities</i> | <i>Category</i> |
|---|------------------------------------|--|
| 2002 | 6 | All Categories |
| 2003 | 7 | All Categories |
| 2004 | 3 | Fireground Operations; Medical Conditions |
| 2005 | 6 | All Categories |
| 2006 | 3 | Motor Vehicle Incidents |
| 2007 | 3 | Fireground Operations |
| 2008 | 2 | Fireground Operations; Medical Conditions |
| Annual Firefighter Fatality Average = 4.29 | | |