

**LINE OF DUTY  
DEATH REPORT  
REPORT SLIDES**



**F2021-12**

**Volunteer Firefighter Dies after  
Becoming Lost during a  
Residential Structure Fire –  
Pennsylvania**



# Summary

- On Sunday, July 4, 2021, a 35-year-old volunteer firefighter (Engine 21-2) died after becoming lost and transmitting a Mayday in the attic of a single-family dwelling.
- Box 34162 was transmitted at 22:33 hours with a report of a roof on fire.
- Ladder 21, Engine 21, Engine 26, Ladder 26, Engine 25-1, and Ladder 28 were dispatched.
- Ladder 21 arrived at 22:40 hours and advised Dispatch they had a single-family dwelling, 2-story, Type V construction, with heavy black smoke from the roof.



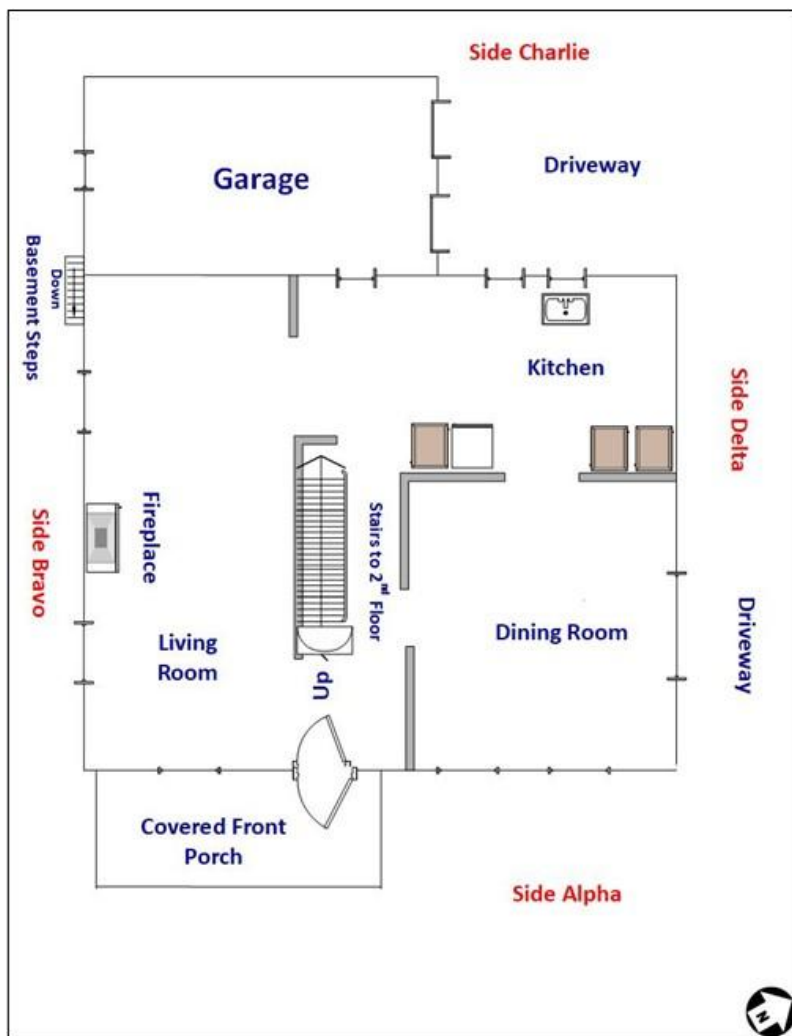
Fire venting along the roofline.  
(Courtesy of the fire department)



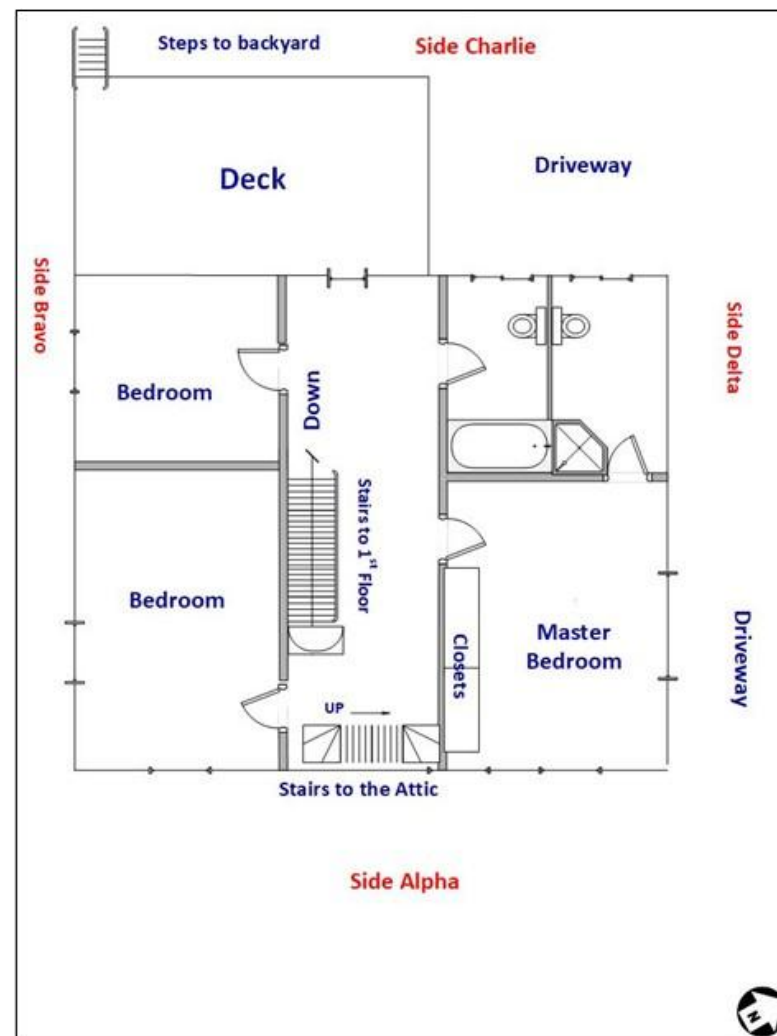
# Summary

- Small flames were also visible in the soffit of the Side Charlie/Side Delta corner. Deputy 21 was the officer in charge of Ladder 21 and established himself as the incident commander (IC).
- Ladder 21 deployed a 1¾-inch hoseline to the interior (PAR 3), making their way to the attic to locate the fire.
- Engine 21 responded with Chief 21 (chauffeur), lieutenant, and firefighter (Engine 21-2).
- Engine 21 arrived on-scene at 22:44 hours and laid a 5-inch supply line from a hydrant to Ladder 21.
- Engine 21-2 made the hydrant connection and charged the supply line.
- Chief 21 assumed IC at approximately 22:46 hours.

# LINE OF DUTY DEATH REPORT REPORT SLIDES



The floor plan of the 1st floor of the fire building.  
(Prepared by NIOSH)



The floor plan of the 2nd floor of the fire building.  
(Prepared by NIOSH)



# Summary

- Deputy 21 was assigned as Operations and remained outside.
- Ladder 21-1 radioed to Operations that they had heavy heat and smoke conditions in the attic but could not locate the fire.
- They could not find the fire because it was in the knee walls and voids.
- Engine 25-1 (PAR 6) arrived on-scene at 22:44 hours with two of their firefighters assigned to vent the roof via Ladder 21's aerial.
- Engine 21-2 and two firefighters from Ladder 26 entered the structure at approximately 22:55 hours.
- They were assigned to relieve Ladder 21's crew in the attic, who were exiting the building due to being low on air.



# Summary

- Rescue 22's crew was tasked with checking for extension.
- They split their crew to go to the 2nd and 3rd floors.
- Engine 26's crew stretched the line to the rear.
- They also stretched a second 1¾-inch hoseline to Side Charlie for exterior fire attack.
- At 22:45 hours, Ladder 28 arrived on-scene and laddered Side Delta to gain access to the roof and cut two ventilation holes in the roof.
- The roof became spongy, conditions were deteriorating, and Ladder 28 was removed from the roof.
- At approximately 23:00 hours, Engine 21-2 transmitted a Mayday.



# Summary

- At this time, a Rescue 22 crew was almost to the top of the attic steps.
- There was high heat and zero visibility but no fire in the finished section of the attic.
- There was fire showing in the unfinished section of the attic, where Rescue 22 found Engine 21-2.



The small bedroom in the attic facing Side Bravo.  
(Courtesy of the fire department)



# Summary

- Engine 21-2's end of service time indicator (EOSTI) sound facilitated Engine 21-2 to be located and out of the attic at 23:06 hours.
- Engine 21-2, who was conscious at the time, was transported to the local trauma center where he later died.
- The fire was extinguished at 00:05 hours.
- At 01:49 hours, all fire companies were clear of the scene.



# Contributing Factors

- Scene size-up and risk assessment
- Personnel accountability system
- Crew integrity
- Attic fire into knee walls and void spaces
- Mayday operations
- Rapid intervention crew/team
- Communicating critical incident benchmarks
- Incident command
- Communications



# Recommendations

- Fire departments should ensure initial and ongoing size-ups and risk assessments are conducted throughout the incident.
- Fire departments should ensure use of a functional personnel accountability system to identify the location and function of all personnel operating at an incident.
- Fire departments should ensure company officers and firefighters maintain crew integrity when operating in the hazard zone.
- Fire departments should ensure a rapid intervention team/crew is dedicated, assigned, and in place before interior firefighting operations begin and throughout an incident.
- Fire departments should ensure fire department operations include SOPs/SOGs for attic fires, including those that involve knee walls and void spaces.



# Recommendations

- Fire departments should ensure firefighters and fire officers are trained in Mayday operations.
- Fire departments should ensure critical incident benchmarks are communicated to the IC throughout the incident.
- Fire departments should ensure ICs immediately establish divisions/groups with a supervisor to communicate conditions and provide accountability.
- Public Safety Answering Points (PSAPs)/9-1-1 Communications Centers should ensure communication SOPs and equipment are in place for dispatchers to support fireground operations and the IC, including the ability to monitor and record all radio traffic during fireground operations.

# Contact Us

Fire Fighter Fatality Investigation and Prevention Program  
Surveillance and Field Investigations Branch

Division of Safety Research

NIOSH 1000 Frederick Lane, MS 1808

Morgantown, West Virginia 26505-2888

[FFFIPP Webpage](#)

[Download the full report](#)