

**LINE OF DUTY
DEATH REPORT
REPORT SLIDES**



F2023-12

Career Firefighter Dies After Falling
into a Light/Air Shaft during a Fire in a
Four-Story Mixed Occupancy
Structure – Illinois



Summary

- On November 13, 2023, a 39-year-old career firefighter died after falling down a light/air shaft while performing roof operations.
- The Type III constructed building was a four-story mixed occupancy built in 1894.
- The first floor was occupied by a full-service restaurant.
- Floors two through four contained 12 occupied apartments.
- The roof contained a mixture of exhaust vents, several large natural openings, two sky lights, and two light/air shafts measuring 9 ½ feet by 5 feet.



A view of the structure from side Alpha. (Photo courtesy of the Fire Marshal's Office)



Summary

- Additionally, the roof had several heating, ventilation, and air conditioning (HVAC) units, satellite dishes, metal beams in the center of the roof, numerous cables, wires, and various tripping hazards.
- At approximately 05:27 hours, a 9-1-1 call reporting a fire was received from a cleaning person employed by the restaurant.
- Approximately two minutes later, the dispatch was issued for a “Still” alarm Box 103607.
- The following companies were dispatched: Engine 55 (E55), Truck 44 (T44), Battalion Chief 12 (BC12), Engine 22 (E22), and Tower Ladder 10 (TL10).
- BC12 was the first arriving unit at 05:31:20 hours. BC12 was met by the caller, advising him the kitchen of the first-floor restaurant was on fire.
- Along with the 9-1-1 caller, BC12 proceeded to the rear/west side of the building where he observed smoke emanating from a rear door.



Summary

- At 05:31:48, E55 arrived, led out a cross-lay and gained access through a door on side Alpha.
- T44 also arrived at this same time, assisting with forcible entry on the side Alpha door that E55 utilized for entry into the structure.
- T44's crew was separated into two teams.
- The officer and firefighter assisted with forcible entry.
- The T44-3 firefighter (deceased firefighter) and another firefighter T44-2 raised the aerial ladder and proceeded to the roof to perform ventilation.
- A working fire was declared and dispatched at 05:33:10 hours.



Summary

- Between 05:38 and 05:51 hours, the working fire units arrived.
- Squad 1 (SQ1) sent two personnel to the roof to assist with ventilation operations.
- They accessed the roof from T44's aerial ladder.
- Once on the roof, they assisted the two members from T44 with ventilating the vertical openings on the roof which were emanating smoke.
- They removed the translucent corrugated panels from the south light/air shaft.



View of smoke over roof. (Photo courtesy of citizen app)



Summary

- The north side light/air shaft was ventilated by puncturing several holes in the translucent corrugated panels.
- There was a concern about the large open south light/airshaft so a firefighter from SQ1 (SQ1-1) removed his helmet and directed the helmet light on the shaft to alert firefighters operating nearby.
- Around this time, T44-2 left the roof to retrieve equipment to probe the roof openings.



View of the two light/air shafts with removal of panel (south shaft) and ventilation holes (north shaft). (Photo courtesy of Fire Marshal's Office)



Summary

- T44-3 was observed cutting a hole in the roof adjacent to the north light/air shaft.
- The hole he was cutting measured approximately 2 feet by 2 feet.
- He appeared to have finished cutting the hole in the roof and put the saw down.
- A firefighter from SQ1 discussed a plan to widen the hole and picked up the saw to begin cutting, expanding the ventilation hole.
- During that time, the other firefighter from SQ1 (SQ1-2) noticed T44-3 was on his knees and adjusting his self-contained breathing apparatus (SCBA) facepiece.
- SQ1-2 then returned to assisting his partner with cutting the hole.



Summary

- When T44-2 returned, he noticed that T44-3 was not there and asked the members of SQ1 if they knew where T44-3 was located.
- SQ1 personnel noted not seeing T44-3 after observing him adjusting his facepiece.
- They began searching the area along the sides of the roof.
- During the search, they heard a Personal Alert Safety System (PASS) device alarm coming from the opened light/air shaft and immediately declared a Mayday at 05:53:47 hours.



Summary

- It was determined that T44-3 fell 54 feet down the South open light/air shaft and was laying critically injured in a dry well below a platform adjacent to the first floor of the building.
- At 06:11:04 hours, rescue personnel begin extrication efforts.
- The officer of SQ1 directed his personnel to assemble equipment to execute a vertical rescue operation into the shaft from the roof.
- As the equipment was being retrieved, additional units were searching for other areas to quickly access T44-3.



View of area light/air shaft where T44-3 was trapped
(Photo courtesy of Fire Marshal's Office)



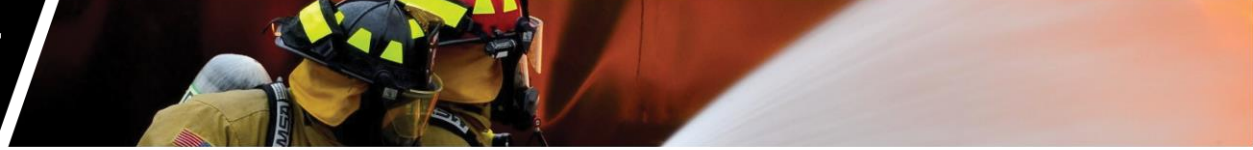
Summary

- The Rapid Intervention Team (RIT) found a window leading to the light/air shaft on the 2nd floor that was covered with plywood.
- They removed the covering, which enabled them to observe the injured firefighter who was conscious, critically injured, and unable to move.
- A firefighter (SQ1-3) was lowered from the 2nd floor window to the injured firefighter.
- At 06:23:06 hours, SQ1-3 made a rapid assessment of T44-3's injuries and prepared him for extrication.
- During the initial contact with the injured firefighter, personnel from Squad 2 (SQ2) gained access through a breach in the masonry wall on the first floor.



Summary

- The breach point opened to the platform approximately eight feet above the dry well containing the injured firefighter.
- T44-3 was removed from the dry well through this breach at 06:33:17 hours.
- He was treated and transported to a medical facility where he was pronounced deceased.
- The fire was contained to the restaurant's kitchen with slight extension to the apartment directly above and quickly extinguished.



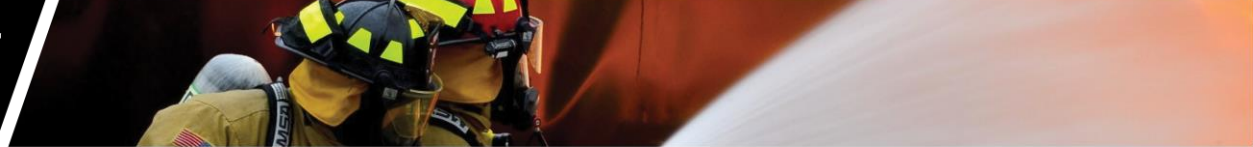
Contributing Factors

- Incident command division supervision
- Communications
- Crew integrity
- Situational awareness
- Poor visibility
- Sleep deprivation/disturbance



Recommendations

- Ensure incident command implements the NIMS, including establishing functional and geographical assignments at the beginning and maintaining them throughout operations.
- Ensure firefighters immediately notify the IC and all units operating on the fireground when the roof is ventilated and/or translucent corrugated roof panels are identified.
- Ensure personnel maintain crew integrity at all times throughout an incident.



Recommendations

- Support the development and maintenance of effective situational awareness during emergency incidents.
- Ensure that all firefighters, company officers, and chief officers are aware of and are trained to recognize the hazards of roof operations, including limited/low visibility operations.
- Ensure fire department management understands and communicates the effects of sleep deprivation and the potential impact on work performance and safety to firefighters before they participate in an incident response.

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