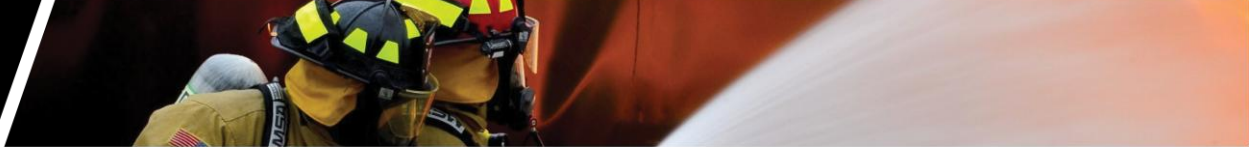


**LINE OF DUTY
DEATH REPORT
REPORT SLIDES**



F2023-07

Career Firefighter Dies in
Collapse involving Lightweight
Construction with Two separate
Maydays – South Carolina



Summary

- A 25-year-old career firefighter died on May 26, 2023, following a collapse of a multi-story lightweight construction apartment.
- At approximately 16:13 hours, the local 9-1-1 communications center dispatched a box alarm assignment to the reports of an apartment fire.
- Engine 6 (E6), Engine 13 (E13), Ladder 7 (L7), Ladder 175 (L175), Rescue 1 (R1), Battalion 2 (B2), and Battalion 1 (B1) were dispatched.

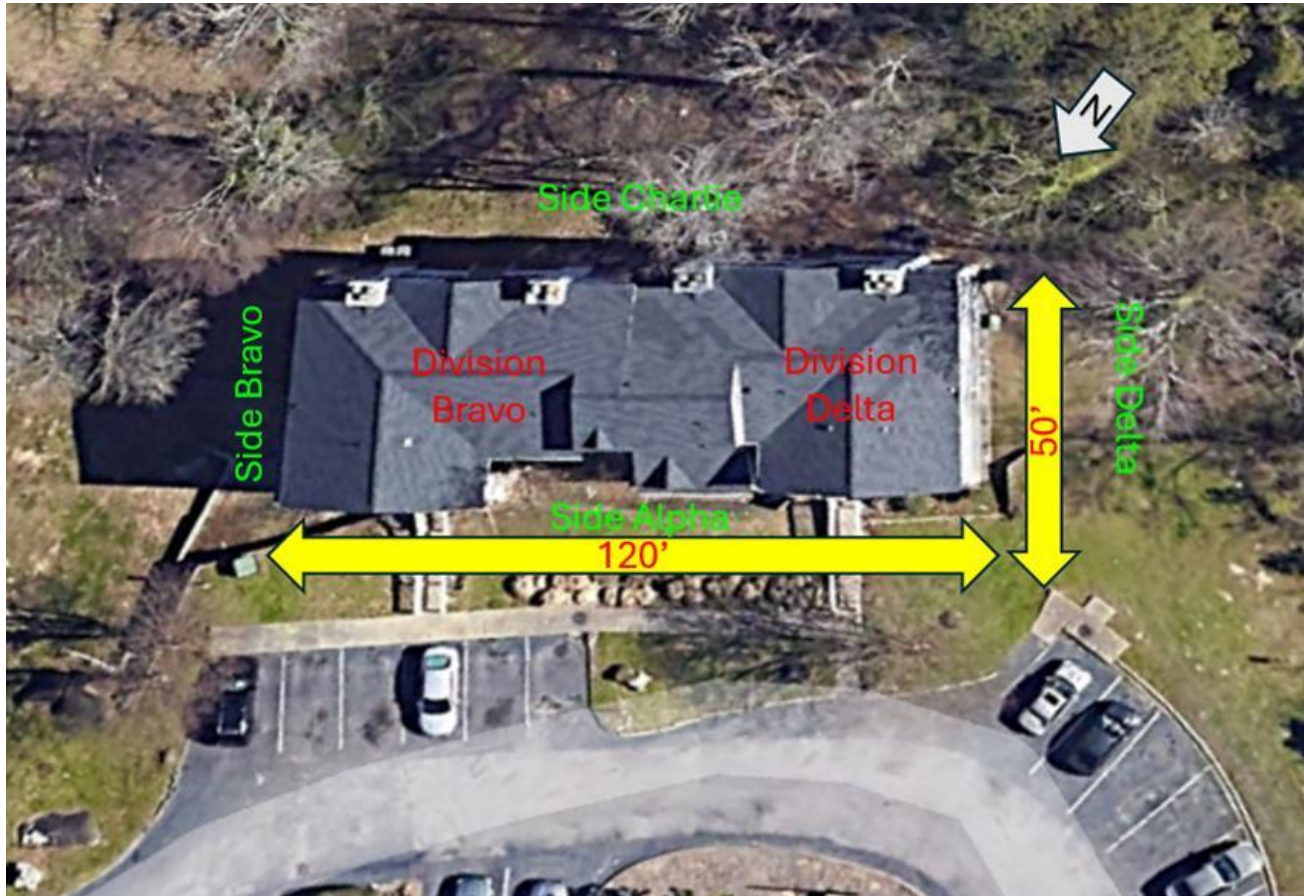
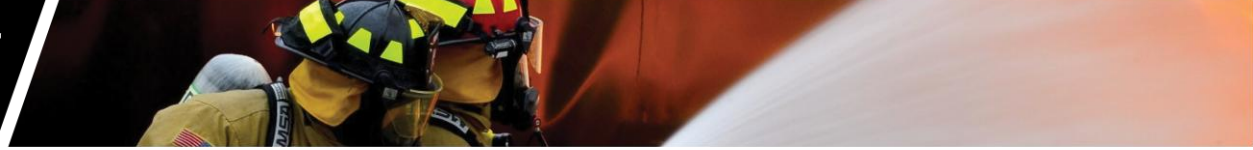


Side Alpha arrival conditions.
(Courtesy of the ATF)



Summary

- Engine 1 (E1) added themselves to the response.
- At 16:16 hours, a working fire dispatch was added to the box alarm consisting of Engine 2 (E2), Fire 6 (F6), and Rehab 1.
- Due to the smoke plume that was visible in the sky while apparatus were responding, L7 requested a second alarm assignment prior to arrival adding Engine 171 (E171, apparatus of the deceased), Engine 9 (E9), Rescue 2 (R2), and Battalion 5 (B5).
- L7 arrived on-scene at 16:19 hours and reported a working fire in an occupied, three-story apartment building with fire visible on two sides and assumed command.



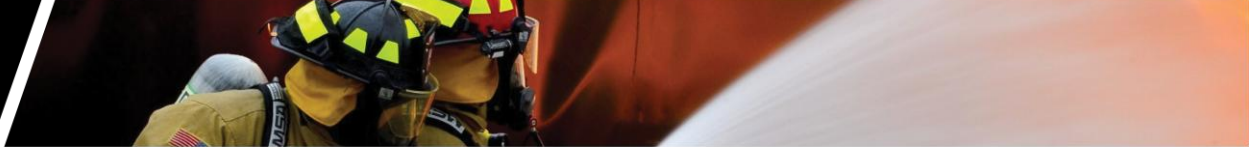
Aerial view of apartment building.
(Prepared by NIOSH)



Summary

- Ladder 9 (L9) added themselves to the incident after hearing L7's size up report.
- Fire was showing in the attic on Side Bravo with the Side Delta structure fully involved (see Photo 1).
- E6 arrived on-scene and began an offensive fire attack utilizing a 1¾ - inch attack line, attempted to establish a positive water supply, and prepared to supply the aerial ladder pipe to L7.
- B1 arrived on-scene and assigned himself as the division Alpha supervisor, passing command to B2 when they arrived on-scene at 16:20 hours.
- B2 served as the incident commander (IC) at the Side Alpha/Delta corner.

LINE OF DUTY DEATH REPORT REPORT SLIDES



First alarm apparatus positioning showing seat of the fire.
(Prepared by NIOSH)



Summary

- At 16:22 hours, property management advised that occupants were still trapped within the structure.
- E6 was able to make a successful rescue of a trapped occupant on the second floor directly across the open breezeway from the original fire apartment.
- A seized hydrant cap limited the amount of water available for fire attack for several minutes.
- As the first alarm fire companies arrived on scene, they worked to secure a secondary water supply and were assigned tasks by meeting face-to-face with the division Alpha supervisor at the front of the structure.
- E171 arrived on-scene at 16:26 hours and reported to the incident command post (ICP).



Summary

- E171 was assigned to stretch a 1¾-inch attack line to the second floor of division Delta, but E6 was unable to provide adequate pressure on the attack line.
- E171 assumed the original attack line from E6 as they exited the original fire apartment.
- At 16:44 hours, a Mayday was transmitted reporting the collapse of the third floor with firefighters from E1 and R1 trapped.
- Less than a minute later the fourth-floor loft bedroom fell through the third floor and into the second floor, trapping the E171 crew.



Division Bravo (left) and division Delta (right) separation. (Prepared by NIOSH)



Summary

- The rapid intervention crew (RIC) was deployed to assist the trapped firefighters and several other companies that had been working in the area assisted.
- Two firefighters from E171 were able to self-extricate and started working to locate and free the other two firefighters from E171.
- The third firefighter from E171 was pulled from the debris pile on the second floor, followed by the E1 and R1 firefighters from the third floor.
- After approximately 45 minutes, the fourth E171 firefighter was removed from the structure where he was transported to a local trauma center and pronounced deceased in the emergency room.



Contributing Factors

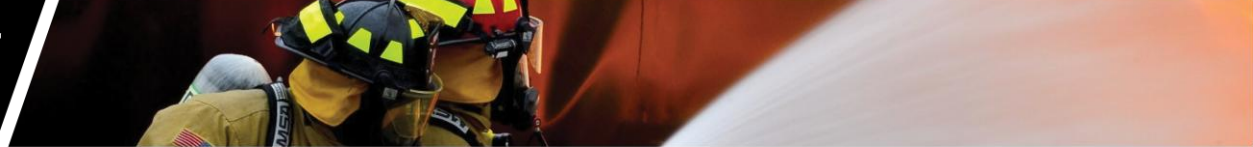
- Size-up and risk assessment
- Personnel accountability
- Task-level management and supervision
- Risk/benefit analysis that considers building construction
- Incident safety officer (ISO)
- Simultaneous interior and exterior operations
- Communication of changing conditions
- Mayday management
- Deployment of RICs
- Delayed fire department notification
- Pre-incident planning
- Delayed water supply



Recommendations

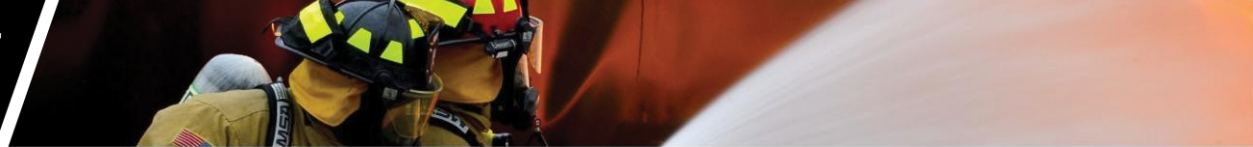
Fire departments should:

- Ensure initial and ongoing size-ups and risk assessments are conducted throughout the incident.
- Use a personnel accountability system to readily identify the location and function of all personnel operating at an incident.
- Ensure ICs immediately establish divisions/groups with a supervisor to communicate conditions and provide accountability.
- Train personnel on modern fire dynamics and develop fireground strategies based on a thorough risk/benefit analysis that accounts for building types, their characteristics, associated risks, and available on-scene resources.



Recommendations

- Utilize safety officers with training on structural collapse and incorporate these principles into fireground incident management.
- Ensure interior and exterior operations, such as water application, are not conflicting.
- Educate personnel on the use of radio communication processes for sharing critical information on a fire scene.
- Provide a Mayday tactical worksheet for ICs in the event of a Mayday.
- Develop and implement an SOP/SOG on the deployment and use of RICs.



Recommendations

- Educate the community to help change knowledge, attitudes, and behaviors that can reduce risks, injuries, and fires within the community.
- Develop a pre-incident plan for high-risk occupancies that is supported by national standards.
- Consider maintaining resources and protocols to address occupational exposure to potentially traumatic events for their members.

Governing municipalities (federal, state, regional/county, and local) should

- Ensure the water agency/authority responsible for municipal water supply shares information on hydrant testing and flow capabilities with the local fire departments.

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

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