In-Station Training

TM 26-11 High-Rise Fire

Author

Chief Ed Hartin

Purpose

Size matters, particularly when dealing with a high-rise building. Tall buildings present significant challenges during firefighting operations due to occupant egress, firefighter access, and logistics to name a few.

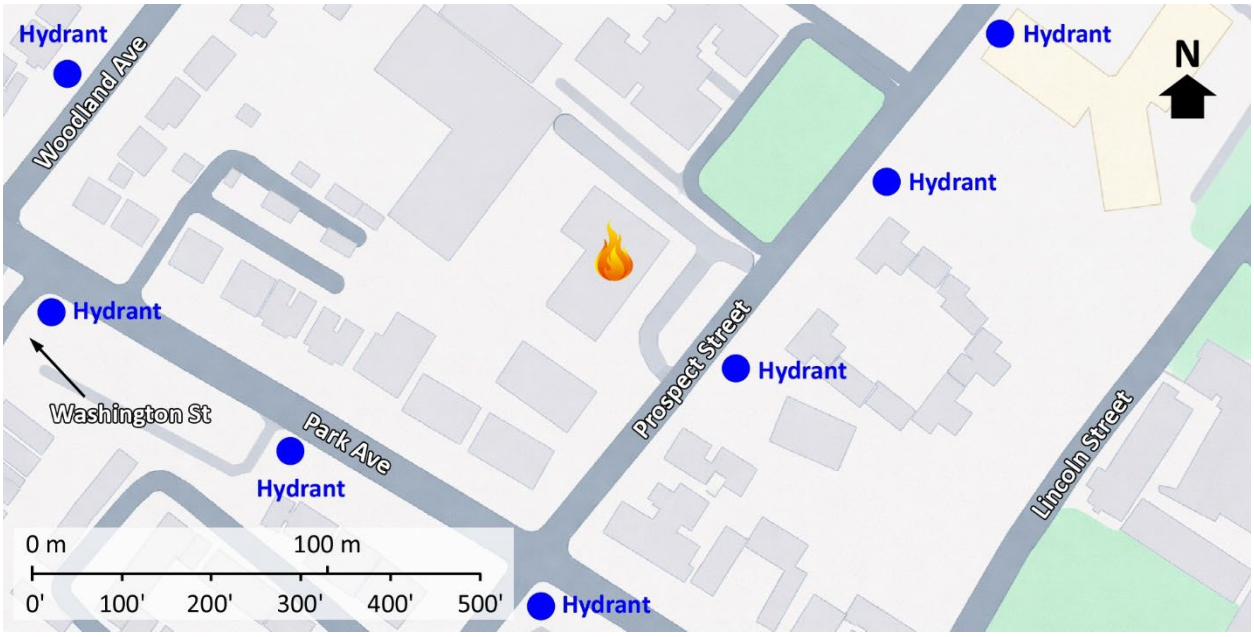
Learning Outcomes

Initial incident commanders perform an effective size-up, select an appropriate strategy, and implement tactics based on the strategic decision-making model.

Conducting the Drill

This incident involved a high-rise fire at Executive House, 175 Prospect Street in East Orange, New Jersey on Monday, February 16, 2026, at 21:35 (Jersey Shore Fire Response, 2026). Review the map and photos (Figures 1-8) to gain an understanding of the building and area involved.

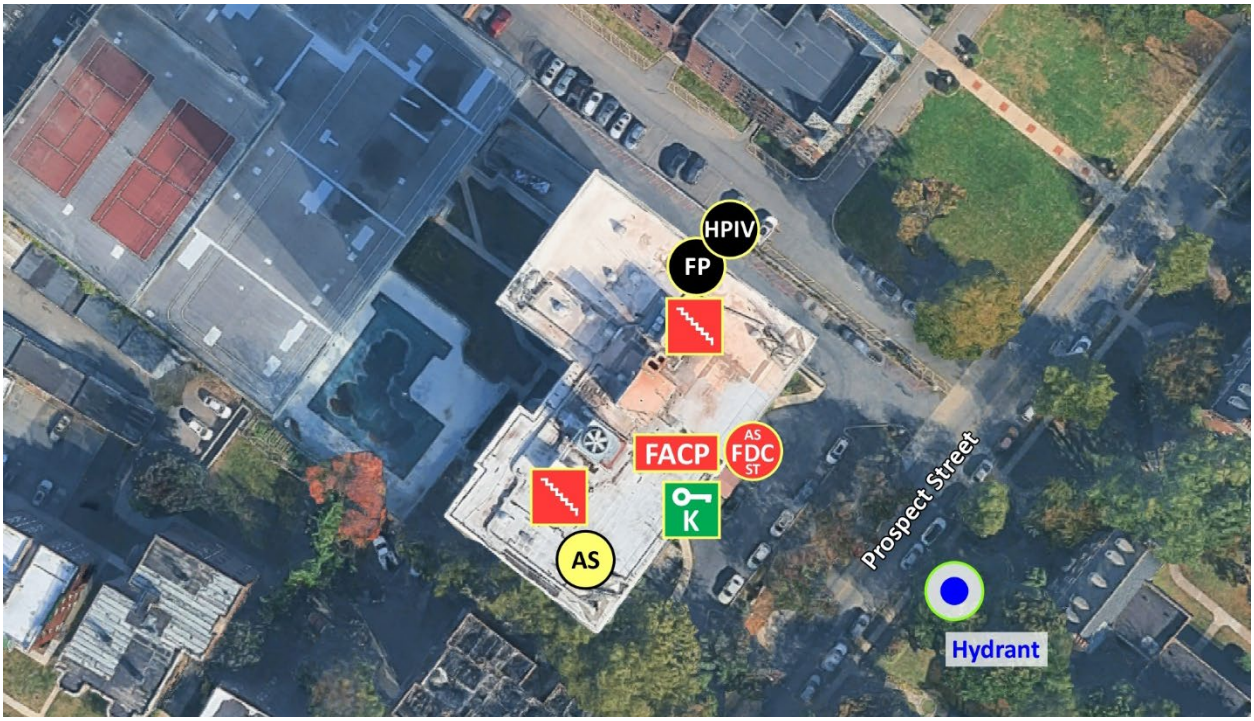
Figure 1. Map of the Incident Area



Note: Adapted from Google. (2026a). [Map, 175 Prospect Street, East Orange, NJ]. Map data ©2026 Google. https://bit.ly/4kWp1dq.

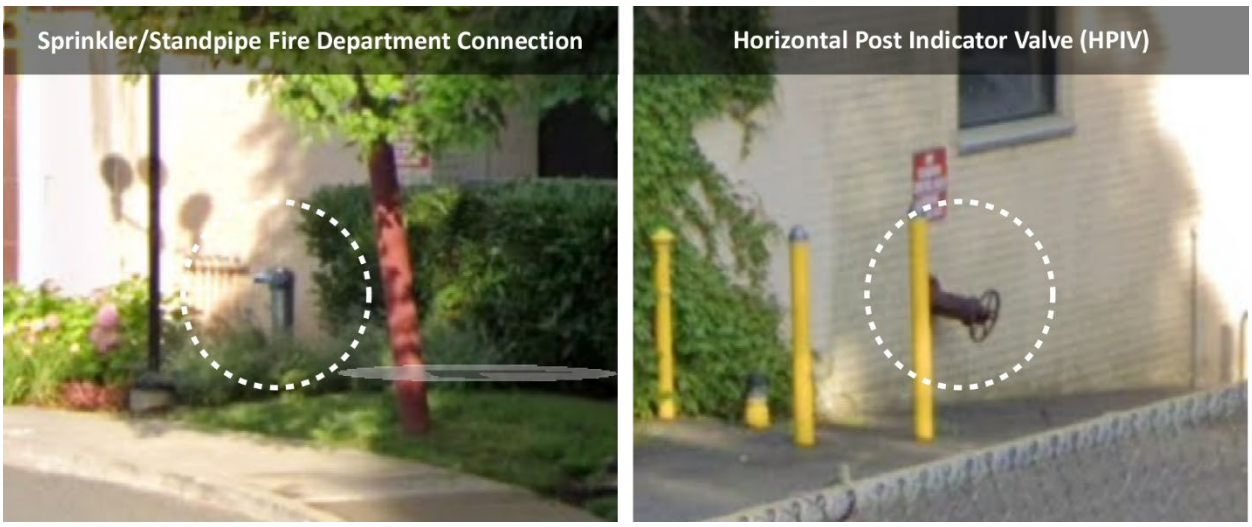
The closest hydrant is on Prospect Street directly across the street from the main fire occupancy. There are additional hydrants in the area as illustrated in Figure 1.

Figure 2. Aerial View



Note: Adapted from Google. (2026b). [Aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. https://bit.ly/40AvxgF.

Figure 3. Fire Department Connection (Side Alpha) and Sprinkler/Standpipe Control Valve (Side Delta)



Note: Adapted from Google. (2025a). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. https://bit.ly/3OL7OrB & https://bit.ly/4u79Rq1.

Figure 4. Approaching on Prospect Street at Park Avenue

Note: Adapted from Google. (2025b). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. https://bit.ly/4cSbUrF.

Figure 5. Alpha/Delta Corner

Note: Adapted from Google. (2025c). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. https://bit.ly/4ckTdNb.

Figure 6. Side Alpha-Main Entrance

Note: Adapted from Google. (2025d). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. https://bit.ly/4b1iB8y.

Figure 7. Alpha/Bravo Corner

Note: Adapted from Google. (2026c). [3d aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. https://bit.ly/4l0Xasw.

Figure 8. Charlie/Delta Corner

Note: Adapted from Google. (2026d). [3d aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. https://bit.ly/4l6UUAo.

175 Prospect Street is in East Orange's Prospect Street corridor, an urban residential area characterized by mid- to high-density development. The surrounding blocks include a mix of early-20th-century mid-rise and low rise apartment buildings, and smaller single- and two-family homes, many constructed between approximately 1900 and 1940 with additional mid-20th century infill. Census data for East Orange indicate a predominance of renter-occupied housing and relatively high residential density. The population reflects longstanding urban residency with ongoing turnover typical of rental markets. English is the predominant language, with a substantial minority of households speaking other languages at home. Fire and emergency medical service demand for this area is typical of a high density urban area (OpenAI, 2026).

The temperature is currently 31° F (-0.5° C) with wind from the south at 3 mph (4.8 kph). (Weather Underground, 2026). It is Monday, February 16th and you are dispatched to a high-rise fire at 175 Prospect Street along with four other engines, two ladder companies, medic unit, and two command officers at 21:35. The engines and ladder have four-person staffing[1]. **You are the officer of the first arriving engine company**.

Time starts now! Answer the first ten questions within the next 10 minutes. Save discussion for after answering these questions.

[1] If your first alarm deployment is different, use your own resource assignment and staffing.

While responding, you hear the other engines, ladder companies, medic unit, and command officers go enroute and dispatch provides an update that the initial call was for smoke and sparks from the roof and that they have now received an automatic alarm for smoke detector activation on Floors 23 and 24 and callers reporting smoke in the hallways on these floors.

1. What critical factors would you consider when dispatched and during response? What conversations would you have with your crew during response?

2. Based on the dispatch information and what you know about this occupancy and response area, what do anticipate finding on arrival?

Important! Answer questions three through ten in the form of communication you would have with your crew, dispatch, other companies, and the first arriving command officer. State the communications exactly as you would say them face-to-face or over the radio. Save explanation or discussion until after you have completed these questions.

You anticipate the ladder company will arrive immediately after you, followed by the second and third arriving engines, and a command officer. The remainder of the first alarm resources will arrive after the first arriving command officer. Watch the first 01:05 of the incident simulation video (Hartin, 2026) and examine Figure 9 illustrating conditions on arrival. Click the link above or scan the QR code to access the video.

Figure 9. Conditions on Arrival

Note: Adapted from Hartin, E. (2026) *10-minute training 26-11 incident simulation* [Fire Studio 7 video]. https://bit.ly/4ujgV2X.

3. State your initial radio report (IRR) exactly as you would transmit it to dispatch.

4. What specific actions would you take (as the company officer) immediately upon arrival and exiting the apparatus and what task orders would you give your crew?

Watch the Incident simulation video (Hartin, 2026) from 01:05 to 01:35 and examine Figure 10 illustrating conditions in the lobby. Click the link above or scan the QR code to access the video.

Figure 10. Conditions in the Lobby

Note: Adapted from Hartin, E. (2026) *10-minute training 26-11 incident simulation* [Fire Studio 7 video]. https://bit.ly/4ujgV2X.

The annunciator panel in the lobby indicates smoke detector activation on Floors 19-24. And dispatch advises that they have received calls from occupants reporting **smoke in the hallways on all floors from 19-24**. There is **no indication of sprinkler activation or water flow** from the combined sprinkler/standpipe system.

5. Would you change the action you are taking or modify the assignments given to your crew? If so, what task orders would you provide?

6. State your follow up report exactly as you would transmit it to dispatch.

7. Ladder 1 arrives and reports that they are Level 1 on Prospect Street at Park Avenue. State the tactical assignment you would give them exactly as you would transmit it.

8. Engine 2 arrives and reports that they are Level 1 on a hydrant on Prospect Street at Park Avenue. State the tactical assignment you would give them exactly as you would transmit it.

9. Engine 3 arrives and reports that they are Level 1 on the hydrant on Prospect Street northeast of the incident. State the tactical assignment you would give them exactly as you would transmit it.

If you chose to investigate conditions on the upper floors or assign another company or companies to do so, the first command officer arrives before the investigating company or companies reach Floor 19.

10. Based on anticipated effectiveness of your tactical operations, state your conditions, actions, and needs (CAN) report that you would provide to the first arriving command officer as part of command transfer to IC #2.

Reflect on your strategic decision-making and responses to questions one through ten before answering the next eight questions. Think about what cues, patterns, or anomalies (differences from conditions that you would anticipate) informed your answers.

11. What information most influenced your expectations?

12. Did anything in the incident post-arrival challenge your initial expectations?

13. What was the actual problem once you arrived?

14. What were your tactical priorities and what was getting in the way of achieving them?

15. During initial operations, was there an immediate threat of serious injury or death to you, your crew, or other companies?

16. Was it reasonable to believe that the Main Fire Occupancy was occupied?

17. Was there searchable space?

18. If you believed it was reasonable that there was searchable space, what could you do about it?

Upon arrival companies reported smoke and embers visible from the roof. Crews began ascending the building and encountered heavy smoke conditions from the 19th floor and above, initially unable to locate the seat of the fire.

19. Based on the incident conditions presented in this 10-Minute Training and encountered by companies arriving at this incident, what alternative scenarios could account for the conditions observed from the exterior and the smoke conditions present on Floors 19-24?

Watch the incident video (Jersey Shore Fire Response, 2026) from 00:48 to 02:48 which provides a view of incident conditions from an unstaffed aerial vehicle (UAV), before answering the next several questions.

Upon reaching the roof, crews located fire and smoke coming from a shaft area. A request was made to check the basement and garbage chute for extension, and lines were stretched to both the roof and basement. Basement crews located fire within the garbage chute area and knocked it down with a handline. Simultaneously, roof crews operated their line from the top down, extinguishing the remaining fire within the shaft. There were no reports of civilian or firefighter injuries.

20. In this incident what tactics would have been appropriate to address the potential risk of civilian smoke exposure in the public hallways?

21. If your company was tasked to check for extension on one or more of the upper floors in this incident, how would you go about this assignment?

22. In this incident what ventilation tactics could be used to remove smoke from Floors 19-24?

Additional Learning

Highrise standard operating guidelines (SOGs) vary considerably from agency to agency. However, there are several common tactical, support, and organizational assignments that are typically addressed in high-rise SOGs.

This additional learning is not intended to provide a comprehensive look at high-rise firefighting procedures or incident organization for high-rise firefighting operations. The purpose of this learning is to provide an opportunity to review your high-rise SOG (if you have one) and to consider the scope and complexity of firefighting operations in high-rise buildings (≥7 stories or as defined by your agency).

Key Tactical and Support Assignments: The order and priority of these assignments (other than command) may vary depending on incident conditions and related needs. In general, a working fire on an upper floor of a high-rise building will require most of these tactical and support assignments.

- Command
- Building Systems (fire alarm, fire pump, communications, built in ventilation control)
- Stairwells (identify attack and evacuation)
- Elevator Control and Assessment (identify if usable, e.g., no smoke or water in the elevator shaft)
- Water Supply (supply the standpipe/sprinkler fire department connection)
- Lobby Control (accountability for companies entering the building, and directing egress of occupants)
- On-Deck (on-deck companies, & fire floor division supervisor on the first smoke free floor below the fire floor)

- Fire Control and Primary Search on the Fire Floor (this requires multiple working and on-deck companies).
- Resource (multiple companies, beyond that required for on-deck and an equipment cache located below the on-deck floor).
- Ventilation (tactical anti-ventilation and ventilation and coordination with building systems).

Some fire and rescue agencies address the need for multiple tactical and support assignments by specifying company responsibilities based on order of arrival (e.g., first engine, first ladder, second engine, etc.) for the entire first alarm assignment. Other agencies use a hybrid model where the first several companies have generally defined responsibilities, but later arriving units are assigned based on the incident's critical factors and a general framework for high-rise firefighting operations.

High-Rise Incident Organization: As with tactical assignments, the incident organization identified in high-rise SOGs varies considerably with differences in language and reporting relationships.

Divisions are used for geographically based organizational assignments where multiple companies will be working in the same area. For example, for a fire on Floor 16 with on-deck companies located on Floor 14 (due to some smoke infiltration of Floor 15) both the companies working on Floor 16 and the on-deck companies on Floor 14 would be managed by the Division 16 supervisor. Following transfer of command to the first arriving command officer, this may be the nest organizational assignment given to a subsequently arriving command officer. Supervision of companies pre-positioned on a floor just below the on-deck companies and the fire floor division supervisor would also be managed by a division supervisor as this too is a geographic assignment (e.g., Resource Division or Division 13 with the tactical assignment to manage pre-positioned resources and equipment cache).

Groups are used for functional assignments where multiple companies are required such as building systems, lobby, and ventilation. Generally, when a company is given a tactical assignment in the hazard zone, they retain their company designation (e.g., if Ladder 4 is assigned responsibility for ventilation, they remain Ladder 4 and their designation is not changed to "Ventilation"). Functional assignments outside the hazard zone may be a bit different. For example, the officer of the company assigned to the building systems function may serve as the Systems Group supervisor until relieved by a command officer when additional companies are assigned to this function).

Where possible, it is preferable to assign command officers to division and group supervisor roles so that company officers can function as part of their company and provide for supervision and accountability for company members. However, when an entire company is assigned to a function such as building systems, the company officer may be able to fulfill the role of groups supervisor while effectively supervising the members of their crew.

In thinking about incident organization, it is essential to be flexible and avoid being overly dogmatic while remaining consistent with sound principles of effective command, control, and communications.

An interesting exercise to extend this additional learning is to consider the commonalities and differences between a high-rise fie and a fire in an extra-large, big box occupancy or a tunnel fire.

References

Google. (2025a). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. Retrieved March 3, 2026, from https://bit.ly/3OL7OrB & https://bit.ly/4u79Rq1.

Google. (2025b). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. Retrieved March 3, 2026, from https://bit.ly/4cSbUrF.

Google. (2025c). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. Retrieved March 3, 2026, from https://bit.ly/4ckTdNb.

Google. (2025d). [Street view 175 Prospect Street, East Orange, NJ]. ©2026 Google. Retrieved March 3, 2026, from https://bit.ly/4b1iB8y.

Google. (2026a). [Map, 175 Prospect Street, East Orange, NJ]. Map data ©2026 Google. Retrieved March 3, 2026, from https://bit.ly/4kWp1dq.

Google. (2026b). [Aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. Retrieved March 3, 2026, from https://bit.ly/40AvxgF.

Google. (2026c). [3d aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. Retrieved March 3, 2026, from https://bit.ly/4l0Xasw.

Google. (2026d). [3d aerial view 175 Prospect Street, East Orange, NJ]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2026. Retrieved March 3, 2026, from https://bit.ly/4l6UUAo.

Hartin, E. (2026) *10-minute training 26-11 high-rise fire incident simulation* [Fire Studio 7 video]. https://bit.ly/4ujgV2X.

Jersey Shore Fire Response. (2026). *Early Arrival at 2-Alarm 24-Story High-Rise Fire | East Orange, NJ*. Retrieved March 3, 2026, from https://bit.ly/3PbvXrg.

OpenAI. (2026). *ChatGPT 5.2* [Large language model]. Retrieved March 3, 2026, from https://chat.openai.com/chat.

Weather Underground (2025). *Newark NJ weather history* [historical weather February 16, 2026]. Retrieved March 3, 2026, from https://bit.ly/4kWGNNG.