In-Station Training

TM 24-14 Residential Fire

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Purpose

When operating in an offensive strategy, quick water on the fire is non-negotiable. Water applied into the fire compartment from the exterior or interior reduces heat release rate and improves interior conditions. However, unless an exterior stream can quickly wet the involved fuel surfaces, the fire will quickly regrow, making rapid transition to the interior essential (Regan, Bryant, Weinschenk, 2020).

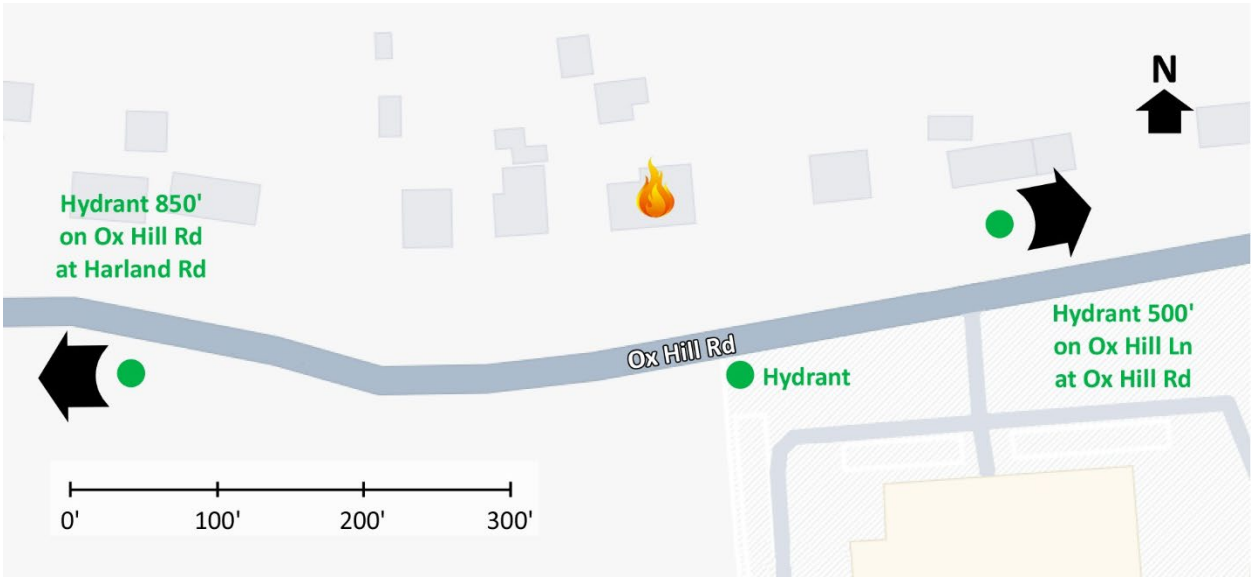
Learning Outcomes

Firefighters and officers 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 residential fire at 74 Ox Hill Road, Norwich, Connecticut on January 27, 2024, at 17:12 (NLC Fire Wire, 2024 & Drelich, 2024). Review the map and photos (Figures 1-5) to gain an understanding of the area and building involved.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2024a). [Map, 74 Ox Hill Road, Norwich, CT]. https://bit.ly/3IfXste.

Figure 2. Aerial View

Note: Adapted from Google. (2024b). [Aerial view 74 Ox Hill Road, Norwich, CT]. https://bit.ly/3IfuOs4.

The closest hydrant is across the street from the Main Fire Occupancy with additional hydants as show in Figure 1.

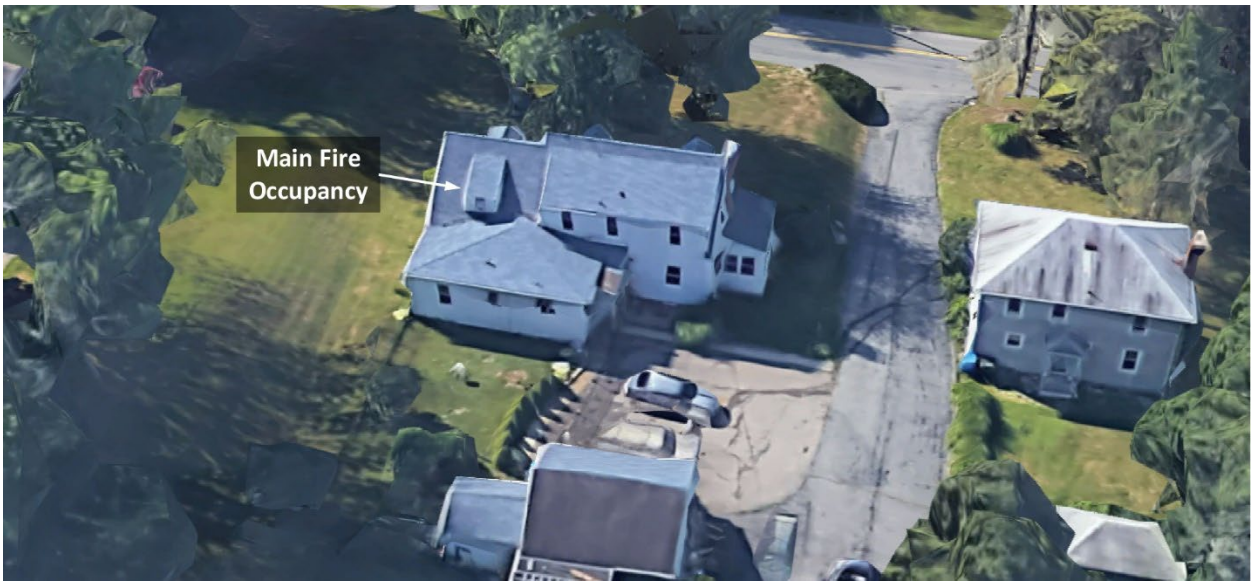
Figure 3. Alpha/Bravo Corner

Note: Adapted from Google. (2017a). [Street view, 74 Ox Hill Road, Norwich, CT]. https://bit.ly/49zhXgr.

Figure 4. Alpha/Delta Corner

Note: Adapted from Google. (2017b). [Street view, 74 Ox Hill Road, Norwich, CT]. https://bit.ly/49X1dQ8.

Figure 5. Side Charlie



Note: Adapted from Google. (2017c). [3d aerial view, 74 Ox Hill Road, Norwich, CT]. https://bit.ly/3UTnJF6.

The temperature is currently 40° F with no appreciable wind from the north (Weather Underground, 2024). You have been dispatched to 74 Ox Hill Road for a report of a residential fire at 17:12. You are the company officer or AIC of the first arriving engine and have your company's typical staffing.

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

Dispatch provides an update reporting multiple calls reporting flames from the second floor. You hear a command officer, three other engines, and an advanced life support ambulance with typical staffing for your agency go enroute. You will arrive from the west on Ox Hill Road. The second engine will arrive from the same direction six minutes after you. The command officer will arrive shortly after the second engine. All other units dispatched on the first alarm will arrive after the command officer.

Examine Figure 6 illustrating conditions on arrival.

Figure 6. Conditions on Arrival

Note: Adapted from NLC Fire Wire. (2024). *74 Ox Hill Road Taftville house fire* [video]. https://bit.ly/49MqUCO

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

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

You observed a moderate volume of smoke from Floor 2 on Side Bravo as you approached the incident. Watch the incident video (NLC Fire Wire, 2024) from 00:05 to 00:25 (the incident audio is not synchronized with the video). Occupants report that everyone evacuated the house before you arrived.

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

5. State your update report exactly as you would transmit it to dispatch.

6. Engine 2 arrives and reports that they are Level 1 on a hydrant at Ox Hill Road at Harland Road. State the tactical assignment you would give them exactly as you would transmit it.

7. Based on the 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.

Watch the incident video (NLC Fire Wire, 2024) from 00:25 to 00:46 before answering the next two questions.

8. Did you make a quick hit from the exterior or stretch through Side Alpha like the first arriving engine at this incident? What critical fireground factors influenced your decision?

9. If you chose to make a quick hit from the exterior, describe where you positioned your attack line and your method of water application. How would access and interior configuration of the room on Side Bravo have impacted water distribution when making a quick hit?

Watch the incident video (NLC Fire Wire, 2024) from 01:10 to 02:00 before answering the remaining two questions.

10. The incident commander chose to ventilate vertically, with roof cutting operations starting before effective water on the fire. What are the advantages and disadvantages of this ventilation tactic given the building (1 ½ story, wood frame, house) and fire conditions (appears to be a room and contents fire with possible extension to the attic and knee wall void spaces)?

11. If your crew was performing fire control and primary search on Floor 2 and chose to use hydraulic ventilation, how would you accomplish this task? Describe which window you would use as an exhaust and why. What factors would influence the effectiveness of this type of ventilation to clear smoke from the fire compartment and the remainder of Floor 2.

Additional Learning: Read about speed of transition and regrowth (pages 367-370) in *Analysis of the Coordination of Suppression and Ventilation in Single-Family Homes* (Regan, Bryant, & Weinschenk, 2020). Then watch *Hose Stream Mechanics Exterior Suppression* and *Hose Stream Mechanics Hydraulic Ventilation*. After watching these two videos discuss how exterior application of water and hydraulic ventilation could have been used effectively at the incident in this 10-Minute Training.

Now get out and stretch some hose and practice using an attack line for exterior suppression and hydraulic ventilation!

References

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