In-Station Training

TM 24-30a Residential Fire with Entrapment

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Purpose

A working fire with report of trapped occupants or occupants visibly in need of rescue can present conflicting priorities for the sequence of tactical operations (immediate rescue versus fire control to reduce or eliminate the threat to the occupants.

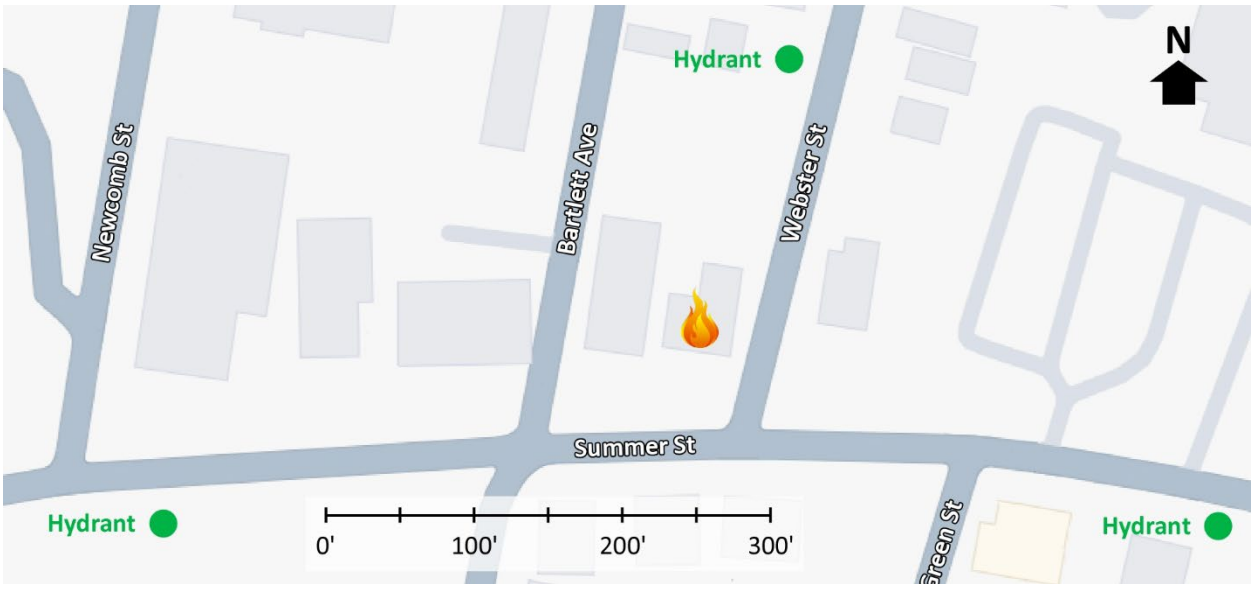
Learning Outcomes

Command officers perform effective ongoing 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 in a duplex at 52-54 Summer Street, Haverhill, Massachusetts on May 10, 2024, at 10:04 (Jarvi Productions, 2024, Haverhill Gazette, 2024; Coco, 2024; & Broadcastify, 2024). Review the map and photos (Figures 1-4) to gain an understanding of the area and building involved.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2023a). [Map, 52-54 Summer Street, Haverhill, MA]. https://bit.ly/3Vpke9m.

The closest hydrant is north of the incident location on Webster Street. Additional hydrants are east and west of the incident location as illustrated in Figure 1.

Figure 2. Aerial View

Note: Adapted from Google. (2023b). [Aerial view 52-54 Summer Street, Haverhill, MA]. https://bit.ly/3Vrquxv.

Figure 3. Alpha/Delta Corner from Summer Street

Note: Adapted from Google. (2022a). [Street view 52-54 Summer Street, Haverhill, MA]. https://bit.ly/4aMTjsD.

Figure 4. Charlie/Delta Corner from Webster Street

Note: Adapted from Google. (2022b). [Street view 52-54 Summer Street, Haverhill, MA]. https://bit.ly/4aJSUXJ.

You have been dispatched to 54 Summer Street for a residential fire a with report of fire on the third floor. You are responding to this incident as the first arriving command officer. Temperature is 55° F with wind from the northeast at 5 mph (Weather Underground, 2023). While responding you hear four engines, an advanced life support (ALS) ambulance, and a second command officer go enroute. The engines have staffing typical of your agency.

The first engine will arrive from the east on Summer Street. The second engine and ALS ambulance will arrive from the west on Summer Street three minutes after the first. Make a note of your resource and staffing assumptions prior to continuing with this 10-Minute Training. **You will arrive from the east on Summer after the second company**. Additional resources on the first alarm will arrive later in the incident.

1. What critical factors would you consider when dispatched and during response?

As you were responding Engine 1 provided the following initial radio report:

> *On-scene of a small three-story apartment with a working fire, Floor 3, smoke from two windows on Sides Charlie and Delta. stretching an attack line through Side Alpha to Floor 3 for fire control and primary search, offensive strategy, give me two additional engines, establishing Summer Command.*

Summer Command provides the following update report:

360 complete, two-story on Side Charlie, look out basement, Bravo 1 is a two-story apartment, report of an occupant trapped on Floor 3, continuing offensive, Engine 1 is accountability on Side Delta.

Engine 2 and Medic 2 report Level 1 on a hydrant at Summer and Newcomb Streets. Summer Command provides the following orders to Engine 2 and Medic 2.

Engine 2, position on Side Delta to supply Engine 1 and throw a ladder to Floor 3 for possible rescue of a trapped occupant.

Medic 2, go on-deck Side Delta.

Watch the first 00:35 of the incident video (Jarvi Productions., 2024) and examine Figure 8 illustrating conditions on your arrival.

Figure 5. Conditions on Arrival of Chief 1

Note: Adapted from Jarvi Productions. (2024). Haverhill Fire - Summer St - Structure Fire - 5/10/2024 [video]. Retrieved June 10, 2024, from https://bit.ly/3x3rPRB.

As you arrive, a law enforcement officer reports seeing an occupant who has exited a skylight and is trapped on the roof above the fire occupancy and advises Engine 2. Who provides the following radio message.

Command, Engine 2 with Priority Traffic (Command acknowledges)

Law enforcement reports an occupant trapped on the roof above the fire. Engine 2's ladder will not reach the roof. Need a company to access the roof from Side Charlie for rescue.

2. What actions will you take prior to contacting IC #1 (Engine 1) to begin command transfer?

3. State your command transfer communication after IC #1 acknowledges your radio contact (exactly as you would transmit it).

Following your confirmation of the location and assignment of Engine 1, Engine 2, and Medic 2 and request for a conditions, actions, and needs (CAN) report, IC #1 provides the following CAN:

That is correct, Engine 1 has stretched to Floor 2 and is gaining access to the unit on Floor 3. Need a company to access the roof for a trapped occupant and a company for primary search on the remainder of Floor 3.

4. State the communication you would have with IC #1 and dispatch to complete the command transfer (exactly as you would transmit it).

5. What action would you take based on the CAN from Engine 1 (IC #1). State the communications you would have with the operating companies exactly as you would transmit them.

Engine 3 arrives and reports that they are Level 1 on a hydrant on Summer Street east of the incident location.

6. State the tactical assignment that you will give Engine 3 exactly as you would transmit it.

Watch the incident video (Jarvi Productions., 2024) from 00:35 to 01:00. *Note that there is some tactical activity in the incident video not specified in this 10-Minute Training (e.g., accessing the roof with a tower ladder).*

7. Chief 2 arrives and advises that they are Level 1. State the assignment you will give Chief 2 exactly as you would transmit it.

Engine 4 arrives and reports that they are Level 1 on a hydrant on Summer Street at Newcomb Street.

8. State the tactical assignment that you will give Engine 4 exactly as you would transmit it.

Reflect on your strategic decision-making and responses to questions 1 through 8 before answering the remaining questions.

9. What was the problem?

10. What was getting in the way of achieving your tactical priorities?

11. Was there anything in this incident that could have hurt or killed you (right now)?

12. Was it reasonable to believe that the building was occupied?

13. Was there searchable space?

14. If you believed it was reasonable that the building was occupied and there was searchable space, what could you do about it?

Watch the remainder of the incident video (Jarvi Productions., 2024) before answering the remaining questions.

15. In this incident, a tower ladder was used to access the roof for rescue. This 10-Minute Training did not provide you with that option. What tactical assignment did you provide to rescue the occupant? How did you anticipate that the company given this assignment would access and rescue the occupant?

16. Given incident conditions, how could exterior application of water have been used more effectively? Consider fire on the exterior, likely points of extension from the exterior to the interior, position of operating companies, and potential for regrowth of fire that may have extended into Floor 1.

Additional Learning: This incident presented several challenges including the need to access a third-floor roof when portable ladders were limited to those carried on an engine company (typically a 24' or 28' extension ladder and a 14' roof ladder. Review the ladder complement carried on apparatus with your companies and visit locations within your response area that would present difficult access to upper floors. Discuss alternatives to access these areas and when the height and reach of an aerial ladder or platform and the larger complement of ground ladders carried on truck companies is necessary.

Table 1. Maximum Reach of Portable Ladders

Designated Length	Bedded Length	Maximum Reach	
14 foot (Roof)	14' 3"	13 feet	2nd Floor Window
16 foot (Roof)	16' 3"	15 feet	2nd Floor Window
24 foot (2 Section Extension)	14' 3"	23 feet	2nd Floor Roof
28 foot (2 Section Extension)	16' 3"	27 feet	3rd Floor Window
35 foot (3 Section Extension)	15' 3"	34 feet	3rd Floor Roof

Note: The maximum reach is achieved with the ladder at a 75° climbing angle. The maximum reach specified by target location is simply a guide as reach is impacted by the height of the foundation, slope of ground, and height of a story in the fire building.

References

Broadcastify. (2024). *Haverhill Fire 05/10/2024 09:52 AM <--> 10:22 AM EDT*. Retrieved June 2, 2024, from https://bit.ly/3WZX4aS.

Coco, T. (2024). *Haverhill firefighters rescue man from rooftop skylight and one other during morning blaze.* Retrieved June 2, 2024, from https://bit.ly/4ejmXsz.

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