



In-Station Training

TM 24-17 Vehicle Fire with Extension



Author

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Purpose

Fires that start outside and extend to the interior have the potential to present significant challenges to firefighters. In many cases, these fires start in the rear, out of view of the first arriving company. In other cases, such as the incident in this 10-Minute Training, it is readily apparent that an exterior fire has extended to the interior of the building. Research by UL FSRI has shown that when a fire starts on the outside, this should be the initial attack position (Kerber & Zevotek, 2014).

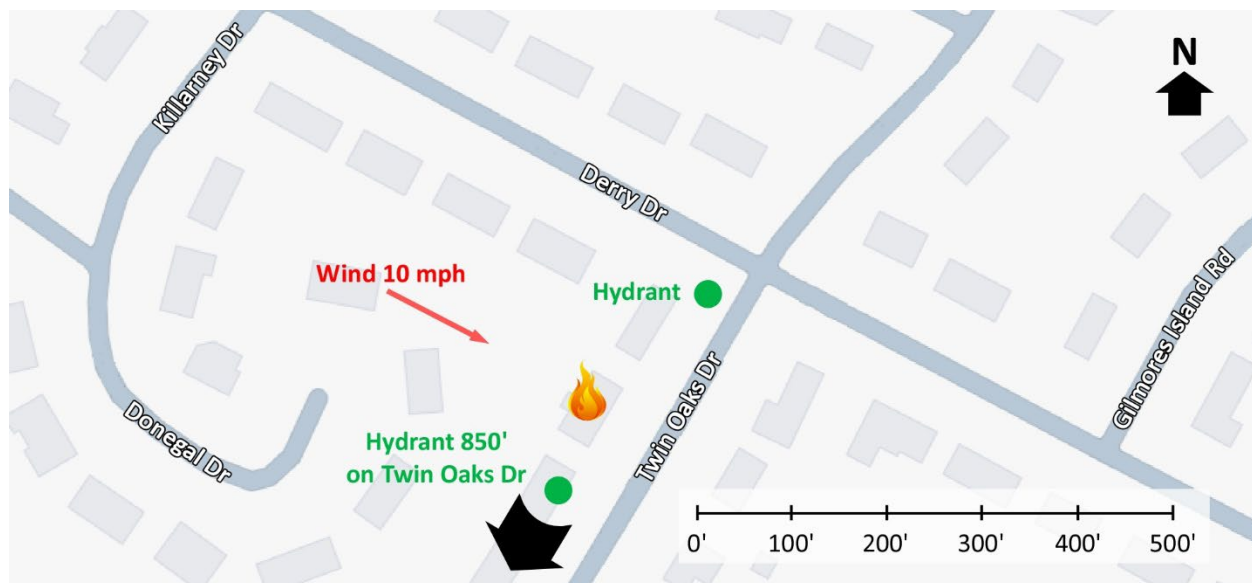
Learning Outcomes

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 vehicle fire with extension to a house at 332 Twin Oaks Drive, Toms River, New Jersey on February 14, 2024, at 04:20 (Demonracer2, 2024 & The Lakewood Scoop, 2024). Review the map and photos (Figures 1-7) to gain an understanding of the area and building involved.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2024a). [Map, 332 Twin Oaks Drive, Toms River, NJ].

<https://bit.ly/3J1EiaW>.

Figure 2. Aerial View



Note: Adapted from Google. (2024b). [Aerial view 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/3VQyXLj>.

The closest hydrant is on Seaman Ave just northwest of the incident location on Twinn Oaks Drive at Derry Drive with an additional hydrant 850' to the southwest on Twin Oaks Drive as shown in Figure 1.

Figure 3. Alpha/Bravo Corner



Note: Adapted from Google. (2022a). [Street view, 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/3vvEv35>.

Figure 4. Side Alpha



Note: Adapted from Google. (2022b). [Street view, 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/4aDdE3O>.

Figure 5. Alpha/Delta Corner



Note: Adapted from Google. (2022c). [Street view, 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/3J5Dm5q>.

Figure 6. Charlie Delta Corner (view from Derry Drive)



Note: Adapted from Google. (2022d). [Street view, 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/4cJtkEy>,

Figure 7. Side Charlie



Note: Adapted from Google. (2024c). [3d aerial view, 332 Twin Oaks Drive, Toms River, NJ].
<https://bit.ly/3vAlpYp>.

The temperature is currently 38° F with wind from the north northwest at 10 mph (Weather Underground, 2024). You have been dispatched to a report of a vehicle fire at 332 Twin Oaks Drive. 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 that the vehicle fire has extended to the house and the occupants are evacuating. 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 southwest on Twin Oaks Drive. 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.

Watch the incident video (Demonracer2, 2024) from 02:45 to 03:15 and examine Figure 7 illustrating conditions on arrival.

Figure 8. Conditions on Arrival



Note: Adapted from Demonracer2. (2024). Pre-arrival truck fire catches house on fire Toms River structure fire 2-14-24. Retrieved April 5, 2024, from <https://bit.ly/3vuf9CJ>.

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?

No smoke is visible from Floor 1, Side Charlie. However, smoke is pushing with moderate velocity from the gable vent on Side Bravo and the mushroom vents at the ridgeline of the roof. Before answering the next several questions, watch the [incident video](#) (Demonracer2, 2024) from 04:00 to 04:15 illustrating conditions as you complete your reconnaissance.

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 on Twin Oaks Drive southwest of the incident. 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.

Reflect on your strategic decision-making and responses to questions 1 through 7 before answering the next six questions.

8. What was the problem?
9. What was getting in the way of achieving your tactical priorities?
10. Was there anything in this incident that could have hurt or killed you (right now)?

11. Was it reasonable to believe that the building was occupied?
12. Was there searchable space?
13. If you believed it was reasonable that the building was occupied and there was searchable space, what could you do about it?

Watch the [incident video](#) (Deamonracer2, 2024) from 06:45 to 07:45 before answering the question.

14. The initial attack line appears to have made a quick hit on the exterior of the garage and eaves prior to making entry through the door on Side Alpha. Was this exterior application of water effective? Why or why not?
15. The fire originated in the vehicle on Side Alpha and extended into the attic and the garage. Which of these paths of fire extension is most significant? Why?
16. Did wind speed and direction influence your choice of attack position? Why or why not?
17. The companies operating at this incident attacked the attic fire from below. What alternative tactics may have allowed more rapid confinement of the fire to the area currently involved and knockdown of the attic fire? How would these tactics have impacted the fire control and property conservation tactical objectives?

Additional Learning: Watch [Attic Fire Considerations](#) (LACoFD, 2021). Consider which of the tactics discussed may have been most effective in the incident examined in this 10-Minute Training. Give some

thought to wind speed and direction as well as the location of the vehicle fire and how these factors might influence your tactical decisions.

Get out and practice application of water for an eave attack. This requires movement parallel to the eave of the roof, while maintaining water application parallel to the rafters or roof trusses (perpendicular to the eaves). You can practice this skill without a building or roof prop, simply work on maintaining continuous flow with the proper angle and stream direction while moving sideways.

Figure 9. Eave Attack



Note: Adapted from Underwriters Laboratories Fire Safety Research Institute (UL FSRI). (2015). *Tactical Tuesday - eave attack continuing with the tactics for water application, during the attic fires project* FSRI looked at the application of water on attic fires. <https://bit.ly/3U7rK8k>.

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