

In-Station Training

TM 25-13 Residential Fire



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Purpose

Quick water on the fire is essential in an offensive strategy and is compounded when faced with a rapidly developing fire and a significant threat to one or more exposures.

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 2517 W Broadway, Louisville, Kentucky on Wednesday, January 15, 2025, at 12:30 (FireRescueVideos, 2025 & Loukyfire, 2025).). Review the map and photos (Figures 1-6) to gain an understanding of the area and building involved.

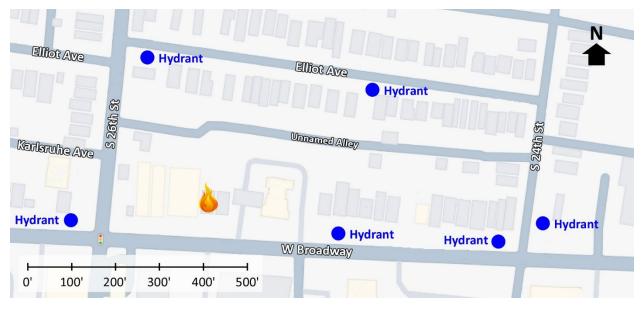


Figure 1. Map of the Incident Area

Note: Adapted from Google. (2025a). [Map, 2517 W Broadway, Louisville, KY]. https://bit.ly/40pksyF.



Figure 2. Aerial View

Note: Adapted from Google. (2025b). [Aerial view 2517 W Broadway, Louisville, KY]. <u>https://bit.ly/4g9AfaC</u>.

The closest hydrant is to the east on West Broadway. There are additional hydrants in the area as illustrated in Figure 1.

Figure 3. Alpha/Bravo Corner



Note: Adapted from Google. (2024a). [Street view 2517 W Broadway, Louisville, KY]. https://bit.ly/40sl9XV. Figure 4. Side Alpha



Note: Adapted from Google. (2024b). [Street view 2517 W Broadway, Louisville, KY]. <u>https://bit.ly/4jxzPxN</u>.

Figure 5. Alpha/Delta Corner



Note: Adapted from Google. (2024c). [Street view 2517 W Broadway, Louisville, KY]. <u>https://bit.ly/3PM59eo</u>.

Figure 6. Side Charlie



Note: Adapted from Google. (2019). [Street view 2517 W Broadway, Louisville, KY]. <u>https://bit.ly/4gafxr1</u>.

The temperature is currently 20° F with wind from the west northwest at 3 mph (Weather Underground, 2025). **You are the company officer of an engine company**. It is Wednesday, January 15th, and you have been dispatched along with two other engines, a ladder company, medic unit, and command officer at 12:30 to 2517 West Broadway for a residential fire. The engines and ladder have four-person staffing¹.



Time starts now! Answer the first eight questions within the next 10 minutes. Decide and put your answers in the form of communication you would have with your crew, other companies, and the first arriving command officer. Save discussion for after answering the first eight questions.

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

You hear a command officer, two other engines, a ladder company, and an advanced life support ambulance go en route. Your fire station is located a short distance from the reported address, and you will arrive first, approaching from the east on West Broadway. The ladder company will arrive from the west two minutes after you. The second engine will arrive from the west shortly after the ladder

¹ If your first alarm deployment is different, use your own resource assignment and staffing with the first and second arriving resources typical for your agency (e.g., two engines vs. engine and ladder).

company. The command officer will arrive shortly after the second engine. All other units dispatched on the first alarm will arrive after the command officer.

While responding, dispatch advises that the caller reports smoke from the house at the incident address. Watch the <u>incident video</u> (FireRescueVideos, 2025) from 00:22 to 00:37 and examine Figure 7, illustrating conditions on arrival

Figure 7. Conditions on Arrival



Note: Adapted from FireRescueVideos. (2025). *(Specialty video)-pre arrival house fire, Louisville KY 1/15/25*. <u>https://bit.ly/4gXW1zj</u>.

- 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 would you give your crew?

Conditions on Sides Bravo, Charlie, and Delta are consistent with those observed from the Alpha/Delta Corner. Flames from the window on Side Delta are impacting the eaves of the Delta 1 Exposure.

- 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. Ladder 1 advises that they are Level 1 on West Broadway and South 26th Street. State the tactical assignment you would give them exactly as you would transmit it.
- Engine 2 arrives and reports that they are Level 1 on a hydrant on West Broadway and South 26th Street. State the tactical assignment you would give them exactly as you would transmit it.
- 8. 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 one through eight before answering the next six questions. Give some thought to what cues, patterns, or anomalies (differences from conditions that you would anticipate) inform your answers.

- 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 Main Fire Occupancy 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 <u>incident video</u> (FireRescueVideos, 2025) from 00:38 to 03:38 before answering the next several questions.

In this incident, A firefighter from the first arriving engine (staffing level of four) hand stretched a supply line to the hydrant that was approximately 200 feet away, while the company officer and a firefighter stretched an attack line to Side Alpha. The apparatus operator deployed a second attack line on Side Alpha for operation by the second arriving company. The first line had water on the fire from the exterior approximately two minutes after arrival. The second line was placed into operation applying water onto the Delta 1 Exposure approximately two minutes and twenty seconds after arrival.

- 15. The first arriving engine took on multiple tasks during the first two minutes of this incident (water supply, two attack lines, etc.). How might this have impacted the time to effective water on the fire? What options could have increased efficiency and reduced the time to put the first line into operation?
- 16. When a fire hydrant is nearby, having the apparatus operator stretch the supply line and make hydrant connections can be an efficient way to establish water supply (the "on a hydrant" water supply tactic). Given that this apparatus had a 500-gallon water tank (KentuckyFireTrucks, 2025), is it likely that the apparatus operator could have established water supply after supplying the initial attack line(s)? How close does the hydrant have to be to use the "on a hydrant" water supply tactic (this varies from person to person, but what is your baseline distance that all apparatus operators can accomplish)?
- 17. Given the building, smoke, air track, heat and flame (B-SAHF) fire behavior indicators observed in the incident video, what were your assumptions regarding the location, extent of the fire? Companies operated at this incident for nearly three hours, what critical factors might have influenced extended time for overhaul?

Additional Learning: In an offensive strategy, quick water on the fire is essential and is dependent on staffing and the efficiency of task level actions required to deploy and place an attack line into operation. It's time to stretch some hose!

Use the configuration of building access and water supply encountered in this incident for hose deployment as illustrated in Figure 8 and determine the most efficient way to deploy the attack lines and establish water supply as a single company. Consider the following:

- Forward lay vs having the apparatus operator establish the water supply.
- Having the apparatus operator start the "on a hydrant" evolution either before or after supplying the attack line.
- Having the apparatus operator stretch the second line prior to supplying the attack line vs after supplying the attack line.

The answer to this question is dependent on multiple factors including staffing (most important), apparatus water tank capacity, hose size and loads, and the skill of the members involved.

Figure 8. Hose Deployment

Once you have determined a solid approach to this problem, consider how this changes if the closest hydrant is 200' beyond the fire.

References

- FireRescueVideos. (2025). (Specialty video)-pre arrival house fire, Louisville KY 1/15/25. Retrieved January 31, 2025, from https://bit.ly/4gXW1zj.
- Google. (2019). [Street view 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/4gafxr1.
- Google. (2024a). [Street view 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/40sl9XV.

- Google. (2024b). [Street view 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/4jxzPxN.
- Google. (2024c). [Street view 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/3PM59eo.
- Google. (2025a). [Map, 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/40pksyF.
- Google. (2025b). [Aerial view 2517 W Broadway, Louisville, KY]. Retrieved January 31, 2025, from https://bit.ly/4g9AfaC.
- KentuckyFireTrucks.com. (2025). [Louisville] Engine 17. Retrieved January 31, 2025, from <u>https://bit.ly/4jwJ2Xb</u>.
- Loukyfire. (2025). [Louisville Fire Department Instagram post]. Retrieved January 31, 2025, from https://bit.ly/4gaimbC.
- Weather Underground (2025). *Louisville KY weather history* [historical weather January 15, 2025]. Retrieved January 31, 2025, from <u>https://bit.ly/40AnDUm</u>.