



In-Station Training

TM 23-46a Residential Fire-Chief Arrives First



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Purpose

In many cases, an engine company is the first arriving resource at a structure fire, establishing command, establishing strategy, and initiating tactical operations. However, in some cases, a command officer arrives first. This 10-Minute Training provides an opportunity to exercise knowledge and skills arriving first as a command officer.

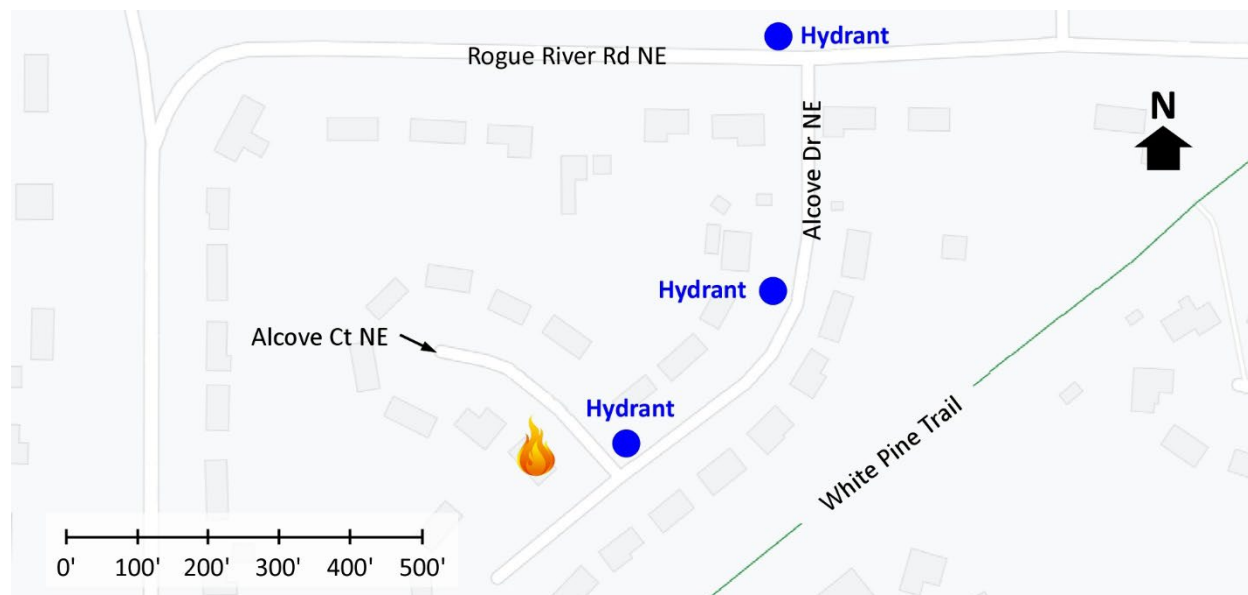
Learning Outcomes

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 at 1850 Alcove Court in Plainfield Township, Michigan on January 26, 2023, at 00:20 (Svoboda, 2023 & WGHN, 2023). 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

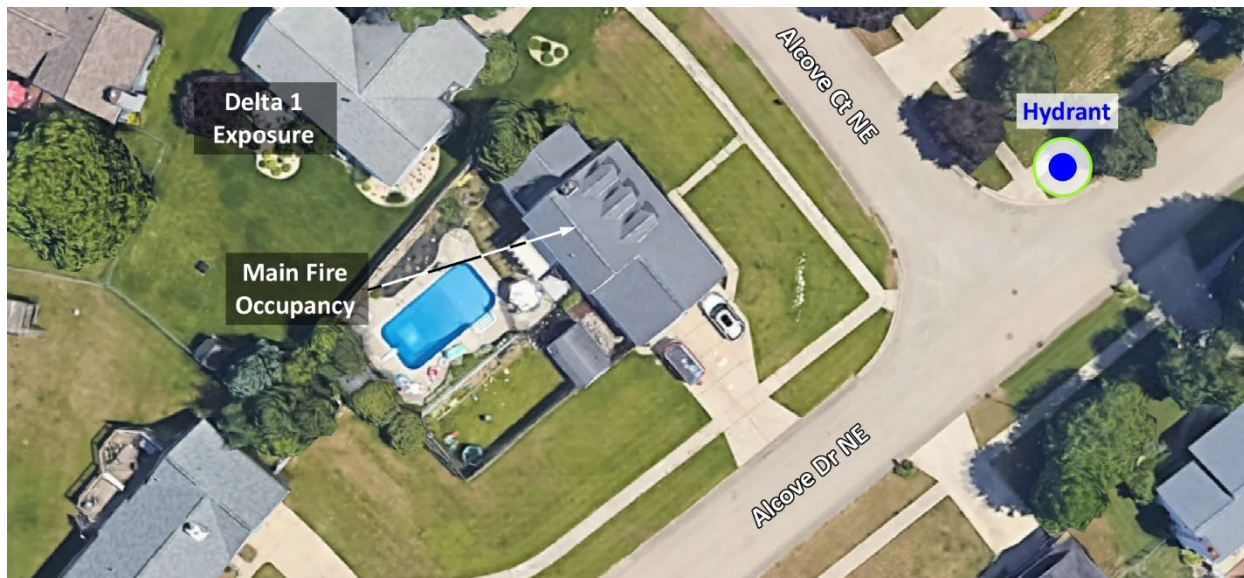


Note: Adapted from Google. (2023a). [Map, 1850 Alcove Court, Plainfield Township, MI].

<https://bit.ly/3rVS9dK>.

The closest hydrant is located at the intersection of Alcove Drive NE and Alcove Court NE. Additional hydrants are located on Alcove Driver NR and Rouge River Road NE as illustrated in Figure 1.

Figure 2. Aerial View



Note: Adapted from Google. (2023b). [Aerial view 1850 Alcove Court, Plainfield Township, MI].
<https://bit.ly/3ZVGqZm>.

Figure 3. Bravo/Charlie Corner



Note: Adapted from Google. (2022a). [Street view 1850 Alcove Court, Plainfield Township, MI].
<https://bit.ly/46LKrSn>.

Figure 4. Alpha/Bravo Corner



Note: Adapted from Google. (2022b). [Street view 1850 Alcove Court, Plainfield Township, MI].
<https://bit.ly/3PZ5cDq>.

Figure 5. Alpha/Delta Corner



Note: Adapted from Google. (2022c). [Street view 1850 Alcove Court, Plainfield Township, MI].
<https://bit.ly/3Filh28>.

You have been dispatched to 1850 Alcove Court for a residential fire at 00:20. You are responding to this incident as the first arriving command officer. Temperature is 30° F with wind from the northwest at 9 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.

While enroute, dispatch provides an update that a female occupant of the building is still inside attempting to locate her dog. You will arrive prior to any of the companies dispatched on the first alarm. The first engine will arrive from the northeast on Alcove Drive approximately two minutes after you. The second engine and ALS ambulance approximately four minutes after the first. Make a note of your resource and staffing assumptions prior to continuing with this 10-Minute Training. Additional resources on the first alarm will arrive later in the incident.

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

Watch the [incident video](#) (Svoboda, 2023) from 00:38 to 01:15 (there is other radio traffic in the background of the video that may relate to other incidents) and examine Figure 6.

Figure 6. Conditions on Arrival



Note: Adapted from Svoboda, K. (2023). 2023 0192 Structure Fire HD 720p. <https://bit.ly/3rXSv3L>

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

3. What specific actions would you take (as the first arriving command officer) immediately upon arrival?

Conditions on Side Charlie are consistent with those observed on approach and from Sides Alpha and Delta. No smoke is visible on Floor 1.

Watch the [incident video](#) (Svoboda, 2023) from 01:15 to 02:43

4. State your update report exactly as you would transmit it.
5. What assignment will you give Engine 1 when they arrive? State the tactical order exactly as you would transmit it.

Engine 2 arrives and reports that they are Level 1 on a hydrant on Alcove Drive.

6. State the tactical assignment you will give Engine 2 exactly as you would transmit it.
7. What tactical assignments would you anticipate giving Engines 3 and 4 (assignments would likely be influenced by conditions, actions, and needs reports from Engine 1 or Engine 2 prior to or as the remaining first alarm companies indicate that they are Level 1).

Watch the [incident video](#) (Svoboda, 2023) from 02:43 to 06:00.

8. Initial water application was initiated from the exterior using a master stream. Was this an effective tactic? Why or why not? What other tactics could have been used to make a quick hit from the exterior? Would any of these alternatives have been more effective for initial water application?

9. Based on the proximity of the hydrant, would you have had the apparatus operator of Engine 1 establish their own supply line (e.g., standard tactical play of “on a hydrant”)? If so, what would be your expectations regarding sequence of water supply task activity by the apparatus operator?

10. If the first arriving company did not have sufficient staffing to initiate interior operations and the second arriving engine would not arrive for an extended time, how could the first arriving engine maximize the effectiveness of exterior operations for fire control? State the tactical assignment you would give them exactly as you would transmit it.

Watch the [incident video](#) (Svoboda, 2023) from 06:00 to the end. This video is in fast forward mode from 06:08 to the end but provides a view of ongoing incident operations.

11. After the arrival of additional resources, companies returned to use of the master stream and deployed an attack line on the Alpha/Delta corner for exterior water application prior to transitioning to the interior. Were these tactics effective? Why or why not?

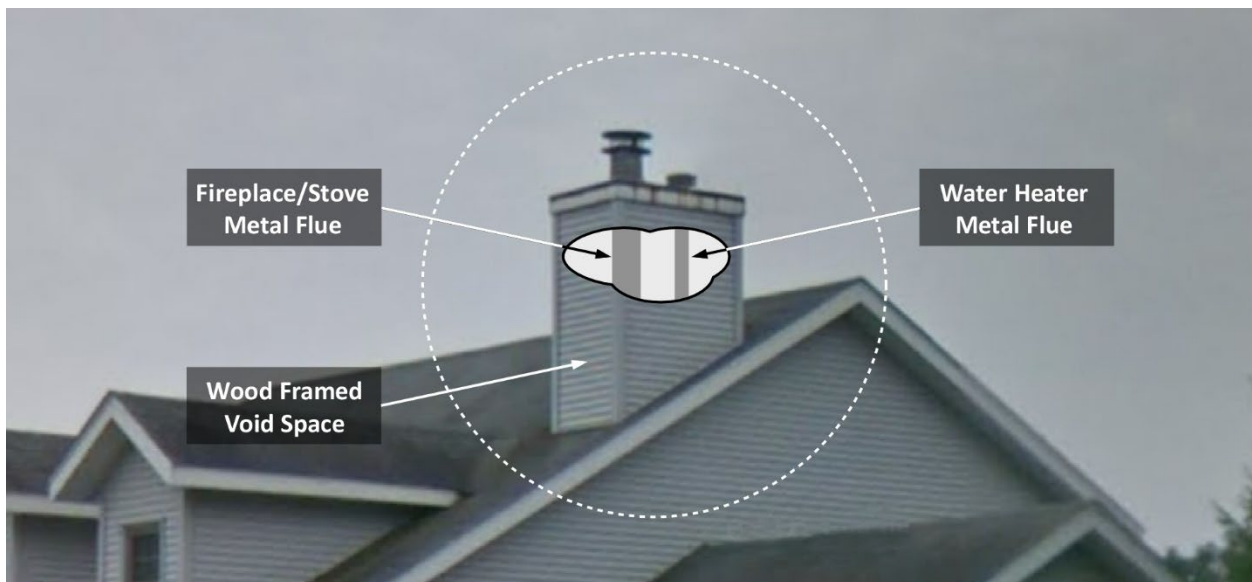
Additional Learning: This incident provides an opportunity to examine both chimney fires (the original problem) and attic fires (what the chief found when he arrived). Review the following considerations related to chimney fires with your companies.

- Effective size-up to determine if the fire is confined to the flue (chimney fire) or if it has extended to structural voids or living spaces (structure fire).
- Consider the type of chimney (masonry or metal) and age of the building (potential for an unlined masonry chimney) and building construction features that may impact potential for extension and avenues for fire spread (e.g., chimney breast, framed out spaces containing one or more metal flues).
- Operating in a non-IDLH environment does not require an on-deck company (two out). However, consider the potential for change if there may be potential for extension to the structure. Upgrade the response as needed.
- Assign a company to the interior to ensure that the damper is closed (anti-ventilation), to assess potential for extension to structural voids, and potentially to initiate bottom-up fire control using a water or dry chemical extinguisher.

- If the fire is confined to the flue, consider placement of salvage covers and/or hall runners to minimize property damage during fire control operations.
- Consider assigning a company to go to the roof to provide a roof and chimney report and potentially to initiate top-down fire control.
- If the fire has extended to structural voids, consider the most effective means for water distribution within the void space. Alternatives include application through the eaves or gable end, piercing nozzles/fog nails, and opening ceilings and walls from the interior or a combination of these methods.

This incident involved a fire in a metal chimney that extended into the framed-out space around the chimney (see Figure 7) and into the attic/trussloft.

Figure 7. Chimney Detail



Note: Adapted from Covered Bridge Home Inspections. (2023). F031 – F031 – *Metal chimney in wood frame*. <https://bit.ly/3saf2u2>.

The Underwriters Laboratories Fire Safety Research Institute (UL FSRI) on-line course [Residential Attic and Exterior Fire Hazards](#) (2012) provides an excellent examination of attic fires and firefighting. If you have not previously completed this course, it is highly recommended!

References

- Covered Bridge Home Inspections. (2023). *F031 – Metal chimney in wood frame*. Retrieved October 21, 2023, from <https://bit.ly/3saf2u2>.
- Google. (2022a). [Street view 1850 Alcove Court, Plainfield Township, MI]. Retrieved October 21, 2023, from <https://bit.ly/46LKrSn>.
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- Underwriters Laboratories Fire Safety Research Institute (UL FSRI). (2012). Residential attic and exterior fire hazards [on-line course]. Retrieved October 21, 2023, from <https://bit.ly/3S3x2B2>.
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- WGHN. (2023). Plainfield Fire Department responds to overnight house fire. Retrieved October 21, 2023, from <https://bit.ly/3Qu2QxW>.