



# In-Station Training

## TM 24-01 Apartment Fire



### Author

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### Purpose

Knowledge of building construction and fire behavior are central to effective strategic and tactical decision-making. With wood frame buildings, the age of the structure provides a valuable clue to the type of wood frame construction that may be encountered. Understanding paths of fire travel, resistance of building materials to the effects of fire, and how building construction and fire behavior intersect provides a solid foundation for decision-making and tactical action.

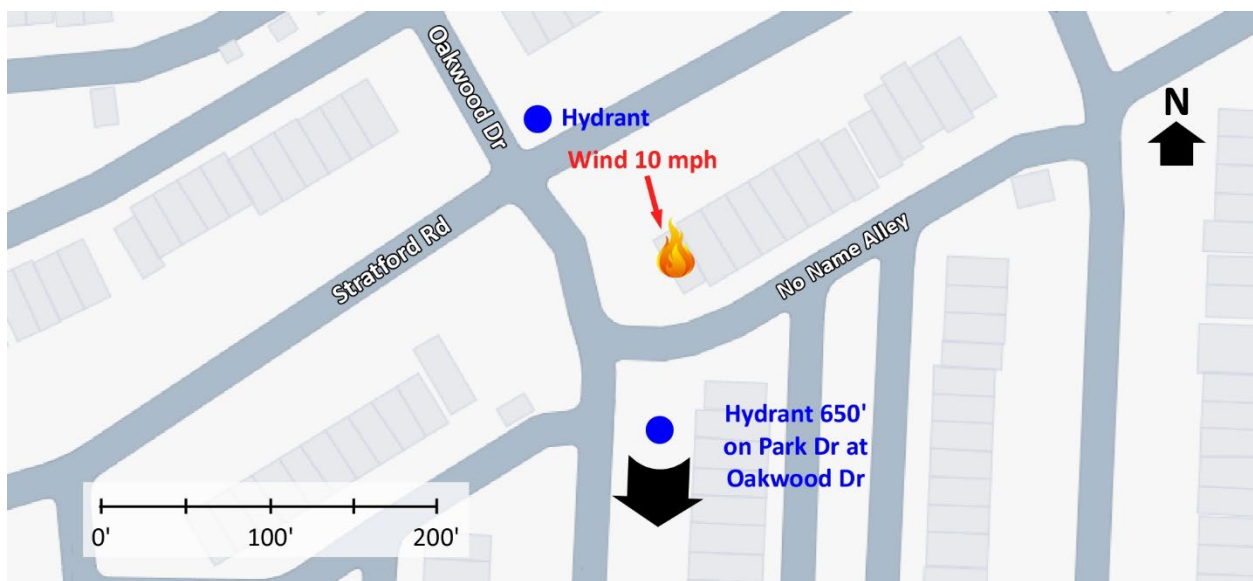
### Learning Outcomes

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

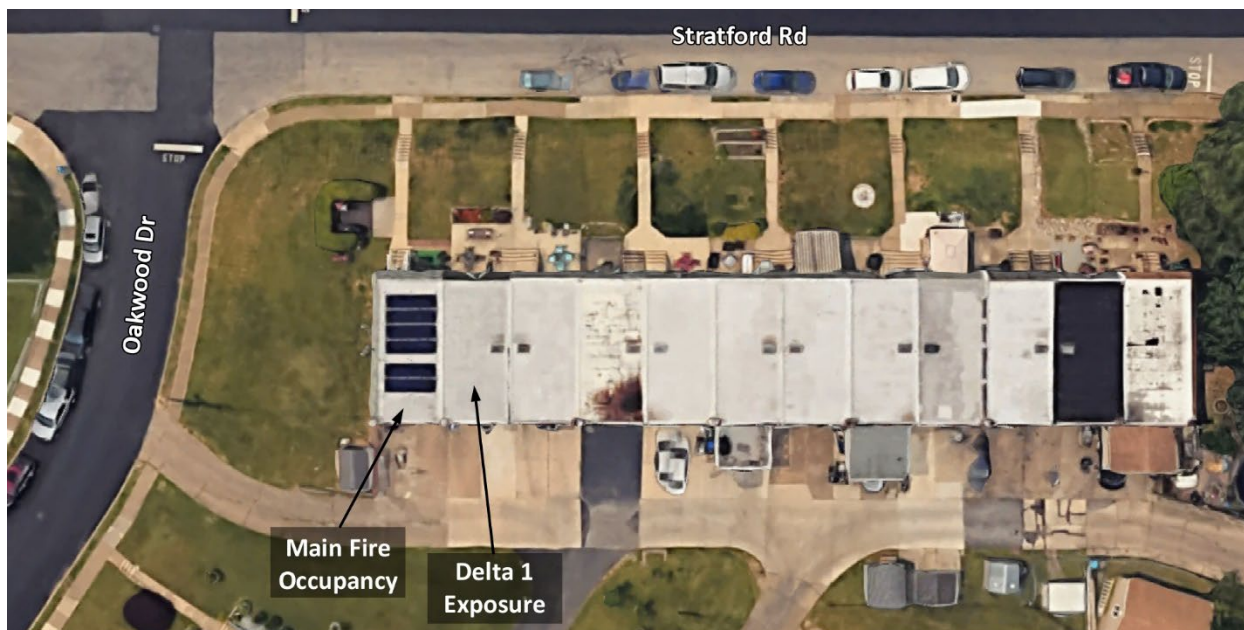
This incident involved an apartment fire at 223 Stratford Road, Glenolden, Pennsylvania on November 23, 2023, at 13:15 (Feeney Fireground Photography, 2023 & Dailey Times, 2023). Review the map and photos (Figures 1-6) to gain an understanding of the area and building involved.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2023a). [Map, 223 Stratford Rd, Glenolden, PA]. <https://bit.ly/3uyd7QX>.

Figure 2. Aerial View



Note: Adapted from Google. (2023b). [Aerial view, 223 Stratford Rd, Glenolden, PA].

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

The closest hydrant is on the corner of Stratford Road and Oakwood Drive. An additional hydrant is located on Park Drive at Oakwood Drive as illustrated in Figure 1. For this 10-Minute Training the rear of the building is designated as Alpha as this is the main access point to the fire.

Figure 3. Charlie/Delta Corner

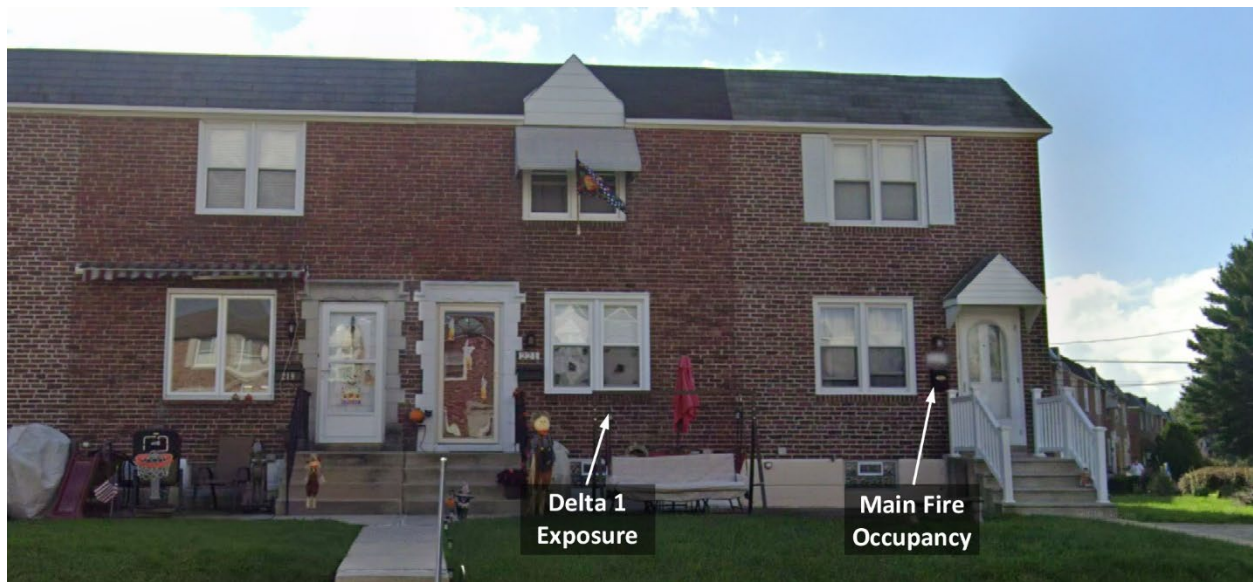


Note: Adapted from Google. (2018a). [Street view, 223 Stratford Rd, Glenolden, PA].

<https://bit.ly/46yBA66>.



Figure 4. Side Charlie



Note: Adapted from Google. (2018b). [Street view, 223 Stratford Rd, Glenolden, PA].  
<https://bit.ly/46xrpYF>.

Figure 5. Side Bravo-Main Fire Occupancy



Note: Adapted from Google. (2018c). [Street view, 223 Stratford Rd, Glenolden, PA].  
<https://bit.ly/3QUfyoE>.

Figure 6. Alpha/Bravo Corner



Note: Adapted from Google. (2018d). [Street view, 223 Stratford Rd, Glenolden, PA].

<https://bit.ly/3uE7lx4>.

The temperature is currently 53° F with wind from the north northwest at 10 mph (Weather Underground, 2023). You have been dispatched to 223 Stratford Road for a report of an apartment fire at 13:15. 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?

While responding, you hear a command officer and another engine with typical staffing for your agency go enroute. You will arrive from the north northwest on Oakwood Drive. The second engine will arrive from the same direction six minutes after you, followed by the command officer. All other units dispatched on the first alarm will arrive after the command officer.

Watch the first 00:10 of the [incident video](#) (Feeney Fireground Photograph, 2023) and examine Figure 7 illustrating conditions on arrival.

Figure 7. Conditions on Arrival in the No Name Alley.



*Note:* Adapted from Feeney Fireground Photography. (2023). *First in eng-74 UFD arrival 2nd alarm dwelling fire. Darby Twp PA. going in svc with 1 ¾" handline* [video]. <https://bit.ly/3uLMsjQ>.

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 did not observe any smoke from Sides Bravo or Charlie on approach. An occupant reports that everyone is out of the townhouse.

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.



Watch the [incident video](#) Feeney (Fireground Photography, 2023) from 01:30 to 02:30 and examine Figure 8 illustrating conditions as you stretch your attack line through Side Alpha.

Figure 8. Conditions on Entry



*Note: Adapted from Feeney Fireground Photography. (2023). First in eng-74 UDFD arrival 2nd alarm dwelling fire. Darby Twp PA. going in svc with 1 ¾" handline [video]. <https://bit.ly/3uLMsjQ>.*

6. Engine 2 arrives and reports that they are Level 1 on a hydrant at West Oakwood Drive and Stratford 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?
  
8. How did the location of the fire in the walkout basement and reported wind speed and direction influence your tactical and task level decision-making?

9. What tactics could be used to address the conflicting issues related to the location of the basement access at grade on the downwind side of the building.

Watch the [incident video](#) Feeney (Fireground Photography, 2023) from 04:00 to 04:30 and examine Figure 9 before answering the next several questions.

Figure 9. Smoke Conditions on Charlie



*Note:* Adapted from Feeney Fireground Photography. (2023). *First in eng-74 UDFD arrival 2nd alarm dwelling fire. Darby Twp PA. going in svc with 1 ¾" handline* [video]. <https://bit.ly/3uLMsjQ>.

10. How would you assess wind conditions based on observed conditions? What factors could influence local wind conditions in relation to general conditions in the area? What indicators could provide information regarding wind speed and direction at the incident location?

**Additional Learning:** Arriving from the north to the address side of this building appears to be a medium, two-story, townhouse complex. From the south, accessing the building from the alley, it appears to be a three-story townhouse complex. How would you describe this building in your initial radio report and follow-up report and why might this be important?

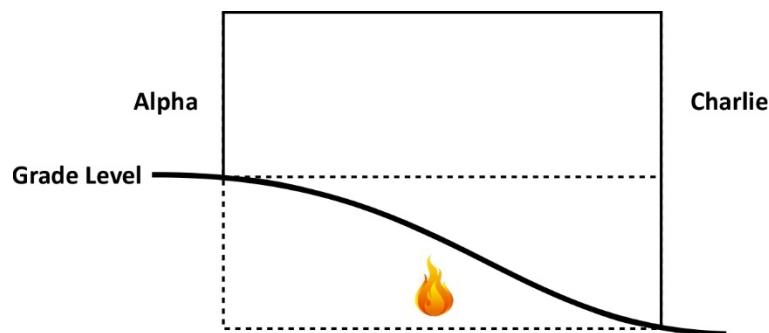
Blue Card certified ICs have learned that critical elements of the follow-up report include:

- If there is a basement, and if so, what type (e.g., look out, walk out, etc.), and if it is involved in fire; and
- How many stories are on Side Charlie (which is really any variation on the number of stories on any side other than you reported in your initial radio report).

The rationale for identifying presence, type, and involvement of the basement is obvious based on the risk of working above the fire (particularly if you do not know that you are). The importance of the number of stories from what was initially reported may be less obvious. Having a mental picture of the geometry of the building, including variations in the number of stories is essential in identifying location when making tactical assignments and when reporting conditions. A common operating picture depends on agreeing what is Floor 1, Floor 2, Basement, etc.

Changes in grade from front to back, back to front, or side to side present an interesting challenge to accurate and consistent description.

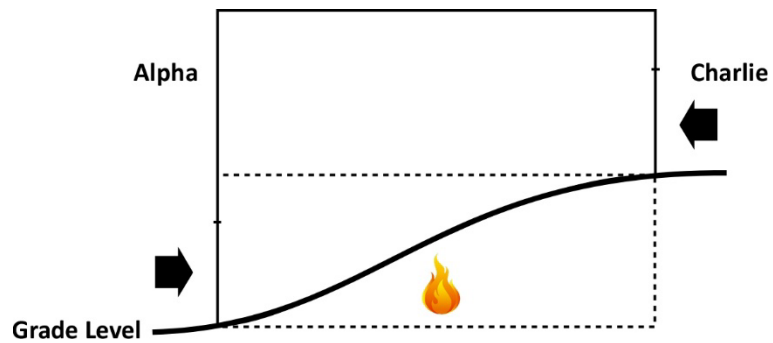
Figure 10. Example 1-Variations in Grade



1. How would you describe the building in Figure 10 and the location of the fire in your initial radio report and follow-up report?
2. If you located a victim on the floor on Side Charlie of the floor above the fire and were requesting a ladder to a window for removal of the victim, how would you describe the location for ladder placement?

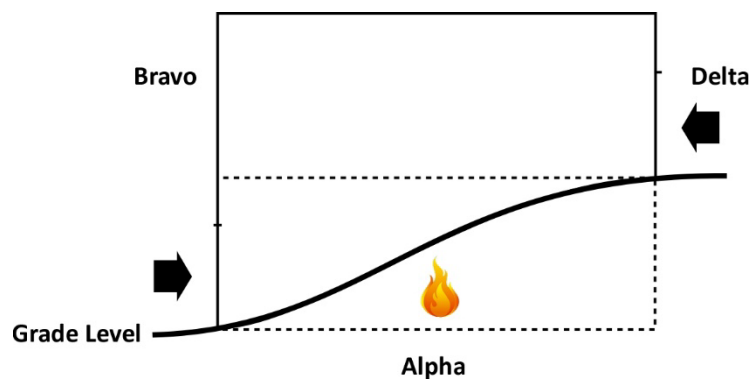


Figure 11. Example 2-Variations in Grade



3. How would you describe the building in Figure 11 and the location of the fire in your initial radio report and follow-up report?
4. If you located a victim on the floor on Side Alpha of the floor above the fire and were requesting a ladder to a window for removal of the victim, how would you describe the location for ladder placement??

Figure 12. Example 3-Variations in Grade



5. How would you describe the building in Figure 12 and the location of the fire in your initial radio report and follow-up report?

6. If you located a victim on the floor on Side Alpha of the floor above the fire and were requesting a ladder to a window for removal of the victim, how would you describe the location for ladder placement?

**Learning from History:** On May 30, 1999, a fire in a townhouse at 3146 Cherry Road NE, Washington D.C. claimed the lives of Firefighters Louis Matthews and Anthony Phillips. The fire almost killed Firefighter Joe Morgan, who was later forced to retire from the DC Fire & EMS Department due to his injuries. This incident occurred 24 years ago and many of today's firefighters have never heard of Cherry Road.

Watch [Cherry Road Fire - ISFSI and UL FSRI Understanding and Fighting Basement Fires](#) (UL FSRI, 2017) and listen to [Cherry Road Fire Lieutenant Joseph Morgan's Story](#) (NYUFireResearch, 2014).

Dig deeper into this incident by reviewing [Death in the Line of Duty F99-21](#) (NIOSH, 1999) and [Simulation of the Dynamics of the Fire at 3146 Cherry Road NE Washington D.C., May 30, 1999](#) (Madrzykowski & Vettori, 2000).

This incident provides a solid example as to why 360-degree reconnaissance is important and why having a common operating picture of building configuration and geometry is critical to safe and effective fireground operations. Honor the sacrifice of Firefighters Matthews, Phillips, and Lieutenant Morgan and learn the important lessons that this incident provides.

## References

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