



In-Station Training

TM 24-16 Commercial Fire-Auto Shop



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Purpose

Fires in vehicle service and repair facilities present significant hazards. Critical factors may include the occupancy (particularly the presence of flammable liquids and other hazardous materials, and the emerging hazard of lithium-ion batteries in hybrid or electric vehicles), the building, and the fire (which will likely have a higher heat release rate than in many other types of occupancy).

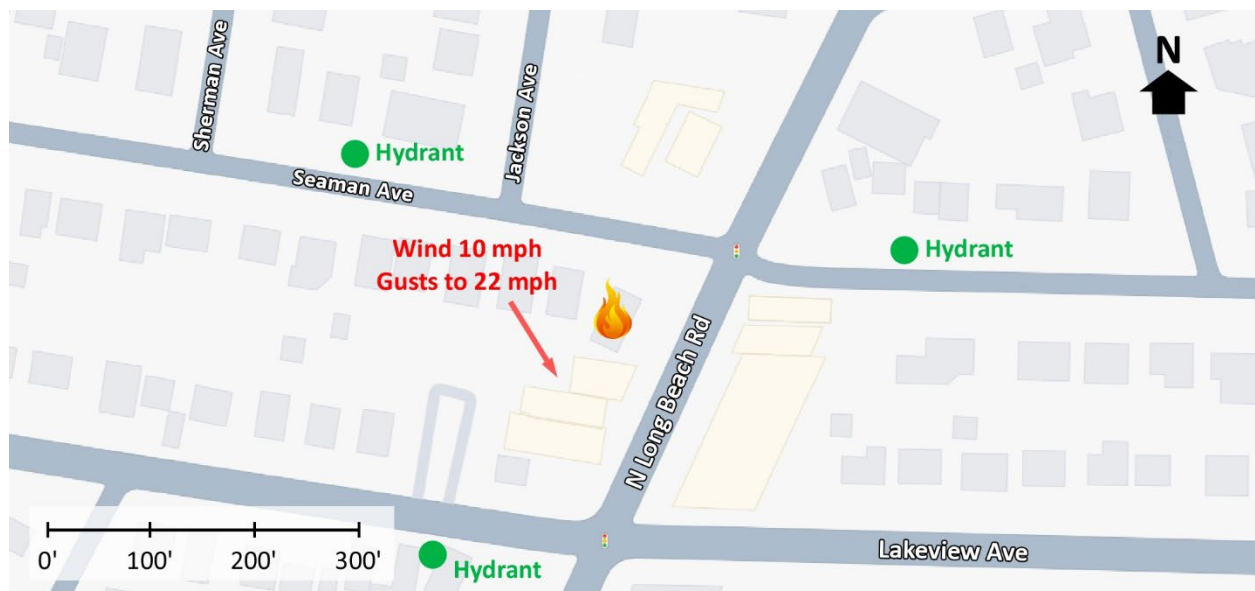
Learning Outcomes

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 commercial fire at K&K Auto & Tire Centre, 224 N Long Beach Road in Rockville Centre, New York on February 6, 2024, at 13:00 (Morin, 2024). 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. (2024a). [Map, 224 N Long Beach Road, Rockville Centre, NY].

<https://bit.ly/497usyP>.

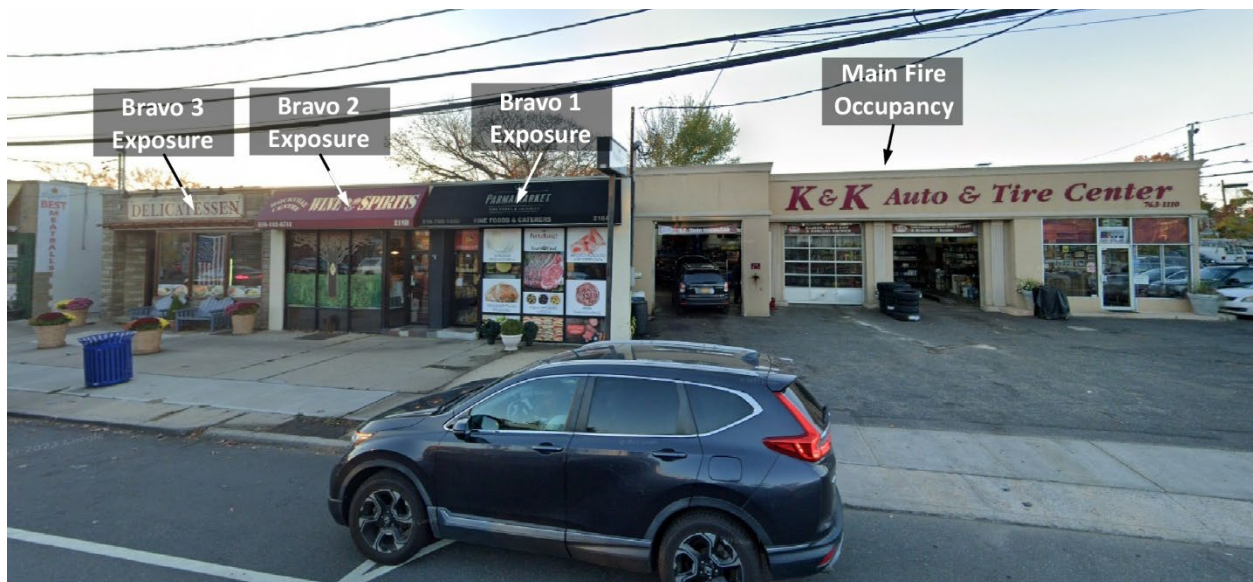
Figure 2. Aerial View



Note: Adapted from Google. (2024b). [Aerial view 224 N Long Beach Road, Rockville Centre, NY]. <https://bit.ly/4ao1Rq0>.

The closest hydrant is on Seaman Ave just east of North Long Beach Road with additional hydrants to the west on Seaman Ave and to the south on Lakeview Ave as shown in Figure 1.

Figure 3. Side Alpha



Note: Adapted from Google. (2012a). [Street view, 224 N Long Beach Road, Rockville Centre, NY]. <https://bit.ly/3vfxLWV>.

Figure 6. Charlie/Delta Corner



Note: Adapted from Google. (2024c). [3d aerial view, 224 N Long Beach Road, Rockville Centre, NY]. <https://bit.ly/4a3jdJ1>.

The temperature is currently 38° F with wind from the north northeast at 10 mph with gusts to 22 mph (Weather Underground, 2024). You have been dispatched to K&K Auto & Tire Centre, 224 North Long Beach Road for a report of a commercial fire at 13:00. 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 multiple calls reporting a fire at the incident location. 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 south on North Long Beach Road. 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](#) (Dozgood Media, 2024) from 00:25 to 00:50 and examine Figure 7 illustrating conditions on arrival.

Figure 7. Conditions on Arrival



Note: Adapted from Dozgood Media. (2024). **Fully involved* pre-arrival | auto shop 2nd Alarm | Rockville Centre, NY [2-6-24]* [video]. <https://bit.ly/499ymHm>

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?

There is a large volume of dark grey smoke pushing at moderate velocity from windows on Side Charlie. The business owner reports that his employees and customers evacuated when the fire started and are now across the street.

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 Lakeview Avenue at North Long Beach 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.

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](#) (Dozgood Media, 2024) from 01:40 to 03:05 before answering the next question. Note that there is a break in the video at 03:00 (undetermined actual elapsed time between 02:59 and 03:01).

14. The first arriving engine reverse laid a 2 ½" attack line from Side Alpha to (likely) the hydrant on Seaman Avenue east of Noth Long Beach Road. What were the advantages and disadvantages of this tactic?

Watch the [incident video](#) (Dozgood Media, 2024) from 03:05 to 03:35 before answering the next two questions.

15. Was the 2 ½" attack line effective? What factors influenced the effectiveness of application of water from this attack line?
16. What alternative tactics may have been more effective in quickly achieving the fire control tactical objective?

Additional Learning: While not identified as an issue in this incident, involvement, direct flame impingement, or thermal exposure of acetylene cylinders (as used in oxy-acetylene welding and cutting) presents a significant hazard. This type of hazardous material is commonly encountered in auto repair and metal fabrication occupancies.

Acetylene presents several unique hazards and acetylene cylinders are considerably different than those used for other compressed gases. Read [First Responder Assessment of Acetylene Cylinders](#) (Chemically Speaking, LLC, 2023). Watch [Why Acetylene Gas Cylinders Are Different](#) (Cylinder Recyclers, 2020) to gain an understanding of the characteristics of acetylene cylinders.

Watch [Fire & Rescue Service Acetylene Training Video](#) to learn more about response to acetylene incidents. This video focuses on policy and procedures used within fire services throughout the United Kingdom but provides a good starting point for understanding acetylene response.

If a thermally impacted acetylene cylinder was discovered during overhaul at the incident presented in this 10-Minute Training, how should the company that identified cylinder notify command?

What action should the IC take to address the hazards presented by the acetylene cylinder?

East County Fire and Rescue is developing comprehensive standard operating guidelines for acetylene incidents (as part of a set of standard operating guidelines for hazardous materials response). The information in this standard operating guideline will be presented in a future in-service training and will be incorporated in an acetylene specific incident in a 10-Minute Training later in 2024.

References

British Compressed Gas Association (BCGA). (2023). *Fire & rescue service acetylene training video*.

Retrieved April 1, 2024, from <https://bit.ly/49oIP2W>.

Chemically Speaking, LLC. (2023). *First responder assessment of acetylene cylinders*. Retrieved April 1,

2024, from <https://bit.ly/3xbgAWS>.

Cylinder Recyclers. (2020). *Why acetylene gas cylinders are different*. Retrieved April 1, 2024, from

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

Dozgood Media. (2024). **Fully involved* pre-arrival | auto shop 2nd Alarm | Rockville Centre, NY [2-6-*

24] [video]. Retrieved April 1, 2024, from <https://bit.ly/499ymHm>.

Google. (2012a). [Street view, 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024,

from <https://bit.ly/3vfxLWV>.

Google. (2012b). [Street view, 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024,

from <https://bit.ly/49bv6v0>.

Google. (2012c). [Street view, 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024,

from <https://bit.ly/4arREcc>.

Google. (2024a). [Map, 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024, from

<https://bit.ly/497usyP>.

Google. (2024b). [Aerial view 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024,

from <https://bit.ly/4ao1Rq0>.

Google. (2024c). [3d aerial view, 224 N Long Beach Road, Rockville Centre, NY]. Retrieved April 1, 2024, from <https://bit.ly/4a3jdJ1>.

Morin, C. (2024). *Rockville Centre auto shop catches fire*. Retrieved March 25, 2024, from <https://bit.ly/3PAkev2>.

Weather Underground (2024). *New York, NY weather history* [historical weather February 6, 2024]. Retrieved April 1, 2024, from <https://bit.ly/48Cp1HR>.