



In-Station Training

TM 24-29 Commercial MVA with Entrapment & Fire



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Purpose

Commercial vehicle accidents may present different critical factors than those involving passenger cars or small trucks. In addition to differences in size, weight, and construction, commercial vehicles may also carry bulk quantities of hazardous materials. The challenge of size-up and sequencing of tactical operations increases when confronted with a commercial vehicle accident with trapped occupants when the vehicles are on fire.

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 two semi-trucks that crashed at Mile Post 43 on Interstate 40 in Fayette County, Tennessee on November 23, 2022, at 13:10 (NorthernCountyMedia, 2022 & Scott & Paul, 2022). Review the map and photos (Figures 1-5) to gain an understanding of the incident area.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2024a). [Map, Mile Post 43, Interstate 40, Fayette County, TN].

<https://bit.ly/3R1lFbm>.

Figure 2. Aerial View



Note: Adapted from Google. (2024b). [Aerial view Mile Post 43, Interstate 40, Fayette County, TN]. <https://bit.ly/4dUba3z>.

The closest water tender fill point is a hydrant at TN 222 and 2nd Street in Stanton TN. Travel distance to the fill point is 5.00 miles (one way) as shown in Figure 1.

Figure 3. Incident Location Viewed from Interstate 40 Eastbound



Note: Adapted from Google. (2017a). [Street view, Mile Post 43, Eastbound Interstate 40, Fayette County, TN]. <https://bit.ly/3x2KA7A>.

Figure 4. Incident Location Viewed from Interstate 40 Westbound



Note: Adapted from Google. (2017b). [Street view, Mile Post 43, Westbound Interstate 40, Fayette County, TN]. <https://bit.ly/3WY2SS2>.

The temperature is currently 61° F with wind from the south southeast at 5 mph (Weather Underground, 2022). You have been dispatched to Mile Post 43 on Interstate 40 for a report of a commercial vehicle crash at 13:10. You are the company officer or AIC of the first arriving engine and have your company's typical staffing.

You hear a command officer, a second engine, and an advanced life support (ALS) ambulance with typical staffing for your agency go enroute. You will arrive from the west on Interstate 40. The second engine and ALS ambulance will arrive from the same direction six minutes after you. The command officer will arrive shortly after the second engine. Any additional resources on the initial alarm or requested while enroute will arrive after the command officer.

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 for a multiple vehicle crash involving two semi-trucks with fire with entrapment.

2. How does this additional information change the critical factors considered during response and your resource determination (what additional resources will you request)?

Watch the first 00:20 of the [incident video](#) (NorthernCountyMedia, 2022) and examine Figure 5 illustrating conditions on arrival.

Figure 5. Conditions on Arrival



Note: Adapted from NorthernCountyMedia. (2022). ** Major crash * pre-arrival * fatal semi collision* [video]. <https://bit.ly/3UW6hhS>.

3. What direction will you provide your apparatus operator regarding apparatus positioning?

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

5. 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?

Reconnaissance determines that there are two occupants in the cab of the silver tractor. Both were restrained and are conscious but are complaining of neck and back pain. Watch the [incident video](#) (NorthernCountyMedia, 2022) from 00:42 to 00:52 and examine Figure 5 illustrating the condition of the other truck (conditions on the other side of the truck are consistent with those visible in Figure 5).

6. Would you change the action you are taking or modify the assignments given to your crew? If so, what task orders would you provide?
7. State your update report exactly as you would transmit it to dispatch.
8. Engine 2 arrives and reports that they are Level 1 west of the incident. State the tactical assignment you would give them exactly as you would transmit it.
9. Medic 1 arrives and reports that they are Level 1 west of the incident. State the tactical assignment you would give them exactly as you would transmit it.
10. 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.

This incident resulted in two injured victims and one fatality. There were no reports of hazardous materials involved other than the diesel fuel carried by the two trucks.

11. Did the potential for involvement of hazardous materials (other than diesel fuel) impact your apparatus positioning decision? If so, how? If not, why not?
12. Neither truck appeared to be placarded. How does the absence of placards impact the potential presence of hazardous materials?
13. If the fire involving the silver tractor was controlled, how would you approach stabilization of the tractor prior to extrication of the two occupants?

Additional Learning: Read [Hazardous Materials Placarding Requirements](#) (Roberts, n.d.) for a good review of placarding requirements for non-bulk and bulk shipments, special placarding requirements, and critical placarding exceptions.

Watch [Stabilizing Heavy Trucks](#) (Fire Engineering, 2021) for a quick look at stabilization tactics for heavy trucks. Consider which of these methods you can accomplish with the resources on your apparatus, and which will require request of additional or specialized resources.

Review the use of Rescue 42 Struts to stabilize an upright truck (such as the silver tractor in this incident). If members need a refresher (or an initial overview) on the Rescue 42 Strut System, the [Rescue 42 TeleCrib Video Update](#) (Rescue42Inc, 2017) is a great resource.

References

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