



# In-Station Training

## TM 18-20 Lancaster PA Mayday



**Authors:** Chief Ed Hartin

**Training Code:** TBD

**Validated by:**

**Training Hours:** 0.2

### Purpose

A mayday occurs whenever a firefighter cannot safely exit the hazard zone. The best way to address a mayday is to not have one in the first place! However, the fireground is a hazardous and dynamic environment. If a mayday occurs, effective response requires a coordinated and concerted effort by the individual and company involved in the mayday, other companies working nearby, and on-deck companies, as well as the IC and tactical level boss (Division Supervisor).

### Learning Outcomes

Firefighters and officers operate to minimize the potential for a mayday and respond effectively if one occurs.

### Conducting the Drill

This incident involved a fire in a small, two-story row house at 225 East Madison Street in Lancaster PA at 04:25 on February 18, 2013. Review the map and photos (Figures 1-5) to gain an understanding of area and building involved.

Figure 1. Map of the Incident Area



*Note:* Adapted from Google. (2018). [Google map 225 East Madison Street, Lancaster PA]

<http://bit.ly/2JRieQp>

As illustrated in Figure 1 there are two hydrants within 300' of the fire building at the intersections of East Madison Street and East Lemon Street and East Madison and North Lime Street.

Figure 2. Aerial View of the Fire Occupancy and Exposures



Note: Adapted from Google. (2018). [Google aerial view 225 East Madison Street, Lancaster PA]  
<http://bit.ly/2H4nLoR>



Figure 3. Approach from the West on E Madison Street



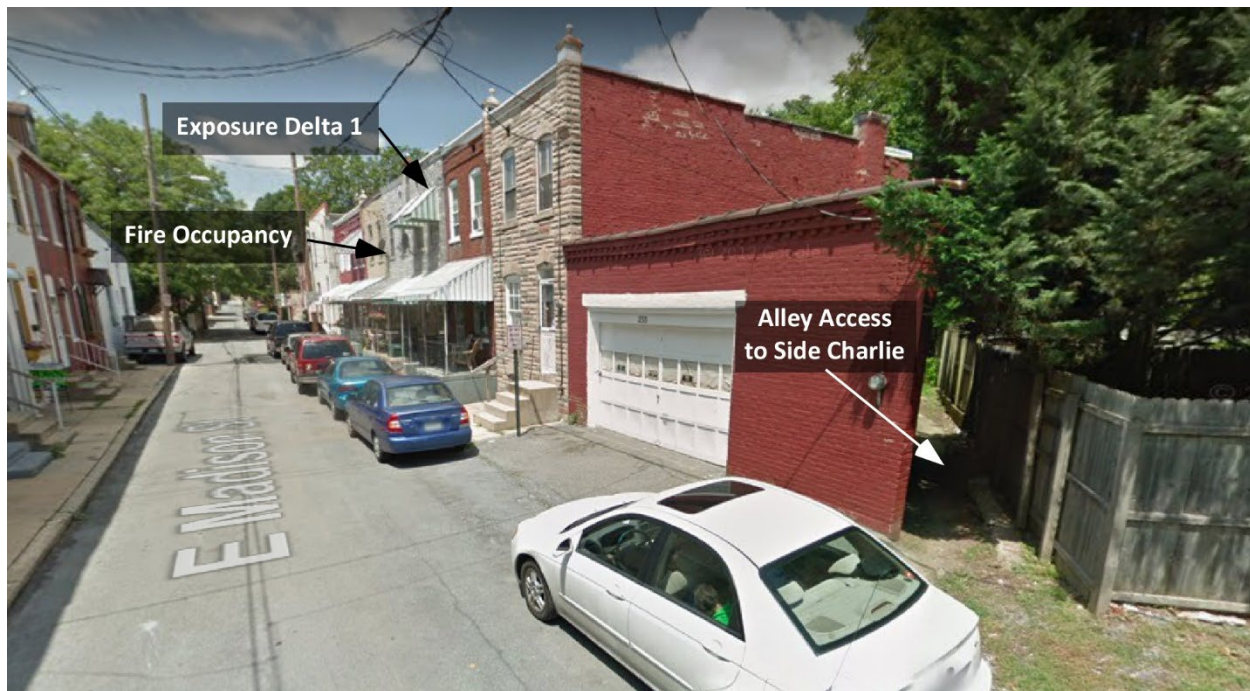
Note: Adapted from Google. (2011). [Google street view 225 East Madison Street, Lancaster PA]  
<http://bit.ly/2qFfbSr>

Figure 4. Alpha/Bravo Corner



Note: Adapted from Google. (2011). [Google street view 225 East Madison Street, Lancaster PA]  
<http://bit.ly/2ETTLGm>

Figure 5. Alley Access to Side Charlie



Note: Adapted from Google. (2011). [Google street view 233 East Madison Street, Lancaster PA]  
<http://bit.ly/2voRt2C>

You are responding to this incident as the company officer or AIC of the first arriving engine and have a crew of three. Your dispatch information indicates a residential fire at 419 S. Hill Street. You are responding from the west on S. Hill Street. A second engine with a staffing level of two will arrive within four minutes after you. A command officer will arrive approximately two minutes later.

1. What critical factors would you consider when dispatched and during response and what conversations would you have with the members of your crew while responding?
2. What assignments would you give your crew prior to arrival?

Listen to the first 1:30 of the [audio recording](#) of radio traffic for this incident. There is no photograph or video of conditions on arrival. Figure 6 is a simulation based on conditions reported to the investigators in the after-action report on this incident (Smith & Shouldis, 2013).



Figure 6. Conditions on Arrival Side Alpha [Simulation]



*Note:* Adapted from [Google street view 225 East Madison Street, Lancaster PA] <http://bit.ly/2ETTLGm>

3. State your initial radio report (IRR) exactly as you would transmit it to ICOM.
  
4. What specific actions would you take (as the company officer) immediately upon arrival and exiting the apparatus?

Immediately on exiting the apparatus, law enforcement advises you that there are two occupants trapped on Floor 2 and believed to be in the front bedroom. Access to Side Charlie will require either entry to the rear through Exposure Bravo 1 or Delta 1, or the alleyway (illustrated in Figure 2) at the end of the block (see Figure 1).

5. State your update report exactly as you would transmit it to ICOM.
  
  
  
  
  
  
  
  
  
  
6. Would you modify the assignments given to members of your crew? If yes, state the task orders you would give them at this point.
  
  
  
  
  
  
  
  
  
  
7. What tactical assignment would you give the next arriving engine company?

This incident resulted in the deaths of an adult occupant and child and injury to the Lieutenant and one of the Firefighters of the first arriving engine. The Lancaster Fire Department had an [After Action Report](#) (Smith & Shouldis, 2013) developed by two retired Chief Officers from the Philadelphia Fire Department. Listen to the remainder of the [incident audio](#) (Alertpage, 2013) and the following summary of events surrounding the Mayday that occurred during this incident and then answer the last few questions in this 10-Minute Training.

Engine 3 reported heavy smoke showing from Side Alpha. In the after-action report, one of the firefighters stated that he observed “heavy black smoke violently pushing from the front of the house” (Smith & Shouldis, 2013, p. 11). The Lieutenant of Engine 3 did not perform 360° reconnaissance (possibly due to the need to access Side Charlie through an exposure or via the alley at the end of the block and possibly due to the urgency presented by the report of occupants. The after-action report did not provide any detail as to the rationale or if conducting 360° reconnaissance was normal practice for the Lancaster Fire Department).

A Firefighter from Engine 3 stretched a dry 1-3/4” attack line through Side Alpha to Floor 2 for primary search. The Firefighter stretching the attack line encountered thick smoke and heat and used a thermal imager (TI) to find the occupants but it simply showed a white screen (no mention was made as to what make and model of TI was used). The Firefighter stretching the line climbed over a bureau that was blocking the door to the front (Side Alpha) bedroom for primary search. Finding what he believed to be a victim, he vented a window on Side Alpha, but discovered that it was a deceased dog.

Figure 7. Position of the First Arriving Engine (Photo Taken Later in the Incident)



*Note:* Adapted from Lancaster Online. (2013). Document: Report into the fatal East Madison Street fire. <http://bit.ly/2jiHNOr>

Concurrently the Lieutenant of Engine 3 proceeded up the interior stairway to the hallway outside the second-floor middle bedroom (between Sides Alpha and Charlie). Within a short time, the first floor flashed over and fire spread up the interior staircase to the second floor. The Lieutenant, lying in a prone position, called for the Firefighter that stretched the attack line (who was still in the bedroom on Side Alpha) for help. The Firefighter found no pressure (it had been stretched dry). Based on untenable conditions on Floor 2, the Firefighter told the Lieutenant to go back down the stairs and the Firefighter exited the window he had broken out on Side Alpha onto a lightweight metal porch roof. The porch roof was weakened by fire blowing from windows on Floor 1 Side Alpha collapsed under the Firefighter's weight shortly after he called a Mayday for the Lieutenant trapped on Floor 2.

The timeline provided in the after-action report does not provide detail on the sequence of action taken by Engine 3 (first arriving engine) and Truck 2 (first arriving truck) other than to indicate that Engine 3 arrived at 04:29:30 and Truck 2 (along with the balance of the first alarm) arrived approximately three minutes later between 04:32:19 and 04:32:26.

The Acting Officer of Truck 2 and the Lieutenant of Engine 3 were on the front porch at the same time prior to the Lieutenant entering the fire occupancy. Concurrent with Engine 3's operations inside the

building, the Truck 2 Apparatus Operator broke out a window on Floor 1, Side Alpha and then proceeded along with another member of Truck 2 through the Bravo 1 Exposure to Side Charlie with a ladder which was deployed to the roof of the one-story addition. Working from the roof of the addition, crew from Truck 2 vented a window on Floor 2, Side Charlie and the apparatus operator entered through the vent opening to perform search but found rapidly deteriorating conditions and was forced to retreat to ground level on Side Charlie. The crew of Truck 2 then entered the bedroom on Floor 1, Side Charlie (in the one-story addition), pushing open the door to the kitchen they found that it was fully involved and exited through a door on Side Charlie. No mention was made in the after-action report if the crew of Truck 2 closed the bedroom door on Floor 2 but does indicate that the rear door was left open for ventilation. The after-action report states that as the crew of Truck 2 working on Side Charlie exited the fire occupancy, they heard the Mayday transmission from the Engine 3 Firefighter.

8. What factors likely contributed to the crew of Engine 3 being trapped on Floor 2 by rapid fire progression?
  
  
  
  
  
  
  
  
  
  
9. Based on the [incident audio](#) (Alertpage, 2013) summary information provided in this 10-Minute Training, how could the first arriving companies have reduced potential for a Mayday (there is more to the story, but you will need to read the after-action report).

The two civilian occupants were later found in the middle bedroom (the Lieutenant's location when conditions became untenable). Investigation determined that these occupants were likely deceased prior to the arrival of Engine 3.

While extending this learning opportunity well beyond 10-Minutes, take the time to read the [After-Action Report](#) (Smith & Shouldis, 2013) on this incident and consider the following questions:

10. The After-Action Report (Smith & Shouldis, 2013) had several omissions that would have provided additional clarity around the circumstances of this incident. What additional information would have been useful to you in understanding the conditions presented and actions taken by the first arriving companies?



11. The After-Action Report (Smith & Shouldis, 2013) contained 22 recommendations for improvement. However, there were several significant omissions. What additional recommendations would you make based on the information provided in the report?

## References

- Alertpage. (2013). Lancaster PA 4 Alarm Fatal Fire w Mayday & Radio Audio 2/18/13. Retrieved May 2, 2018 from <http://bit.ly/2HMWuno>.
- Google. (2011). [Google street view 225 East Madison Street, Lancaster PA]. Retrieved May 5, 2018 from <http://bit.ly/2qFfbSr>
- Google. (2011). [Google street view 225 East Madison Street, Lancaster PA]. Retrieved May 5, 2018 from <http://bit.ly/2ETTLGm>
- Google. (2011). [Google street view 233 East Madison Street, Lancaster PA]. Retrieved May 5, 2018 from <http://bit.ly/2voRt2C>
- Google. (2018). [Google aerial view 225 East Madison Street, Lancaster PA]. Retrieved May 5, 2018 from <http://bit.ly/2H4nLoR>
- Google. (2018). [Google map 225 East Madison Street, Lancaster PA]. Retrieved May 5, 2018 from <http://bit.ly/2JRieQp>
- Lancaster Online. (2013). Document: Report into the fatal East Madison Street fire. <http://bit.ly/2jjHN0r>
- Smith, J. & Shouldis W. (2013) After action report 225 East Madison street fire Lancaster, PA. Retrieved May 2, 2018 from <http://bit.ly/2l3tpr8>.