

**MVU Incident Report
North East Mall, Hurst Texas
Tuesday, September 17th @ 00:25 hours**



Photo by DFW Airport Fire Department

Overview

On Tuesday, September 27, 2005, DFW Airport dispatched their 60" Mobile Ventilation Unit on a mutual aid call with the Hurst Fire Department. A fire had started in a clothing store inside the North East Mall in Hurst, TX. The interior of the indoor mall was filled with smoke near the location of the fire. The MVU was called in to assist with smoke control and removal. Below are notes on the incident written by DFW Airport Fire Department:

MUTUAL AID RESPONSE:

North East Mall – Actual fire in the Hollister Clothing Store causing smoke throughout the entire 200,000 sq. ft. structure. Hurst Fire Department requested Mutual Aid from the following: Bedford, DFW, Euless, NRH, Richland Hills

At the request of the Hurst Fire Department, DFW Fire Rescue responded Unit 38 (Mobile Ventilation Unit) to Northeast Mall. Upon arrival, DFW Units were advised that the fire was out; however there was a significant amount of smoke remaining inside the structure. DFW was instructed to set up for a ventilation operation near the Food Court Main Entrance.

Thirty minutes (approximate time needed to obtain pressurization of the structure) into the operation, a visible difference could be seen regarding movement of the smoke. Approximately 1.5 hours into the operation smoke was cleared from the majority of the main corridors and anchor department stores. As positive pressurization was maintained inside the mall with Unit 38 (MVU), firefighters strategically positioned portable electric fans near some of the smaller stores to clear any trapped smoke.

Total ventilation operation was completed in 4.5 hours, which seemed like an eternity. However, without our assistance and support, an operation of this magnitude would have taken more time and resources; More than likely, causing a greater property loss. With the exception of the Hollister Clothing store, Northeast Mall opened as usual on Tuesday morning.



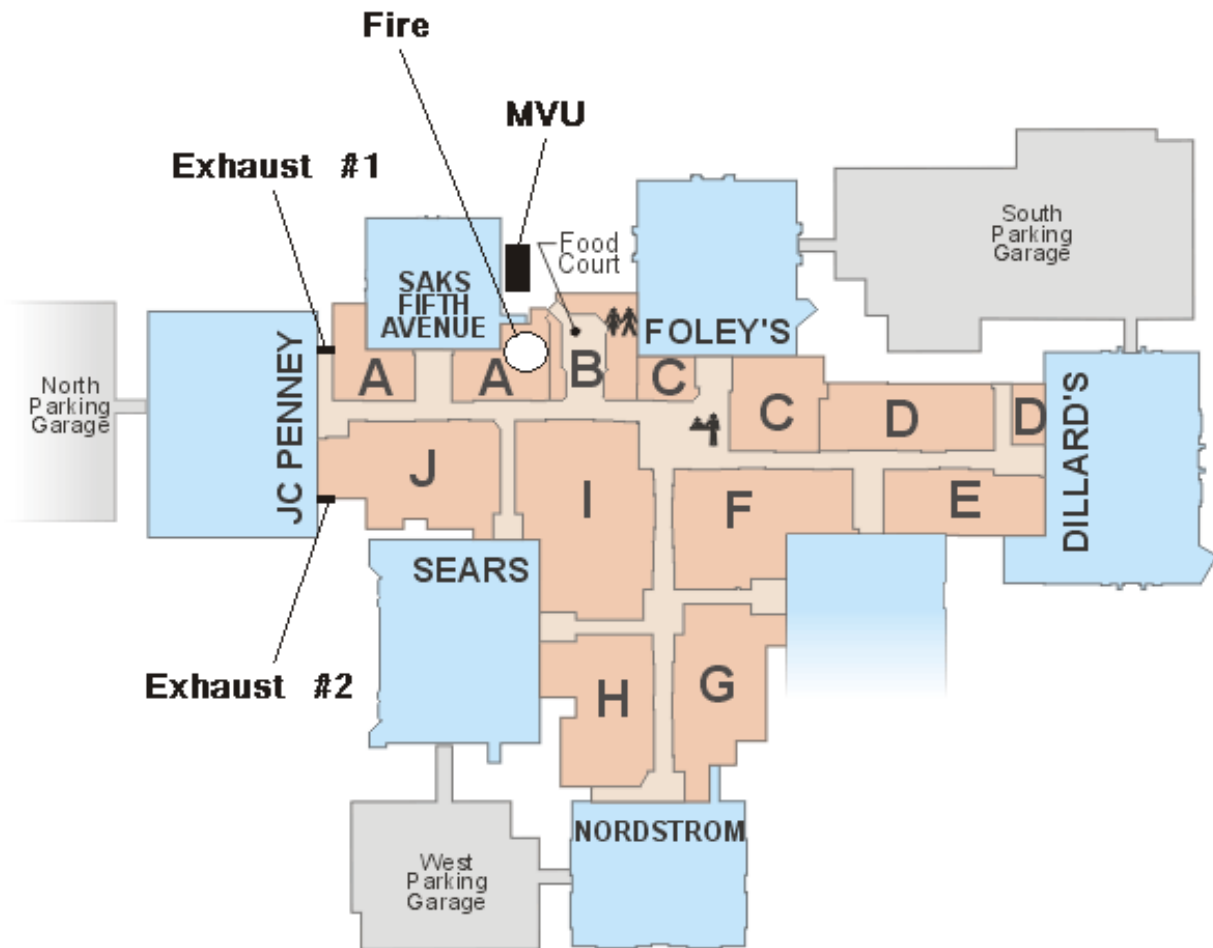
Photo by DFW Airport Fire Department



Photo by DFW Airport Fire Department

MVU Positioned at Loading Dock Outside Food Court

Mall Floor Plan



- The fire started in the storage room of the Hollister clothing store. The cause of the fire was under investigation at the time this report was written.
- The sprinkler system had extinguished the fire by the time the fire department arrived.
- Light to moderate smoke filled the food court and the corridors around sections "A", "J" and "I".
- The MVU was positioned at the loading dock outside of the Food Court. The fan was elevated and aimed at the entrance to the Food Court.
- Exhaust openings were created at the mall entrances near the JC Penney department store.
- Three electric PPV blowers were used to help direct smoke out of vaulted compartments within the mall.
- Severe smoke damage was limited to the Hollister clothing store. There was minimal smoke damage in the adjacent clothing stores. All stores in the mall opened on time at 10:00am, except for the Hollister clothing store.



Photo by DFW Airport Fire Department



Photo by DFW Airport Fire Department

Food Court Entrance Just Prior to Introducing 118,000 CFM from Unit 38 (MVU)



Photo by DFW Airport Fire Department



Photo by DFW Airport Fire Department

Initial Effect of Air Movement Due to Unit 38 Ventilation Operation.



Photo by DFW Airport Fire Department



Photo by DFW Airport Fire Department

Food Court and Corridor 30 Minutes into the Ventilation Operation.



Summary

The Mobile Ventilation Unit proved very effective for removal of the smoke inside the shopping mall. Without the assistance of the MVU, smoke removal would have relied on natural wind currents and a large quantity of small PPV blowers. The MVU greatly reduced the amount of time required to clear the structure of smoke.

By using basic PPV techniques, the fire department was able to control the movement of smoke and prevent excessive property damage to clothing and other merchandise. The exhaust openings chosen allowed the smoke to be directed the shortest distance to the outside while minimizing smoke exposure to adjacent stores.

This incident is an excellent example of an airport fire department partnering with their local departments to provide a high level of service to residents and property owners. By sharing their resources and experience, DFW, Hurst F.D. and the other departments involved greatly reduced the potential for property loss and prevented the disruption of an important commerce center in the Hurst community.

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