

THE RESCUE COMPANY

ELEVATORS

EVERYONE IN the fire service has a story to tell about elevators. Experiences involving passenger rescues from stuck elevators range from short, funny anecdotes to harrowing tales of dangerous operations during serious fires. Fire department operations involve both the emergency incidents and fire- or smoke-related operations complicated by units having to use an elevator to reach the source of the fire or smoke.

Elevators create odd, frustrating, complicated, dangerous, and unusual problems. I vividly remember entering the hallway of an apartment building and finding two residents holding onto the maintenance man, who was dangling in midair with his arm stuck through the vision panel of the elevator hoistway door. The elevator had stalled and he was going to trip the release device to open the hoistway door and remove the passengers. However, as he reached in and moved his arm up toward the release device, the elevator suddenly moved upward; the man's arm moved with it, lifting him off the ground; and the elevator just as quickly stalled again.

After providing a makeshift platform for him to stand on, we worked to free him completely. Using a small air bag and working from above, we were able to move the elevator car and free the

RAY DOWNEY has been a member of the City of New York Fire Department for 27 years and has commanded the operations of Rescue Co. 2 for the past nine. Captain Downey holds an associate's degree in fire science. He's a New York state certified instructor and has conducted seminars and lectures throughout the United States on rescue-related tactics.

arm. We were surprised that he suffered only minor scrapes and cuts. A group of teenagers weren't so lucky—they lost their lives playing a game called "Elevator Action," in which they ride on top of the elevator. They become victims by falling from cars, by being crushed, or by being struck by parts of the elevator machinery in the shaft.

When I was a young firefighter, we were frequently called to housing projects for elevator emergencies. A seasoned veteran told me the fastest way to get the hoistway door open in such a situation was to enlist the aid of one of the local kids. In their idle time these kids had perfected the technique of opening the doors so they could play "Elevator Action."

Recently steps have had to be taken to prevent this easy entry. Many of the emergency key openings have been sealed over, and plates are used to cover the vision panel and other openings. Although such precautions have helped curb illegal entry, they have posed additional problems for firefighters during elevator incidents.

Two incidents—one occurring in October 1989 and the other many years ago—demonstrate the need for all units to train for elevator incidents. During the San Francisco earthquake in October 1989 problems included collapsed buildings, fires (often fed by broken gas mains), gas leaks, water main breaks, and numerous stalled elevators resulting from the major power loss. Preplanning, the recall of off-duty members, and the effective utilization of resources were instrumental in dealing with this highly visible and publicized tragedy. In November 1965, a major power failure in the Northeast created some serious

problems for firefighters. The Otis Elevator Company reported that it serviced approximately 20,000 elevators in the affected area at that time. A total of 355 passengers were stuck in 161 elevators in 107 buildings. Remarkably, most passengers were removed in less than one hour, with the exception of those stuck in express hoistways—of those 134 cars stuck, 112 stopped close enough to the floor so passengers could be removed by opening the car and hoistway doors.

The types of elevators you will encounter range from the simple single-shaft passenger or freight elevator to the glass, fully enclosed passenger elevators that run along the outsides of buildings or in atriums. The "double-decker" cars now in use save space because they have the equivalent of two cars in a single shaft. The majority of elevators are single-car or multicar, and they provide local service (stop at each floor in that particular shaftway).

Single-car and multicar elevators that provide express service usually ride the blind shaft for a number of floors before stopping at a floor. For example, a bank of express elevators servicing floors 17 to 35 will ride in a blind shaft (no floor openings for service) from the lobby up to the 17th floor (the first stop). Elevators in blind shafts can create difficult challenges for firefighters.

Whether you are responding to an elevator incident in a high-rise office building or a housing complex, you must have a standard operating procedure. Get as much information as possible prior to and on your arrival at the scene. Inspectional activity can be one source of familiarization training for

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members. Usually a building maintenance worker is available to provide information. Knowing the location of the elevator machinery room—where the elevator's main electrical power switch is located—often can be an asset during operations. Note any special instructions regarding the building elevators in your company records; if your department uses a computer-assisted dispatch system, the information should be programmed into the system. If you cannot locate a maintenance worker on your arrival at the scene, try to contact the person who called for assistance to find out the location and/or reason for the call.

First you must locate the elevator car. There are a number of ways to do this. When entering the elevator lobby, check the indicator panel for the location of the car. In multicar hoistways, determine which car you are looking for. The lobby may have a telephone or intercom system for each elevator car. You can use it to ask stuck passengers for their location.

If the hoistway door has a vision panel, check to see if any part of the elevator car is visible, indicating the location of the car at, above, or below

that level. If you can see the counterweights (used to counterbalance the elevator car weight), this is an indication that the car is a number of floors away in a different direction: Counterweights at a lower floor indicate that the car is at a higher floor, and vice versa.

Use a car in the same elevator bank and open the top hatch to look up and see the stuck car's location. Or open the hoistway door at the entrance level and look up the shaft to locate the car. The hoistway door often can be opened with special elevator keys. Never open this door if you look through the vision panel and see the cables or counterweights moving. Another indicator of the car location is a floor selector or leveler indicator in the machinery room.

Of course one of the easiest ways to locate the car is to listen for the hollering and yelling. Depending on their age, how long they have been in the car, and how strong their vocal cords are, stuck passengers can lead you to their location. Don't take their yelling lightly; many people are claustrophobic, and being confined in a small and often hot elevator car only adds to their panic. After you locate the car, make verbal contact with the passengers, and reassure them that the fire department is on the scene and in the process of rescuing them. This should have a calming effect on the elevator occupants. ■

CONGRESSIONAL CLIPBOARD

DISASTER PREPAREDNESS ACT

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when a disaster could be declared. A General Accounting Office study of this formula found that had it been used between 1980 and 1985, 61 out of 111 disasters would not have been declared, including a tornado that leveled three communities and left 65 dead in Pennsylvania. Fortunately, Congress held oversight hearings and pressured FEMA into abandoning the formula, but one still has to wonder how many "resources" were devoted to developing this elaborate formula to justify not responding to disasters.

Whether by accident or design, the

result of FEMA's "civil-defense-first" philosophy is that the agency devotes the bulk of its money and manpower to programs that will, hopefully, never be tested, and for which there will be nobody around to answer if they fail. In the meantime, FEMA could do itself and the public a favor by better preparing for less catastrophic but relatively common emergencies such as floods, tornadoes, hurricanes, and earthquakes.

Preparing an inventory of emergency response and rescue resources would greatly assist in accomplishing this, as well as provide a valuable tool for the entire emergency response community. At the very least, it would be a better exercise in disaster preparedness than debating the issue *ad nauseum* in conference and position papers. ■

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