TRAINING NOTEBOOK

PLACEMENT OF LADDER APPARATUS

BY FRANK C. MONTAGNA

Only truckies, and in particular the truck chauffeur, need worry about aerial ladder placement. Right? You as an engine company firefighter need only know how to put the wet stuff on the red stuff. Right? Wrong! Consider the following scenarios.

THE PUMPER

You are an engine company lieutenant. Late one night, you respond down a narrow street to a six-story multiple dwelling. Smoke is pushing out two fifth-floor windows. You have only two firefighters in addition to your chauffeur. There is a deep courtyard in front of the building, and you know this stretch will be a difficult one for your firefighters.

Ten feet before you reach the building, your chauffeur notices a hydrant. This is a lucky break. The next hydrant is way down the block. Your chauffeur noses the pumper into the hydrant and uses the preconnect 3½-inch hose set up for the front suction intake.

Positioning your pumper this close to the building reduces the amount of hose needed and allows for a faster stretch. It is less taxing on your firefighters, which means they can make a more aggressive attack after they stretch.

In a fifth-floor window a woman is inching out onto the narrow window ledge. The wind shifts, and she is obscured by heavy smoke. Instinctively, you look down the block for the ladder apparatus. Entering the block behind you is a 75-foot aerial device. Good, you think, they will get the woman. Your thoughts return to your job: getting the line into position.

You consider yourself a competent engine officer and aggressively lead your company in an interior attack, as you have done many times before. You do your usual good job, but this time it won't be good enough because you have made a fatal error: You failed to consider the placement needs and

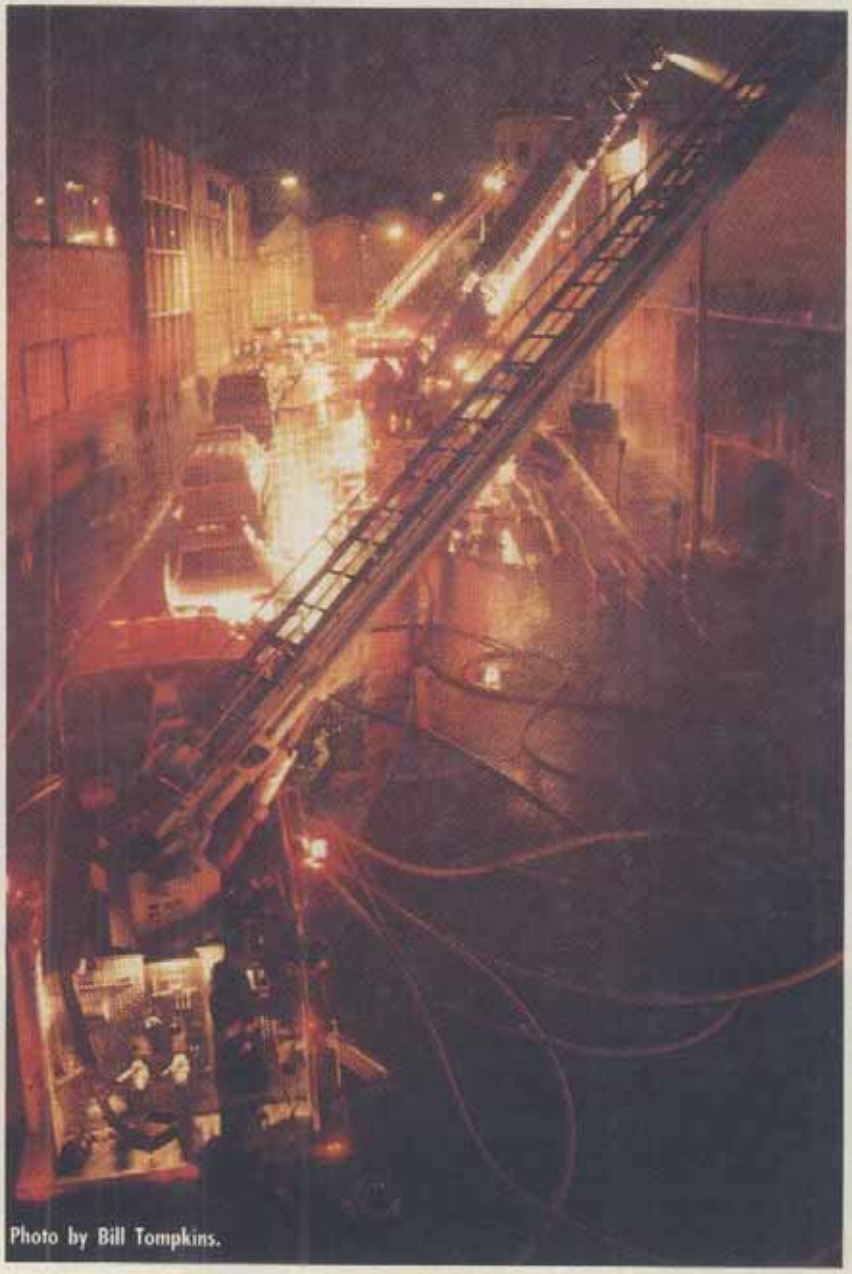

Photo by Bill Tompkins.

■ **FRANK C. MONTAGNA**, a 22-year veteran of the fire service, is a battalion chief with the City of New York (NY) Fire Department. He is an instructor at the FDNY Probationary Firefighters School, an officer in command in the FDNY Chauffeur Training School, and an adjunct lecturer at John Jay College in New York City. He has a bachelor's degree in fire science.

the limitations of the aerial device.

Yes, even as an engine officer, you must understand and be able to apply the principles of ladder apparatus placement.

The effective range of an aerial device is restricted by certain parameters of height from the ground and distance from the turntable. When possible, position the pumper away from the front of the building. Leave that position open for the ladder apparatus.

You encountered the hydrant before the building. By nosing into the hydrant and hooking up the front suction connection, you blocked the ladder apparatus from passing you on a narrow street. The reach of the aerial device is limited, and the deep courtyard—coupled with your pumper's position—prevents the rescue from being effected.

You could have avoided this problem by performing a reverse lay to the next hydrant: Stop momentarily and allow your firefighters to pull off the required hose; then direct your chauffeur to pass the building, set up on the far side, and stretch a supply line back to the hydrant. Considering the length of your stretch, your chauffeur easily would have gotten you water by the time you were in position. The truck would not have been blocked and could have taken a favorable position and effected the rescue.

Alternatively, you could have radioed to the first-due truck that it should not enter the block but rather go around and come in from the other side. True, that would have taken additional time, but it still would have allowed the truck to be properly positioned and perhaps save a life.

Positioning the first-due pumper in front of the building can make the ladder apparatus useless. This is especially true on a narrow block if the rear of the pumper is projecting into the street. If you must place the pumper in front of or before the building, position it parallel to and as close to the sidewalk as possible. In this way, the ladder apparatus may be able to drive past you or set up alongside and operate over the pumper, effecting the rescue.

Photo by Hank Sajovic.

Photo by Bob Pressler.

THE TRUCK

You are a newly trained ladder company chauffeur, and this is your first night driving your company's aerial device.

You follow the pumper out of the firehouse, responding to a reported fire with people trapped. Driving cautiously, you lag a few blocks behind the pumper. You can see the pumper turn into the block, and you hear the engine officer report over the radio that there is a working fire on the fifth floor.

As you turn the block, you see the fire building, a six-story multiple dwelling. The pumper is angling into a hydrant just before the fire building. It's a narrow block and you won't be able to pass him. You continue into the block, stopping just behind the pumper.

The moment you stop, the officer and other firefighters jump off the apparatus and head into the building. One firefighter hesitates and considers helping you set up your platform. He sees the woman in the sixth-floor window and sizes up your placement. He removes the roof rope and two life belts from the rear compartment and calls to you to follow him as he starts up the adjoining building stairs to the roof. The hazardous roof rope rescue now may be the woman's only hope. You realize your positioning does not allow you to use the platform, so you follow him up the stairs.

If vehicles or conditions in the street prevent you from taking a functional position with your apparatus, consider entering from the opposite side.

If you plan to go around the block and enter from the opposite side, the officer and other firefighters first

should get off the apparatus, walk to the building, and begin firefighting while you go around the block. If this is not possible, contact the incoming second-due truck and tell it to come in from the opposite side.

The decision to enter the block was made in a split second, before the officer could give directions. Once the apparatus is committed, it is time-consuming and hazardous to back out of the street in an attempt to go around the block. If a car or other apparatus comes in behind you, it may not be possible to back out. The time lost could be fatal to the victims awaiting rescue or to endangered firefighters looking for a secondary means of egress.

The engine company chauffeur could have avoided this problem by considering the needs and limitations of the ladder apparatus. The engine officer should have trained his chauffeur not to block out the truck or at least should have ordered the chauffeur to allow the truck to pass.

Knowing that he had an inexperienced chauffeur, the ladder company officer should have perceived the problem and should not have allowed the chauffeur to enter the block, or he should have radioed the incoming truck to enter from the other side instead. In addition, the chauffeur should have been adequately trained prior to allowing him to function as chauffeur.

NOT FOR CHAUFFEURS ONLY

It is clear that ladder placement training should not be restricted to chauffeurs. In the above scenario, a number of fire personnel could have made decisions that would have placed the ladder apparatus in a functional position, enabling it to make the rescue. It could have been done by the engine officer, the engine chauffeur, the ladder officer, or the ladder chauffeur. The ladder company firefighter who initiated the roof rope rescue understood placement limitations. He saw the platform was useless and took appropriate action.

The list of fire personnel who need to understand ladder placement can be expanded. What about incident commanders? As they formulate strategy, they understand the capabilities and limitations of the apparatus on the scene and responding. They should know what can be done with first-alarm apparatus and what additional apparatus may be needed.

The safety officer, too, must have a working knowledge of ladder apparatus placement, limitations, and capabilities. This knowledge is needed to determine what is safe and unsafe. The safety officer also must be able to suggest to the incident commander ways to remove dangerous conditions while allowing the apparatus to perform its function.

It is safe to say that all at the fire scene need to have knowledge of the placement, capabilities, limitations, and operation of ladder apparatus. At any given time, you may be the only person in position to effect a rescue with the aerial device. If you cannot perform simple aerial placement or use functions safely, a civilian or firefighter may pay the price. ■