

WHERE'S THE VICTIM?

BY FRANK C. MONTAGNA

The truck firefighter sized up the building as a three-story brick building. Exposure 2 was a similar attached corner building. Exposure 4 was a similar attached dwelling in a row of similar attached dwellings. The exposures would only present an extension problem if a fire wall were compromised. While forcible entry was underway on the entrance door, the engine company flaked out its hose and bled the line. Heavy smoke pushed from the now-open front door. The truck's outside vent (OV) firefighter reported from the rear that someone was trapped and hanging out the third-floor rear window on the exposure 2 side.

The fire on the first floor was lighting up. The engine attacked. Attempting a two-

pronged rescue attempt, the truck officer ordered a firefighter up the aerial ladder and into the third-floor window, while the truck officer tried to reach the victim via the interior stairs.

The OV firefighter reported that the victim was climbing out the window. As the heavy black smoke pushed out over the victim's head, the OV firefighter tried to calm him, unsuccessfully. If someone did not reach the victim soon, he would jump.

A truckie entered the third-floor window and searched for the victim. He reached the rear of the building but could not find him. Sticking his head out the window, the frustrated firefighter called down to the OV firefighter. Removing his mask, he shouted, "Where did he go?" The OV firefighter responded, "He is on the floor below you." Just then, the civilian lost his grip on the window ledge and fell to the ground three stories below.

Wait a minute—this is a three-story building. The firefighters had sized it up and were not mistaken. How then is it possible for a firefighter on the third floor to be on the floor above a victim who is also on the third floor?

WHAT YOU SEE IS NOT ALWAYS WHAT YOU GET

What you see is not always what you get, and what you do not know can hurt you.

This building is built on a hill that slopes from front to rear and has three stories above grade in the front and four stories in the rear.

The firefighters in the front could not see the rear and would not know that an extra story was there. The OV firefighter either did not notice that the front was a different height than the rear or assumed that everyone knew it was four stories in the rear.

At all fires, it is important that someone get a view of all four sides of a building and then report what he sees. He can report all is clear or that smoke is coming from a window on the exposure 3 side. He must alert all on the scene to any unusual aspects of the building. In this case, he should have announced the floor difference between the front and rear of the building. Other useful observations would include the existence or absence of a rear fire escape or balcony, an unusual building configuration or extension, structural defects, fire conditions, the need for a hoseline, and the presence of any trapped victims. If a firefighter is unable to vent an area or enter and search it, he should notify his officer or the incident commander, who can assign someone else to perform the function.

If everyone operating at the fire is not aware of the floor difference given in the above example, many problems can arise. Imagine the OV firefighter entering the

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When viewed from the front, this is a three-story building, with the grade-level floor the first floor.



However, when viewed from the rear, with the grade-level as the first floor, this is a four-story building.

building from the rear and finding a stairway that goes up only one flight. This brings him to the first floor when viewed from the front, exposure 1, but to the second floor when viewed from the rear, exposure 3. He conducts search operations on this floor and is searching the rear of the first

floor when he gets entangled in some bicycles stored there. The room is getting hot and approaching flashover. He calls for help and reports his location as the second floor rear. The firefighter assist team waiting in the street goes into action, placing a portable ladder to the second floor and searching for the trapped firefighter. Seconds turn into minutes, and the room flashes over. For a brief period, the trapped firefighter screams into his radio and then is silent. They find him after extinguishing the fire. He was rescuable when he called for help; but because of unclear communication, he is dead. Afterward, all wonder how this type of tragedy could be prevented in the future.

STANDARDIZED COMMUNICATION IS ESSENTIAL

At a fire it is essential that all on the scene speak the same language and have the same reference point. Standardized

communication is essential. For these buildings, the incident commander should determine the first-floor location and let all know which floor is so designated. But he first must recognize that there is a difference between the front and the back.

At an isolated house, the incident commander can walk around it, see the difference, and make everyone on the scene aware of the problem. If the building is one in a long row of attached buildings, it is not so easy. As mentioned above, someone should make this size-up and announce the results. Even if operating without a truck or an outside vent position, the incident commander still needs all this information, and someone has to get it to him.

Once informed of the problem, the chief must announce it and ensure that all on the scene are aware of the difference. If he announces at the start of the fire that the building has four floors in the rear and three in the front, how will the FAST truck be aware of the problem when it responds later in the operation? The officer in command must ensure all units responding are apprised of the problem.

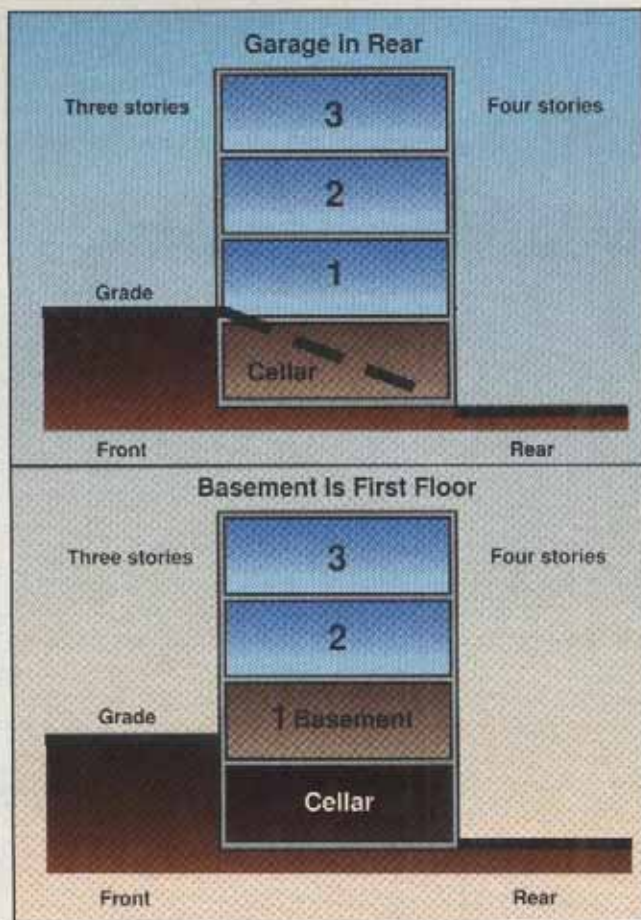
FRONT GRADE LEVEL AND FLOOR DESIGNATION

If a floor is one-half or more below grade, it is a cellar. If the first floor is at grade level in the front, the floor below it is the cellar, because it is fully below grade level. This is true even if in the rear it is fully above-ground. The building described above had three floors above a cellar in the front. The cellar was above grade in the rear.

If a floor is less than one-half below grade, it is a basement. Some buildings have a basement in the front (partially below grade) that is fully above grade in the rear. This basement can be designated the first floor. The second floor then is reached by a flight of stairs that sometimes ends on a front porch. Again, the location of the first floor must be established and announced.

Some buildings have a driveway sloping below the grade level in front of the house into the garage under the house. If it is less than half below grade, it is a basement. Designate it as the first floor. The second floor would be above the garage and be reached by climbing the front stairs.

In the example on the next page, the OV firefighter should have considered the rear entrance to the building an entrance to the cellar, not to the first floor. He should have counted the floor above this level as the first floor. The victim should have been located on the second floor of the building (that is, above the basement) when counted from the rear. The



(Top) The floor at least half or more below grade level in the front is the cellar, even if fully above grade level in the rear. (Bottom) A floor less than half below grade is a basement and is designated the first floor; the floor below it is a cellar.



The staggered window placement at the side of a building may indicate a split-level configuration.

these buildings. A row of these buildings can run uninterrupted for an entire block. As a result, there will be no access to the rear other than at the ends of each block and sometimes at one end only. This presents an access problem for the firefighter assigned to vent from the rear. It may be possible to access the rear through one of the adjoining build-

cars may prevent ladder placement. Trees or wires may be in the way, or awnings on lower floors may prevent ladder placement.

Don't forget that the firefighter may be too tired to raise the ladder alone by the time he gets it into place. It would be great if two firefighters could be assigned to this task, but the realities of staffing do not allow it. If a second truck is coming in, one of the second truck's firefighters can assist; but the wait involved for the second truck might be too long. The OV firefighter's venting job must be timed with engine company advance and often can't wait for the second truck.

TACTICAL CONSIDERATIONS

Taking the following actions will help ensure that the scenario described at the beginning of this article does not occur at one of your responses:

- Identify problems early in the incident.
- Announce the floor designation and other special considerations to all present at the incident and to all later arriving units.
- Count floors from the front of the building, and count a basement as the first floor. It is important that everyone use the same floor numbering system.
- Anticipate that a cellar may be below grade. A small window at grade level in the front or rear of these buildings may indicate a cellar, but it may be hidden by bushes. If the window is in the front, the cellar may be at grade level in the rear. If the window is in the rear, the cellar will be below grade level in the rear. This means it will be two levels below grade in the front.
- Anticipate the possibility of split levels on each floor. What seems like a two-story building may actually be a four-level structure if each floor is a split level. A three-floor building could have six levels. Add a

OV firefighter entangled in bicycles should have reported his location as first floor rear.

Various configurations result in a height difference from the front to the rear of a building. The building may be built on a hill, or the rear of a building may have been excavated. Building a partial floor on the rear half of a building's roof will result in a height difference when viewed from the front and rear. In any case, those in the front will be unaware of the height difference unless informed of it by the firefighter conducting the rear survey.

A building may be one story in the front and two stories in the rear, two stories in the front and three stories in the rear, or three stories in the front and four stories in the rear. In New York, some apartment buildings are five or six stories in the front and seven or eight stories in the rear. Regardless of the heights involved, the problem of communication remains the same.

BUILDING ACCESS CONSIDERATIONS

Access problems may be associated with

ing; but if no one is home, this requires forcible entry and will take time. Even if a firefighter can get through the adjoining house, he probably won't be able to bring a 35-foot extension ladder, which is needed for heights of three to four floors and might not reach the fourth floor at all. Typically, it is not a straight run from the front to the rear of these buildings, and the ladder doesn't bend. Even a smaller ladder might not make it through the house interior. Having no ladder or a short ladder severely limits the area the OV firefighter can vent and may preclude above-grade search or rescue by him.

One firefighter carrying a 35-foot extension ladder is a neat trick under ideal conditions, but to take it through a house is tough. The alternative is to go to the end of the block to the rear alley entrance and then back to the fire building, which may be a long haul. It may be necessary to climb over several fences separating yards to get to the desired position; and when the firefighter gets back there, he may not be able to raise the ladder. Often, residents use the rear for parking, and



At a fire in this building, there was confusion as a result of the split-level layout of the second and third floors. Note: The garage is on the basement level and is designated as the first floor.

cellar, and there will be five levels in a two-story building and seven in a three-story structure. You can imagine the difficulty in determining your location in such a building. With a heavy smoke condition, a firefighter might easily mistake the upper level of a split level for the next floor. The upper level is usually reached via a short stairway containing three to six steps. A firefighter should count the steps as he goes up.

There are several indicators of a possible split-level. Observe the corner building when entering the block; it might reveal a split-level configuration if the windows on the side are not lined up horizontally but staggered at half levels.

A side parapet or roof that is higher toward the rear of the building is another possible indicator. This type of building can be confusing without a fire; but add a fire, smoke, and trapped civilians or firefighters, and there's a disaster in the making.

- Interior stairs may connect any combination of floors. A room in the basement may be accessible only from the second floor, whereas the rest of the basement is accessible from the first floor. A stairway might run from the top floor directly to the cellar.

- The OV firefighter is key to this opera-

tion and should communicate the problem early in the operation. The firefighter assigned the OV position should bring the appropriate ladder with him and, when practicable, initiate VES on the upper floors.

- A firefighter might be able to recognize the floor difference problem from the roof position. From there, he may be able to vent the top-floor windows and even effect a roof rope rescue. If there is nothing on the roof to tie the rope to, tying it to the aerial ladder or aerial platform might be considered. Another option is to cut a hole in the roof and tie off to the roof joists. This will take time and may not be practicable in an emergency.

- All should take extra care to correctly identify their location at all times and to use correct floor designations in all communications.

When gathering information from residents, realize that they may have their own floor-numbering system, which may not match that of firefighters. Resident information must be interpreted and translated into the firefighters' floor designation. For example, in an apartment building, occupants may call the first floor "the lobby," but the incident commander may call it the "first floor." This problem can be compounded by the elevator-numbering system. If you see a fire on the fifth floor and push the fourth-floor button on the elevator, you could end up on the fifth floor. The lobby might be floor one; the fourth floor might actually be the fifth floor.

This is not a new problem. These buildings have been around for a long time and have needlessly claimed firefighter lives. You may have one old wood-frame building in your district with this configuration, or you may have blocks of new townhouses built like this. Knowing your district will alert you to the presence of such buildings. An alert OV firefighter and a good size-up will warn all on the fire-ground of the problem, and precise communication will prevent tragedy. If you are aware of this type of building in your district, you should preplan and drill on that preplan. Being aware of the problem in advance will decrease, if not eliminate, the confusion.

It really comes down to simple attention to details. Remember, when you discover a construction feature out of the ordinary, such as the front-to-rear floor difference, it must be announced so all are made aware of it. Paying attention to details results in an accurate size-up and accurate communications. Do it. It saves lives. ■

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