THIS WEEK IN TRAINING

TACTICAL CONSIDERATIONS FOR FIRES AT 450 MORELAND RD

This week's article is a follow-up to last week's regarding the Fire Evacuation Plan for 450 Moreland Rd. This week will only contain general tactical considerations for a fire in this building due to the many scenarios that are possible there. Anything written here are simply things to *think* about in the event of a working fire…

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TACTICAL CONSIDERATIONS FOR FIRES AT 450 MORELAND RD

Setting Up & Sizing Up

Where you set the first engine and truck up can very well make the difference in how much property is lost .That being said, it becomes a priority to get your first engine in the proper position to attack the fire in the most efficient manner. We know there are 2 hydrants located on the property. One is in the front on the northeast corner of the A Wing and the other in the small parking lot at the end of the south driveway across from the interior courtyard. The location of the fire will dictate which hydrant to hit and where to set up.

Outside Room Fires Should the fire be located in an outside room in the A or B Wings, it likely will be the best idea to hit the hydrant in front and set your engine up nearest to whichever door or stairwell that you are going to use as the attack door/stairs.

Wing A will be the easiest fire to set up for. If you're going to use the A1 stairwell (Fig1) you'll be able to steamer the hydrant on that northeast corner of the building and the attack line can go directly into that door. If you're going to use the A2 stairwell door, you can lay out 100' and take the 25' section and add it on and you'll be fine. You can also go into the courtyard parking lot and use that hydrant using the A2 stairwell.

Wing B has only one stairwell, "B1" and it's on the eastern end by the front desk lobby (Fig1). So with complete certainty, you would want to hit the hydrant in front on the corner of the A Wing. Unless for some reason it's blocked off, this would be your attack stairwell. The only other stairwell is on the northern end of the C

THE FIRST LINE

It's important we get the first line right. Stretch quickly and correctly, not just for a fire in this building but any fire. Do hands-on training on the basics as often as you can. It doesn't have to be a drill, just take a couple of guys and stretch dry down into the basement of the station. In order to do it right you must practice…

"Let No Mans Ghost Say His Training Let Him Down"

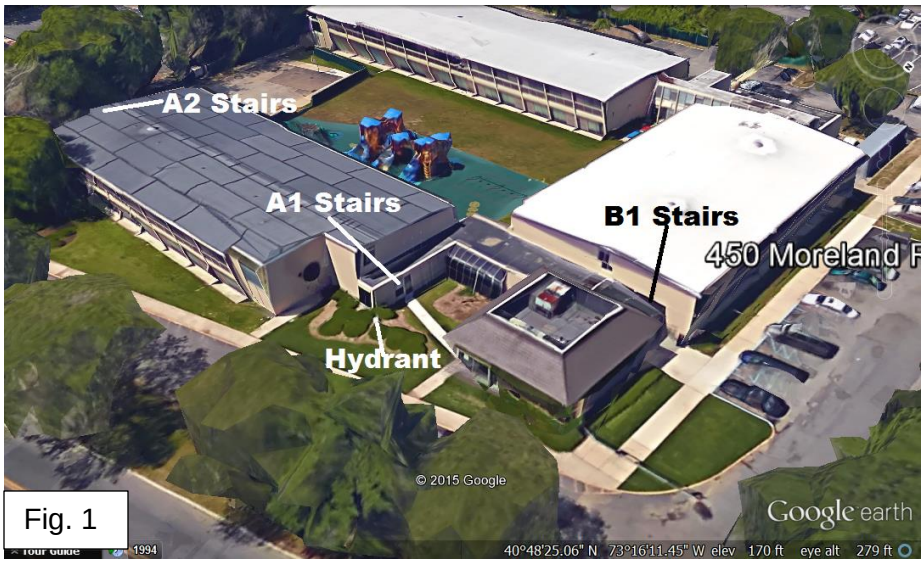

Fig. 1

Wing but it's a long stretch from anywhere you set up, with a lot of turns making it manpower rich, labor intensive and time consuming.

Wing C is different in that it will be a much longer hose lay from the hydrant in front. There are two options here. For fires on the northern half, laying in from the front would be the best option but for fires on the southern half, it might make sense to go into the southern driveway and hit the hydrant in the courtyard and use the C2 stairwell as the attack stairwell (Fig2).

Inside/Courtyard Side Fires

Wing A fires on the courtyard side can be handled setting up in front and hitting the front hydrant, or setting up in back hitting the courtyard hydrant. This will depend on where in the wing the fire is, same as exterior fires. If the fire is on the north end use the front hydrant and the A1 stairwell. If the fire is on the south end, use the courtyard hydrant and use the A2 stairwell. An important thing to note is remember that the first two rooms on the north end on the first floor of this wing on the courtyard side are a daycare.

Fig. 2

Wing B fires pose different problem in that if you want to use the courtyard hydrant, the stretch for the attack line is going to be way too long. Fires in the B Wing should be handled by hitting the hydrant in front and stretching through the B1 stairwell doors. It makes no difference what end the fire is on.

Wing C for an interior courtyard fire the options are pretty much the same as if it were an exterior room fire. The hydrant you hit will be dependent on the stairs/door you're going to use for the attack. For the south end, use the courtyard hydrant. For the north end use the front hydrant.

Front Offices and Rear Utility Area Fires

These two areas of the building are the only portions that do not have a concrete ceiling/roof. Theses sections are steel truss and can fail just like any other steel truss buildings. Fires in these areas should be fought accordingly. For any fire in these areas, the front hydrant should be used, it's closest and easiest to hit. They are both only single story and vertical ventilation is possible.

Set-Up/Size-Up and Tactical Considerations

The Engine

Chauffer's need to think about how that supply line is going to lay out and also if you're going to block out every other vehicle trying to get passed you. It is not the widest parking lot so if you're not tight to the building side, the rig, and the supply line sticking out of the side of your rig could block off the entire lot past your engine. You also need to remember there will be a TON of people in the parking lot when you pull in.

The Hydrant firefighter needs to think about how the supply line is going to lay out as well. You need to watch how it is coming out of the bed and where it is landing. If it's a short lay, you should have time hook up, chase it back to the engine and go back to the hydrant and still get it charged with no delay, If the engine goes all the way around the corner to the C Wing, chase it as far as you can and the chauffer will have to get to what you can't during the hook up. If a 5" supply line is utilized, and most likely given the size of the building, it will be, once it's charged you're not moving it alone. If you're only going 100', it might be a good idea to hand stretch back to the hydrant so that you can control where it's going to be when it gets charged.

Nozzle/Back-up/Control. These three firefighters will make or break the fire. Stretch off the dead bed in the rear and know how far you have to go *before* you stretch the line. Get the right amount of lengths and make sure **ALL** of the kinks are chased out. Pull as much charged hose needed into the building and lay it out nice so there's no resistance when going down the hall (a little extra wouldn't hurt). It needs to be enough to make not just the room, but through the room to the exterior of the room. Think about bringing enough to go at least one room past the fire room. The only thing worse than screaming for "more line" because it's wrapped around corners and/or you didn't bring enough into the building with you before you made the push, is, coming up short all together. You will be embarrassed and pissed off…guaranteed. If you don't have enough manpower for the control man, the nozzle man should put the nozzle down and help hump hose. In general, with a stretch like this you may have to do it no matter how

many people you have. No one's going to steal the nozzle from you…well…I *might*…but if someone does, *just turn their tank off or unplug their low pressure hose*…just kidding, **Don't do that**! Ultimately, working as a team, constantly communicating and helping each other out will get the job done much more efficiently. It is important to remember that if your stretch brings you through a set of magnetic fire doors, you must chock the door completely open, a hinge chock would be best so it can't be kicked out. These doors close in a scissor effect one door opens one way and the other door opens the other way. If its manpower feasible, leave a firefighter at this door to keep it from closing. These doors are very heavy and if a door closes on your line, the scissor effect is probably going to wedge your line between the two doors not allow you to advance any further. Always remember too that no matter which direction you're going down the hall, the right hand door will always open away from you. If these three firefighters get this stretch right, this fire *should* go very smoothly.

Officer's need to look at the location of the fire and make a decision as to how you want to set-up and attack the fire. You **MUST** bring the **TIC**, no if's and's or but's! The TIC will not only enable you to see if there are any victims overcome in the hall immediately, it will also help you identify the fire room by pointing the TIC at the doors as you go. The door itself may not be superhot in color because it's a steel rated door but, the edges of the door will be and you'll likely have heat escaping through the sides of it as well. Know the layout of the building before you go in, take a quick walk inside before the line goes in, maybe you thought initially it would be better to go one way and when you go inside as the line is getting set, you see a better way, maybe it's less turns… whatever, get in and take a look. If the fire is in a courtyard room, there are multiple doors you can go through to get out into the courtyard so you can get a look at the conditions before you go down the hall. Help hump hose. Depending on where this fire is, it's likely going to be a long stretch, you have to help the nozzle team with the line. These are all basic size-up parameters that need to be re-enforced because we're not doing this every day.

The Truck

Search and Rescue will be your priority as always. Yes the IC is supposed to get a list of missing occupants from the Head Fire Warden but that doesn't mean it is going to be correct. In a situation like this human error can be a big factor. You're going to have to search the floor above and the rooms on either side of the fire room as quickly as humanly possible. In the event of an actual fire in this building I would almost say with 100% certainty there are going to be people on balcony's and taking refuge in their rooms due to the smoke in the hallway. This makes ground ladders a crucial element upon arrival. The quickest way to search the rooms on either side of the fire room is to take the glass slider out and enter right from the exterior. You'll want to use this method only if and when water is being applied to the fire. The obvious reason for this is you will definitely cause extension to that room via the exterior if there's no water on the fire yet. Whether or not the glass slider has failed in the fire rom does not make a difference as it could fail after you've entered the other room to perform a search. Otherwise

you're going to have to go down the hall and force the doors from the inside. If you're an interior search team, remember to bring the rabbit tool and the TIC, both are a **must** for obvious reasons.

Ventilation of this building could be a tricky endeavor depending on things like location of the fire, wind conditions and whether or not the fire room glass has failed to name a few. In a building like this, more than ever you need to think about the flow paths we create as we enter and vent. If the fire attack is undertaken from the interior hallway, those open doors have created a flow path from the fire room to the exterior, especially if the door to the fire room was somehow left open. If this is the case the heat and smoke will be traveling your way. If you decide to enter from any way other than the attack stairwell/doorway, keep in mind you need to control those openings made in order to keep from creating another flow path. V.E.I.S. Vent Enter **Isolate** and Search which means put closed doors between you and the fire. This building has a great potential for a wind driven blow torching fire, keep that in mind at all times. Horizontal ventilation will be the same as always, vent nearest the seat of the fire and only vent in conjunction with water being applied to the fire. https://www.youtube.com/watch?v=3NJEz4PUYNk In the case of vertical ventilation, unless you bring some C4, you're not going to vertically vent this building. The floors and ceilings are all concrete…so that's off your plate. The bottom line is, think before you vent. Ask yourself what may or may not happen when you make a hole in this building and just make sure when venting for life, isolate, when venting for fire, nearest the seat is best and of course, wait for that water to be applied. You must use "Tactical Patience" when venting, just like the guy in this video https://www.youtube.com/watch?v=d8iDJ9Q53lo&feature=youtu.be

Some Things to Consider and Remember

After Chief Babajko thought about tactics for this building he came to the realization that the scenarios are too many and the variables too great for each scenario, there is no real way to pre-plan a fire in this building. However, there were some things he wanted to add into this piece. Things like if you know you're not going to have a wind driven fire, you might want to force a door on the opposite side of the hall, before you make your attack, in case you have to find an area of refuge in a hurry. If there is a possibility of a wind driven fire, then you need to force a door to a room on the upwind side in case there is an open glass slider or windows in that apartment. Being upwind should keep you from drawing the fire too you. Those two things being said, either way you decide, make sure you keep the door closed behind you, even if that means having to hold it closed manually because the integrity of the lock has been compromised during forcible entry. https://www.youtube.com/watch?v=_BYdPK2TZAc&list=PLvOkwnSDzshprTSgR3q0LGH7xGQPJNaXE

One more thing to think about is there are going to a possible 400 occupants outside watching, 300 of which will likely have a cell phone. This fire is going to be on YouTube as it is

happening and for sure on the next news cycle on television. You definitely don't want to be on either, doing something stupid or wrong…just a thought…

If there is a fire in this building you are almost definitely going to have civilians on balconies and taking refuge in rooms. The first engine may not even get to stretch the first line because they may be plucking people from balconies with ground ladders right away so the 2nd due piece may be the ones stretching a line.

Another issue with this building is, every room door is hinged on the same side as the bathroom. It doesn't matter if the hinges are right or left, the bathroom will be on the side of the door room hinges. This means when you open the door to the room, you could potentially pass the bathroom if you don't check behind the door after entering. You could pass a potential for a victim or even pass where the fire is. So the bathroom door will always be behind the room door when it is opened.

Ok so here it is, I'm going to say it and some of you are not going to like it…but, something to *consider* is, should the glass door fail prior to attacking the fire and you have fire venting out of this five sided concrete box, the fastest, easiest and most efficient way to extinguish this fire is by starting from the exterior and working your way in through that open wall to finish it off, especially if the fire is on the first floor. A second floor fire will be a *little* more difficult because of the angle but can still be done. Think of all the time, energy and manpower you can save by doing this. Remember the fire will likely only extend from the exterior, the room door is a 3 hour fire rated door and it is self-closing but even if the room door gets left open, because your knocking the fire down at the seat, it causes any heat and fire going out into the hallway to cease as there is nothing burning anymore. That heat and smoke in the hallway that is coming from the fire room is going to cool immediately upon the application of water to the fire. Now, I realize it's not as fun, it's not glorious or maybe as manly, but it ***is*** much more efficient. The faster the fire goes out, the faster safety is achieved on the fireground for firefighters and any potential victims inside. This doesn't mean you don't still have to stretch a line into the building and into the public hall, but it can be the second line. Now I know…I know, some of you not only don't like this idea and in fact you hate it…but the fact is, this is not a structure fire, any fire in the living wings of this building will always be a room and contents fire, even if its two or three rooms. As previously stated, it's Yaphank with a wall missing and furniture instead of pallets, and, concrete does not burn.

I'm **not** saying this is *what we have to do, or even should do*, but it is a viable option and this is just my opinion. The Incident Commander will make the decision on how to go about fire attack. It's just another possible tactic. I do believe however that if it is a wind impacted fire, it's better to attack the fire at its seat with the wind at your back rather than to try and fight your way down the hallway in the flowpath of a blow torching fire. This is the reason why the FDNY now has a High Rise Nozzle or as I have heard it referred to as "The Chicken Nozzle." Call it what you want, it works and it will save lives.
https://www.youtube.com/watch?v=4AOBg4E7Gk8

Conclusion

The main things to remember for this building is each fire would be completely different from the next. Watch the wind, it can cause serious problems. Which hydrant you hit is dependent on where the fire is. You must do a good size up before you enter…that's for everyone, not just officers and chiefs. Bring the printout with you; it has floor plans for both floors. The best possible way to fight a fire in this building is to know the layout beforehand, then look at and even bring in with you the floor plans from the printout just to re-enforce what you already know. You might be able to at least start to come up with what you think the plan may be on the way in on the rig. Getting the first line right is the key to any fire in this building. Do that right, deploy it in the right spot, stretch efficiently and a fire in this building will be a ham and egger. There are so many things you *could* do such as hitting the courtyard hydrant, running a supply line to a manifold in the courtyard or even "Flying the Y" which is basically bringing your own standpipe into the building. These options are all well and good but they take manpower and task specific training. I think keeping it simple is the best option, the faster the fire goes out the better it is for everyone. Slow down and think about what you're going to do before you do it. No matter what it is, think first, listen to the IC, come up with a plan and execute that plan.

Everything previously discussed is an option, just things to keep in your head. I said it before and I'll say it again, if you know the layout of the building, the hydrants doors, stairwells and hallways beforehand, you have already won half the battle…

Thanks for reading and have a safe week…

Fire Marshal Digiose