

#### ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD AGENDA

Wednesday, August 28, 2024 | 1800 Hours | COB-McIntire, Room 246

	Agenda Item	Name
I.	<ul> <li>Call to Order</li> <li>A. Moment of Silence</li> <li>B. From the Board: Matters Not Listed on the Agenda</li> <li>C. From the Public: Matters Not Listed on the Agenda</li> </ul>	K. Alibertis
١١.	Approval of Consent Agenda A. June 2024 Minutes	K. Alibertis
Ш.	Committee updates - A. Executive Committee B. Training Committee C. Operations Committee D. Recruitment & Retention E. Quartermaster F. Apparatus Committee	See Attachment See Attachment No Meeting See Attachment No Meeting No Meeting
IV.	Unfinished Business – A.	
V.	New Business – A. Townhouse FOG B. High-Rise FOG	D. Puckett D. Puckett

#### ALBEMARLE COUNTY FIRE/EMS BOARD FEMS BOARD MEETING WEDNESDAY, JULY 24, 2024 – 1800 HOURS

A regular meeting of the Albemarle County Fire/EMS Board was held on Wednesday, July 24, 2024 at 1800 hours in Room 246 at the County Office Building–McIntire Road, Charlottesville, Virginia.

<u>The following members were in attendance:</u> Dan Eggleston, Albemarle County Fire Rescue Virginia Leavell, Charlottesville-Albemarle Rescue Squad Gary Dillon, Crozet Volunteer Fire Department Todd Richardson, Earlysville Volunteer Fire Company George Robinson, East Rivanna Volunteer Fire Company George Stephens, North Garden Volunteer Fire Department Timothy Cersley, Scottsville Fire and Rescue Greg McFadyen, Seminole Trail Volunteer Fire Department Dustin Lang, Stony Point Volunteer Department Kostas Alibertis, Western Albemarle Rescue Squad

#### Others in attendance:

Heather Childress, Albemarle County Fire Rescue Christina Davis, Albemarle County Fire Rescue David Puckett, Albemarle County Fire Rescue

#### I. Call to Order

Chief Alibertis called the meeting to order at 1802 hrs.

#### A. Moment of Silence

Participants observed a moment of silence.

#### B. From the Board: Matters Not Listed on the Agenda

Chief Alibertis accepted additional items for the agenda.

## C. From the Public: Matters Not listed on the Agenda

There were none presented.

# II. Consent Agenda

A. June 2024 Minutes

**MOTION:** Chief Stephens motioned, seconded by Chief Richardson, to approve the Consent Agenda as presented. The motion passed unanimously (10-0).

Ms. Davis indicated that the Training Policy in the packet is the older version and she would provide the newer one on the screen and send it out after the meeting.

#### III. Committee Updates

- A. Executive Committee
- **B. Training Committee**
- C. Operations Committee
- D. Recruitment & Retention
- E. Quartermaster
- F. Apparatus Committee

#### IV. Unfinished Business

Α.

#### V. New Business

#### A. Training and Registration Policy

Chief Childress reported that this policy had been in the works for some time now, and the only substantive change from the previous version is the proposal for rotation through the waiting list so that each department has an opportunity to pull someone from the waiting list up into the class. She noted that this would allow more equitable access to classes, particularly Firefighter I and EVOC.

Chief Childress stated that Seminole has a strong opposition to the policy, but she emphasized that this is an attempt to be equitable across the system so that every department has opportunity. She said that one of the last issues they had discussed previously was consulting departments when choosing from the waitlist as opposed to picking the first person from the list, to give stations that discretion. She added that this would provide departments with an additional slot after the initial two guaranteed spots.

Chief Alibertis commented that this was intended so that stations might provide someone who was more ready for the class.

Chief McFadyen asked if this should be deferred to allow more time for review, since the older policy was distributed in the packet.

Chief Alibertis responded that given the minimum level of changes—with just one substantive change—they could probably proceed.

Chief Dillon said that the policy was discussed in the Executive Committee, so none of this is a surprise.

Chief Alibertis emphasized that the only difference from the one that is in print is the one single line.

Chief McFadyen stated that there were more changes between the policies than just one sentence.

Chief Childress said that while it's more than one sentence, it is just the waitlist issue.

Chief McFadyen stated that in the older version, there is no reference to LODA—but there is in the newer version.

Chief Dillon emphasized that they could talk about it now, including discussing the differences, and vote on it tonight instead of kicking the can down the road. He added that there was no need to delay, as this has already been going on too long.

Chief McFadyen pointed out that they were given an advanced copy, whereas others may not have seen it.

Chief Childress said that the specific piece missing was that you wouldn't be able to be accepted officially into the class until you got your LODA physical. She stated that this is already an existing policy in LODA, and they simply incorporated that verbiage into the policy. She added that they were trying to avoid last-minute chaos because people haven't gotten their physical or scheduled one.

Chief McFadyen asked if this could be any class—CPR, EMT, etc.

Chief Childress clarified that it would be any ACFR-sponsored class.

Chief Stephens asked how this would affect filling a class slot with someone outside of the locality and how they would verify if they'd had a LODA physical.

Chief Childress responded that ACFR requires verification that someone is covered by another department's insurance before they are allowed in the system, as they cannot control how other localities handle their rules regarding who is eligible to sign up. She noted that ACFR does require a COI from them.

Chief Alibertis stated that another issue they both have is that a fair number of individuals who take the summer EMT course are not affiliated.

Chief Childress confirmed that if they're not affiliated, there is no requirement.

Chief Alibertis said that if someone wants to take the CPR class and isn't a member yet, they don't have to have a LODA physical.

Chief Childress reiterated that this just reinforces the existing policy and remind people that they have to do a LODA physical.

Chief Dillon commented that they want to make sure that everyone gets a LODA physical, but this policy doesn't necessarily grab every person getting one

Chief Childress agreed but said there are a few other prongs such as IDLH—and while it won't catch everyone, it will catch a lot of people. She noted that there are currently 80

people in the system who have not had a LODA physical. She also said that there are a few other measures they are taking to confirm this, including issuance of gear.

Chief Lang asked if this incorporated the people who were grandfathered.

Chief Childress confirmed that it did.

Chief Eggleston noted that most of the people without physicals are those who onboarded during Covid.

Chief Childress agreed, noting that there is a mention in the language that it's "After July 1, 2014," so you don't have to go back and get a physical.

Chief Lang asked whether there was a built-in window for those who signed up prior to a class starting but it wasn't possible to get a physical before then.

Chief Childress responded that if you're signed up a few months ahead of time, Ms. Davis has communicated with Work Med—and for the January class, they will have Life Scan to do employee physicals on that day. She added that the predicament being addressed currently is the timing, as VDFP has changed the number of days that the class closes, and they need to give enough time to fill the slots if someone comes throughout without their physical.

Chief Childress explained that at the recruitment and retention level, they are encouraging people to communicate if they are having trouble getting their physicals. She said that Work Med has agreed to provide two spots per day in August, September, and October, which will help Seminole with the big recruitment efforts at the UVA activities fair, etc. She encouraged the chiefs to reach out if they run into issues with getting physical scheduled, noting that they have several different options now but have not yet looped in MJH/Sentara.

Chief Alibertis said that he had wanted to use Augusta but the process was onerous you have to schedule an appointment, notify the station that they've made the appointment, then the station has to contact ACFR. He said if they could streamline that process, it would be a lot easier for his station.

Chief Childress agreed and said that none of the options is perfect, but they have gotten better and she feels there will be a long-term solution soon.

Chief McFadyen stated that Seminole is experiencing 26 days on average before they get appointments—from the time they call to the time they actually get an appointment—which is still down from 75 days. He noted that they were trying to push through about 6–8 people per month, and the other challenge with Work Med has been the unpredictability of having an X-ray technician present, which creates the need for yet another appointment.

Chief Alibertis asked if there was any further discussion specific to the Training Policy and LODA.

Chief McFadyen responded that Seminole's primary concern is how the pick order works, explaining that the station took the current Firefighter I course and ran it through the existing policy and the new policy to see how it would affect the station. He reported that with the current policy in a typical 24-person class, there would be one WARS person, three East Rivanna, three Crozet, three Stony Point, and 14 Seminole; with the proposed policy by date order, there would be two Stony Point people (registering May 22 and July 8) who had a higher priority in the class—effectively kicking out two Seminole people who registered in April and early May.

Chief McFadyen stated that the way the pick order goes, Seminole is always last.

Chief Childress dissented with his assessment, stating that the first person on the waitlist is that station's slot.

Chief McFadyen agreed but said that it would then go to ACFR, then WARS, then CARS.

Chief Childress said that it would depend on the list order as to who came next.

Chief Alibertis asked if it was date order or station order, as his understanding was that it was the latter.

Chief Childress confirmed that he was correct.

Chief McFadyen said that wasn't what was emailed by the County.

Chief Childress explained that it would go by the list, and the departments have the spot and get to choose who goes in—so the date doesn't matter.

Chief Dillon said that for illustrative purposes, the date closes, you fill the class, and now you have a waitlist; if someone drops out of the class, you will now go to the waitlist. He asked how you decided which station went first off of that waitlist and whether it was the next person who registered, according to date.

Chief Childress responded that the first one off the waitlist is the first one who was on the waitlist, and the department had the option as to who to send.

Chief McFadyen noted that every station would get an opportunity each round, then it would reset for the next round.

Chief Dillon gave an example that if slots 4, 5, 6, 7 happen to be Seminole since they all registered at the same time, they would only pull 4 (one person from Seminole), then circle back through the list.

Chief Eggleston noted that the class limit was now 30, so there was a high likelihood that everyone would get in.

Chief Childress said if they applied the new policy, four people would be able to get in across all firefighter classes.

Chief McFadyen replied that her comment just alluded to Seminole's point that pick order doesn't matter, timing doesn't matter—capacity matters, and they need more Firefighter I and EVOC slots. He emphasized that this policy change was a Band-Aid on a problem, and they needed an actual solution that supported capacity.

Chief Dillon said that he disagreed with part of that and explained that his primary focus with this policy has been equity, and this proposal is more equitable. He stated that he is more comfortable with every station having a chance.

Chief McFadyen responded that there is four months to sign up for a class.

Chief Lang said that his issue was that all of Seminole's people would sign up on the first day, and if his person registers two months after the course opens, he might not get in because Seminole wants 15 people in.

Chief McFadyen pointed out that he has people registering in July as well, and he isn't expecting them to get in—but it's worth it for them to be on the waitlist.

Chief Alibertis commented that they are going around in circles with this, and the design of this is meant to be equitable. He emphasized that WARS has the same issue with EVOC as Seminole does with Firefighter I, but this is a way to be fair because it brings people off of the waitlist in a fair order, and it's up to the station to have that latitude. He added that they can address he capacity issue in other ways as well.

Chief Leavell stated that this is the foundation they need to increase capacity, and she has not run the numbers to see exactly how the policy impacts this.

Chief Dillon commented that this isn't anything personal against Seminole, and going solely on the date people register isn't equitable—especially in light of internet access and the timing of members joining. He acknowledged the impact on Seminole and their frustration, but he was looking at this from the perspective of what as best for the system, as they still all needed engines from other departments.

Chief Alibertis said that WARS is in the same situation, and they have three people on the waitlist for EVOC.

Chief Leavell noted that CARS is hosting quarterly EVOC classes now.

Chief Eggleston emphasized that they are trying to eliminate the "Ticketmaster" approach to class registration, which isn't fair across the system. He said that it is helpful to have the additional slots in classes, but he can't do that with the current classes already scheduled. He commented that this is about as equitable as it can be at the moment.

**MOTION:** Chief Dillon moved to accept the Training and Registration as presented in the meeting and shown on the screen. Chief Leavell seconded the motion, which passed 9–1, with Chief McFadyen dissenting.

#### **B.** Garden Apartment FOG

Chief Puckett reported that he had emailed information out about the FOG but would point out that this includes a recommendation for a response-level change for commercial buildings, and there was a typo that didn't update the effective response force number of 21 as it was in 702.3, the overview, to that same number of 21 in 702.5, the dispatch plan.

Chief Puckett explained that for multi-family structures such as Garden Style Apartments, this would raise the number to four engines, two trucks, ambulance, and chief—which is consistent in Central Virginia and Northern Virginia based on the amount of work and number of people impacted who may need to be evacuated or rescued. He added that specifically for ACFR, the concentration of resources means that it takes longer to get somewhere, which impacted the townhouse fire in Crozet and the Garden Style Apartments on Commonwealth Drive, where they had to call for an additional truck to have one on each side of the structure.

Chief Puckett noted that in their packet was also an updated reference guide/cheat sheet, with an addition under "type of structure" to include an assignment line to make it easier to see what response they should be getting. He said that they would also be updating this for high-rises, with a slightly higher assignment level.

Chief Lang asked if the second truck was coming from the County or the City.

Chief Puckett responded that it wasn't in their current MOUs, so they would need to discuss whether they wanted to expand that.

[inaudible question asked]

Chief Puckett responded that they discussed this internally, and they ended up with the approach of automatically getting a second ambulance if there is a fire with entrapment, but you would have to request a second ambulance for fires without entrapment.

Chief Dillon asked what feedback they had received from the committees on this.

Chief Puckett replied that they reviewed this at the committee level, and some people provided feedback by email, but there was limited input. He noted that the Executive Committee had reviewed this last month and had no real feedback.

Chief Eggleston commented that they reached out to other departments to assess their effective response force, and ACFR was slightly below that.

Chief Puckett confirmed that they are slightly below, and one of the factors considered in those is whether there are specific staffing levels on the units—and ACFR is assuming three people on all of their units.

Chief McFayden asked if he had the opportunity to evaluate this based on cross-staffing and other measures.

Chief Puckett responded that he had not, but he had shared with the group that there were questions about truck units and cross-staffing. He said that they cannot say when to use cross-staffing or when not to from a response plan perspective, but they can prioritize what to pull first. He said he had suggested following engine, truck, engine, truck, and then the rest of the engines. He stated that ideally, they want the first due engine in there first, as water on the fire is the best thing they can do in most cases, followed by a truck to have access and start a search. He noted that he would prefer a second engine to complete the water supply, versus a truck that may not be helpful at a hydrant that is a distance from the building.

**MOTION:** Chief McFayden moved to accept the FOG policy as presented. Chief Dillon seconded the motion, which passed unanimously (10-0).

Chief Puckett said that he would incorporate a month ahead effective date so stations have time to communicate it to personnel.

Chief Puckett also stated that they would change their commercial response package in the short term, and as they get into phase two with fire call types, it would be dispatched as structure fire-multi-family, structure fire-commercial, and structure fire-high-rise.

#### C. Miscellaneous

Chief McFayden announced that it was raised in the Apparatus Committee to review the lease replacement schedule, and the committee has effectively said that this needed to be handled at a higher level. He said that he is requesting a FEMS Board work session to discuss the schedule.

Chief Alibertis stated that he had talked to Chief Walker about this, as they used to have an annual review of this but haven't done that for a number of years.

Chief Puckett responded that he would work on getting a draft out for review, but the process in question was based on outside maintenance before they had their own shop. He said that they now have better data and assessment of those vehicles.

Chief Alibertis commented that to him, this was even more reason to have an annual assessment.

Chief Puckett stated that in his opinion, they should move away from a hard replacement schedule and provide more flexibility with assessing and determining what needs to be repaired or replaced.

Chief Stephens said they had been doing this in reverse, kicking it out another year or two, which they have been doing for a while.

Chief Puckett commented that they have moved these all up a year from a CIP perspective, which hasn't yet resolved the issue, so they may need an entirely new approach. He noted that he would add this for future discussion.

Chief McFayden reported that there would be a third Firefighter I class in the County, and several station officers have reached out to Seminole about it—but this on hold because of funding mechanisms not being in place.

Chief Eggleston stated that he and Chief McFayden had met before this meeting, and going into this year, they had to cut \$1 million+ out of their budget, with additional expenditures they weren't anticipating and a \$500K "hold" by the County. He said that they were going through a lot of scrutiny in their budget, and they were already feeling the pressure at this point in the fiscal year.

Chie McFayden said that Seminole has heard from quite a few stations, and they are trying to figure out how to proceed.

Chief Eggleston commented that this could be a test case for a more permanent funding stream for future years, through demonstrating a return on investment.

Chief Stephens asked what the cost was for a 24-person class.

Chief Alibertis responded that it was \$34,000, or about \$1,500 per student.

Chief McFayden said that other stations could put money behind this with training dollars.

Chief Stephens said that's what he was thinking, as each department has a training budget; if he had someone who needed the class, he would spend the money.

Chief McFayden stated that their goal was to have an October to February class on a Sunday schedule, which accommodates the other classes that take place on Saturday. He said that he would reach out to stations and gauge their interest, along with figuring out the funding piece. Chief Cersley asked if there had been any discussion with ECC about addressing the items they had been talking about.

Chief Eggleston responded that there have been a lot of frustrations, but he was reminded that ECC has a process now to address problems. He noted that there has been a lot of turnover, but they have made salary adjustments that were stemming that. He suggested that they bring Celeste into a future FEMS meeting, as she has been there a long time and it might help shed some light on the challenges and remedies.

Chief Cersley said that was a good idea and mentioned that they recently had a structure fire in Fluvanna County as mutual aid, and it was 13 minutes from the time Fluvanna made the request until ECC toned the battalion. He added that they didn't tone for mutual aid but instead toned the battalion to tell them to call ECC. He stated that this was inexcusable for a fire that he didn't need County battalion to tell him he could go to. He said that today, a brush truck marked up for a tree on a powerline, and ECC toned the engine two more times after that to say they were covering the call.

Chief Eggleston reiterated that it would be best to have Celeste come in, and it was a two-way street as a dispatcher could make or break a call.

Chief Puckett said he had already reached out to her and wasn't sure if they would want a meeting or a work session.

Chief Eggleton responded that a work session would probably be best, and ECC does use the feedback form that has been implemented. He stated that some of these issues could be related to training, and it was important for Celeste to speak to this directly.

[The chiefs shared several stories about ECC delays and incidents, but they were said off-mic.]

Chief Eggleston said that the system needed to be improved, and he would like to offer how they as a system could make this work effectively.

Chief Stephens commented that the CAD updates have helped somewhat.

Chief Alibertis said that whenever they go to an interstate response, the first-due is always late.

Chief Puckett responded that this had been an issue but was recently resolved, so it is plotting correctly now. He said he hadn't heard about delayed notifications but asked the chiefs to let him know if it continued to be a problem.

Chief Childress reported that there is some mandatory IT security training for all albemarle.org email addresses, which the chiefs may have.

Chief Stephens stated that the County's link for the training has not worked—and IT has not responded to him, despite his inquiries.

Chief Childress and Chief Alibertis reminded attendees that the volunteer program lists are due on Friday, with tier one being higher than tier two.

Chief Alibertis said that there would be an EMT class in late September or early October, and he wanted stations to have an opportunity before it went public.

#### Adjournment

At 19:04 hrs., the FEMS Board adjourned its meeting.





# 460 Stagecoach Road, Suite F Charlottesville, VA 22902-6489

ALBEMARLE COUNTY

Voice: 434-296-5833 FAX: 434-972-4123

#### www.ACFireRescue.org

## ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD ATTENDANCE LOG

Date: Wednesday, July 24, 2024

VOTING MEMBERS (OR DESIGNATES)

Chief Dan Eggleston (Albemarle County):

Chief Virginia Leavell (CARS):

Chief Gary Dillon (Crozet):

Chief Todd Richardson (Earlysville):

Assist Chief George Robinson(East Rivanna):

Chief George Stephens (North Garden):

Chief Timothy Cersley (Scottsville Fire):

Gres Mc Fayder Chief <del>Dennis Hahn</del> (Seminole Trail):

Chief Dustin Lang (Stony Point):

Chief Kostas Alibertis (Western Albemarle):

In la

504

Cerster

mcFadger ( Como





14

# ALBEMARLE COUNTY

460 Stagecoach Road, Suite F Charlottesville, VA 22902-6489 Voice: 434-296-5833 FAX: 434-972-4123

www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD ATTENDANCE LOG

#### **GUESTS & OTHERS**

Guest/Other	Date:	Wednesday,	July 24, 2024 Organization/Ag	ency/Affiliation
Christina Davis			ACFR	
David Puckett	12		ACFR	
Heather Childress			ACFR	
	8			
			17	1.





#### www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE RESCUE EMERGENCY AND MEDICAL SERVICES BOARD ACTION RECORD

AGENDA TITLE/ISSUE:	AGENDA DATE:		
Consent Agenda	Wednesday, July 24, 2024		
MOTION:	MOTION MADE BY:	SECONDED BY:	
To accept consent agenda	Chief George Stephens	Chief Todd Richardson	
SUBSEQUENT MOTIONS/AMENDMENTS:			

CALL OF	THE QUESTION:	Yes	No	Abstain
	Chief Dan Eggleston (Albemarle County)	$\bowtie$		
	Chief Virginia Leavell (CARS)	$\boxtimes$		
	Chief Gary Dillon (Crozet)	$\boxtimes$		
	Chief Todd Richardson (Earlysville)	$\boxtimes$		
	Assistant Chief George Robinson (East Rivanna)	$\boxtimes$		
	Chief George Stephens (North Garden)	$\boxtimes$		
	Chief Timothy Cersley (Scottsville Fire)	$\boxtimes$		
	Chief Greg McFadyen (Seminole Trail)	$\boxtimes$		
	Chief Dustin Lang (Stony Point)	$\boxtimes$		
	Chief Kostas Alibertis (Western Albemarle)	$\square$		

I hereby attest that the foregoing is true and complete to the best of my knowledge.

**Christina Davis** 

July 24, 2024

Clerk





- Building the Model Volunteer-Career Fire & EMS System -





#### www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE RESCUE EMERGENCY AND MEDICAL SERVICES BOARD ACTION RECORD

AGENDA TITLE/ISSUE:	AGENDA DATE:		
Training and Registration Policy	Wednesday, July 24, 2024		
MOTION:	MOTION MADE BY:	SECONDED BY:	
To accept the Training and Registration Policy that was on the screen	Chief Gary Dillon	Chief Virginia Leavell	
SUBSEQUENT MOTIONS/AMENDMENTS:			

CALL OF THE QUESTION:	Yes	No	Abstain
Chief Dan Eggleston (Albemarle County)	$\boxtimes$		
Chief Virginia Leavell (CARS)	$\boxtimes$		
Chief Gary Dillon (Crozet)	$\boxtimes$		
Chief Todd Richardson (Earlysville)	$\boxtimes$		
Assistant Chief George Robinson (East Rivanna)	$\boxtimes$		
Chief George Stephens (North Garden)	$\boxtimes$		
Chief Timothy Cersley (Scottsville Fire)	$\boxtimes$		
Chief Greg McFadyen (Seminole Trail)		$\boxtimes$	
Chief Dustin Lang (Stony Point)	$\boxtimes$		
Chief Kostas Alibertis (Western Albemarle)	$\boxtimes$		

I hereby attest that the foregoing is true and complete to the best of my knowledge.

**Christina Davis** 

July 24, 2024

Clerk

Date



- Building the Model Volunteer-Career Fire & EMS System -





#### www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE RESCUE EMERGENCY AND MEDICAL SERVICES BOARD ACTION RECORD

AGENDA TITLE/ISSUE:	AGENDA DATE:		
Garden Apartment FOG	Wednesday, July 24, 2024		
MOTION:	MOTION MADE BY:	SECONDED BY:	
To accept Garden Apartment FOG	Chief Greg McFadyen	Chief Gary Dillon	
SUBSEQUENT MOTIONS/AMENDMENTS:			

CALL OF THE QUESTION:	Yes	No	Abstain
Chief Dan Eggleston (Albemarle County)	$\boxtimes$		
Chief Virginia Leavell (CARS)	$\boxtimes$		
Chief Gary Dillon (Crozet)	$\boxtimes$		
Chief Todd Richardson (Earlysville)	$\boxtimes$		
Assistant Chief George Robinson (East Rivanna)	$\boxtimes$		
Chief George Stephens (North Garden)	$\boxtimes$		
Chief Timothy Cersley (Scottsville Fire)	$\boxtimes$		
Chief Greg McFadyen (Seminole Trail)	$\boxtimes$		
Chief Dustin Lang (Stony Point)	$\boxtimes$		
Chief Kostas Alibertis (Western Albemarle)	$\boxtimes$		

I hereby attest that the foregoing is true and complete to the best of my knowledge.

**Christina Davis** 

July 24, 2024

Clerk

Date



- Building the Model Volunteer-Career Fire & EMS System -

# ALBEMARLE COUNTY FIRE/EMS BOARD

FEMS BOARD EXECUTIVE COMMITTEE MONDAY, AUGUST 5, 2024 – 1630 HOURS

A virtual meeting of the Albemarle County Fire/EMS Board Executive Committee was held on Monday, August 5, 2024, at 1630 hours.

<u>The following members were in attendance:</u> David Puckett, Albemarle County Fire Rescue Virginia Leavell, Charlottesville/Albemarle Rescue Squad Gary Dillon, Crozet Volunteer Fire Department Greg McFadyen, Seminole Trail Volunteer Fire Department Kostas Alibertis, Western Albemarle Rescue Squad

## Others in attendance:

Christina Davis, Albemarle County Fire Rescue

## I. Call to Order

Chief Puckett called the meeting to order at 1630 hrs.

## A. From the Board: Matters Not Listed on the Agenda

Chief McFadyen stated that he had one item for New Business.

## II. Approval of Consent Agenda

## A. July 8, 2024 Minutes

**MOTION:** Chief Alibertis motioned, seconded by Chief McFadyen, to approve the Consent Agenda as presented. The motion passed unanimously (5-0).

## III. Unfinished Business

## A. None

## IV. New Business

## A. High-Rise FOG

## B. Townhouse FOG

Chief Puckett reported that the High-Rise FOG was reviewed at the Operations Committee and sent forward; the Townhouse FOG was a relatively small change that was updated based on the response packages discussed at the last FEMS meeting. He noted that he also included quick references guide, as he's developed for each FOG.

He said that the Mid-Rise FOG was an addendum to the back of the High-Rise FOG, with significant overlap, and from an ECA and Pro QA perspective, high-rise is defined as five stories or greater. He said that mid-rise has similarities operationally, depending on whether it's a building with FDC and standpipes or an older building without

standpipes that is more of a garden-style apartment. He said that he and Burke were still discussing format changes, but that wouldn't change any of the content and would just delineate which buildings it covered and which plans were pertinent.

Chief Alibertis asked what the difference was between the two.

Chief Puckett responded that the mid-rise gets four engines and two trucks; the high-rise gets a fifth engine and two transport units.

Chief McFadyen asked how they were addressing buildings that were not necessarily tall but were spread out in sprawl that went on continuously, as they would be getting the same personnel.

Chief Puckett said that in Pro QA, there is a building called "high occupancy" or "high risk," which wasn't many stories but had a high concentration of people, such as a nursing home or a jail. He stated that his thought for the future was to try to tie the high occupancy to the same response plan as the high-rise.

Chief Alibertis stated that 330 Claremont would fall in that category.

Chief Dillon asked about The View at Old Trail.

Chief Alibertis replied that it's four if you count the garden basement level.

Chief Dillon stated that under these criteria, Mountainside was the only building that fit into this.

Chief Puckett said that there were very few buildings that fell under high-rise and more that fell under mid-rise. He noted that ECC asked about the number of floors when they call in a structure fire, and specific response plans could be applicable to certain addresses—but that becomes cumbersome over time.

Chief Alibertis noted that rooftop bars and decks are not included in the number of floors.

Chief McFadyen asked if the mid- and high- levels aligned with terms in Pro QA.

Chief Puckett responded that they didn't align exactly, and mid-rise would capture most of the garden apartments and any business office structure of less than five floors. He said that what would be excluded would be industrial/commercial, which is a category in and of itself in Pro QA. He said that currently in their system, everything is residential or commercial, so they would be making some changes to align the categories.

Chief McFadyen stated that the buildings in his station's first due just keep getting bigger and bigger, and 2600 Barracks Road, for example, just keeps expanding.

Chief Alibertis commented that Claremont is a similar situation by Crozet standards.

Chief McFadyen said that they were at the point where even alarm activations were proving to be difficult, and all commercial buildings need someone to go to the panel and someone to investigate the area.

Chief Puckett stated that they could continue to discuss it at this level or move it forward to FEMS.

Chief Leavell said that they would still have a month to consider it prior to FEMS.

Chief McFadyen stated that he had distributed this around at a high level several weeks ago, and the only issue that arose was how they wanted those vehicles to arrive and how to make that work within CAD. He said that getting the truck company quickly is key, and the debate has been whether to have an engine staffing and tower staffing, or if they just don't run a cross-staffing arrangement. He stated that with two trucks running side by side, the issue is how to get the response guidelines working the right way. He added that the guide itself is fine, but this is just operationalizing it.

Chief Dillon asked if the townhouse guide revisions were related to the Commonwealth Drive fire.

Chief Puckett responded that both townhouse and garden have been developed since then.

Chief Alibertis asked if the one at Old Trail was a townhouse.

Chief Puckett confirmed that it was.

Chief McFadyen stated that River Run would have been a townhouse, and they had two trucks there—one on the back side, one on the front side. He said that it worked out nicely, as the Crozet truck came in and wasn't blocked in by the hose, and everything worked out really well.

**MOTION:** Chief Alibertis moved that the Mid-Rise and High-Rise FOG be forwarded to FEMS. Chief Leavell seconded the motion, which passed unanimously (5-0).

#### C. Miscellaneous

Chief McFadyen stated that Seminole received a County funding check for the first quarter of the allocation, postmarked the previous Monday, which means they effectively floated the County for the entire month. He asked if there may be other ways to deal with this with the Office of Management and Budget (OMB) besides paper check through the mail, as the allocation wasn't issued until July 26. He said that they started processing bills on July 1, so they would like to find a way to move faster on this.

Chie Alibertis commented that they should have enough from the first quarter to carry into the second quarter.

Chief McFadyen said that June 30 is their cutoff date, with the new fiscal year starting July 1. He added that he was happy to work directly with OMB on this, as it has gone from two to three to now four weeks. He said that they are now transferring money into operations to cover the expenses, then reimbursing themselves when the funding arrives.

Chief Puckett stated that he would follow up with OMB.

# V. Next Meeting

# A. Monday, September 9, 2024 at 1630 hours

The next FEMS Board meeting will be held on Monday, September 9, 2024 at 1630 hours in the Fire Rescue Conference Room.

## Adjournment

At 16:51 hrs., the FEMS Executive Committee adjourned its meeting.





# ALBEMARLE COUNTY

460 Stagecoach Road, Suite F Charlottesville, VA 22902-6489 Voice: 434-296-5833 FAX: 434-972-4123

#### www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD EXECUTIVE COMMITTEE

#### ATTENDANCE LOG

	Date: Aurust 5 2024
VOTING MEMBERS (OR DESIGNATES)	Mana
Chief Virginia Leavell (CARS):	- In Cooce
Chief Gary Dillon (Crozet):	
Chief Greg McFadyen (Seminole Trail):	130m
Chief Kostas Alibertis (WARS):	45
Dewid Reckett Deputy Chief H <del>eather Childres</del> s (Albemarle	County):

#### **GUESTS & OTHERS**

Guest/Other

**Christina Davis** 

David Puckett

Organization/Agency/Affiliation

<u>ACFR</u>

ACFR

22





www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD EXECUTIVE COMMITTEE ACTION RECORD

AGENDA TITLE/ISSUE:	AGENDA DATE:		
Approval of Consent Agenda	August 5, 2024		
MOTION:	MOTION MADE BY:	SECONDED BY:	
Approve Consent Agenda	Chief Kostas Alibertis	Chief Greg McFadyen	
SUBSEQUENT MOTIONS/AMENDMENTS:			
1.			

CALL OF THE QUESTION:	Yes	No	Abstain
Deputy Chief David Puckett (ACFR)	$\boxtimes$		
Chief Virginia Leavell (CARS)	$\boxtimes$		
Chief Gary Dillon (Crozet Fire)	$\boxtimes$		$\boxtimes$
Chief Greg McFadyen (Seminole Trail)	$\boxtimes$		
Chief Kostas Alibertis (Western Albemarle)	$\boxtimes$		

I hereby attest that the foregoing is true and complete to the best of my knowledge.

Christina Davis

August 5, 2024

Clerk

Date





www.ACFireRescue.org

#### ALBEMARLE COUNTY FIRE AND EMERGENCY MEDICAL SERVICES BOARD EXECUTIVE COMMITTEE ACTION RECORD

AGENDA TITLE/ISSUE:	AGENDA DATE:	
High-Rise & Townhouse FOG	August 5, 2024	
MOTION:	MOTION MADE BY:	SECONDED BY:
To forward High-Rise & Townhouse FOG to FEMS	Chief Kostas Alibertis	Chief Virginia Leavell
SUBSEQUENT MOTIONS/AMENDMENTS:		
1.		

CALL OF THE QUESTION:	Yes	No	Abstain
Deputy Chief David Puckett (ACFR)	$\boxtimes$		
Chief Virginia Leavell (CARS)	$\boxtimes$		
Chief Gary Dillon (Crozet Fire)	$\boxtimes$		
Chief Greg McFadyen (Seminole Trail)	$\boxtimes$		
Chief Kostas Alibertis (Western Albemarle)	$\boxtimes$		

I hereby attest that the foregoing is true and complete to the best of my knowledge.

Christina Davis

August 5, 2024

Clerk

Date

## **Training Officers Meeting Agenda Internal**

August 7th, 2024 @1830hrs

## Attendees: Matt Ascoli, Rob Knight, Lucian Mirra, Brittany Schoeb, Kyle Tatton, Taylor Vierrether, Greta Fleming McCauley

## **Current Registrations:**

Fall Semester:

Class	Start Date	# Registered/Waitlisted	Date Closes
EVOC	8/13	13/0	7/23
FFI	8/19	30/2	7/29
DPO	9/3	5/4	8/13
Rope Ops	9/7	11/14	8/24
Pass Vehicle	9/28	9/5	9/7
FFII	10/01	11/15	9/10
Live Fire	10/19	9/13	9/28
EVOC	11/12	4/1	10/22

August EVOC – Need LODA and DMV Auth/Report on file by 8/9

**FFI** – LODA on file by 8/15

November EVOC - Need LODA and DMV Auth/Report on file by 11/8

#### • New PSA

• Matt introduced Greta to the attendees, thanked everyone for patience during the transition period.

## • Fall Semester update

- 2025 training calendar underway, draft is in construction. Scheduling does not look much different; the familiar cadence will be followed. We are in the odd year/series which will include both Officer 1 and Instructor 1. Reginal School is set for the third weekend in March.
- Lucian shared that CE training will be moving into a monthly, virtual model that will be launched in ACTIVE Network for a January start date. The required inperson Mega Code class will still be held in September. Taylor asked if they will

be available for people under Dr. Lindbeck as well, and Lucian advised that it would be available for anyone in the system/county.

- EVOC sign up extended to 08/08/24, 0800hrs due to some registration issues.
- FFI closes on 08/12/24.

#### • Registering for classes in Cornerstone

• Matt opened VDFP and shared screen to provide tutorial regarding the navigation of Cornerstone from a student sign-in perspective, to assist with future class registrations. The search function has not been working, document will be updated to assist with future registrations.

Rob and Kyle shared some of the most recent challenges their students experienced but advised that they got their students taken care of.

#### • Burn Building repair update

• State inspection was completed, but the results have not been received. Due to the thorough in-house inspection, the plan is moving forward. Plans for repair and renovations will be based on the report. Immediate, mid-level and low-level needs will be captured in a grant request to OHM's Department of Fire Programs with the hope that ACFR will receive the \$400,000.00 grant. Matt advised that the grant should cover the thermal tile replacement, all windows, doors, add a deck on alpha side and replace the concrete stairs with metal grating. He explained that quotes are being obtained from contractors and the grant deadline is in January. Kyle asked if the Spring Firefighter course would be impacted. Matt explained that it was a potential, but a back up plan is in place.

## • VDFP retesting

Matt reminded the attendees that students are notified almost immediately via email once the tests are graded by VWP. If the student was not successful the email will contain procedures for retesting, contacts and directions. If a large percentage of students fail a test, the state will manage the retest. If it's just a small number of students, it's best to contact and schedule retesting with the Glen Allen facility. Matt stressed the importance of students initiating the retest. He explained that they have 90 days from their first notification to get the retest completed. He shared that recent emails advised that students now receive 90 days from each test, which is beneficial, but it is their responsibility to get it done. Rob said that he would be happy to sit with students to supervise retesting for other stations.

## • Station items

 Taylor inquired about the checkout page in ACTIVE network. He explained that the required checkout questions are not always relevant the class. He suggested that implementing a dedicated option to the menu to indicate "Not relevant for this class" may be helpful. Matt said that he was not aware of that issue and would investigate. • Matt mentioned that a field was added requiring the student to document Cornerstone ID. Students have submitted random numbers, driver's license numbers, etc. He asked the attendees to speak with the students and ensure they are entering correct information so that registration is timely.

#### Recruitment & Retention Committee Date: Monday, August 12, 2024 Time: 1800 hours Location: Microsoft Teams Virtual Meeting

A virtual meeting of the Recruitment and Retention group was held on Monday, June 10, 2024, at 1807 hours.

Those that were in attendees are as follows:

Elise Lindquist, Crozet Vol. Fire Olivia Hale, Charlottesville-Albemarle Rescue Squad Jeff Bozzone, Seminole Trail Vol. Fire Christina Davis, Albemarle County Fire Rescue

#### I. Fall Physicals

I spoke with Laura earlier this week to set up 2 physicals each day for September and October, she asked to check with the doctor's at WorkMed to make sure they have availability as they are short staffed (once again). I received communication from Laura a day or so after I spoke with her, that WorkMed would not be able to hold two (2) spots for us but will work with us as best as they can due to being short staff. I have asked about holding the 1 spot a day they currently have each day for September and October. She will be speaking with her clinical management team about this request. Currently they have 39 spots for September and October. These slots will be on a first come first serve basis. If anyone has issues with scheduling a physical with WorkMed, please have them reach out to me and I will help coordinate the physical.

Augusta Health usually has spots open without any issues. We may have some Lifescan spots for LODA physicals when they are here but need to confirm this with Battalion Chief James.

II. Join Web Site

I am still working on the email notification issue. If you receive an email from Christina Davis (test) please let me know. In the meantime, I will be pulling a list every Friday and sending out notifications. I hope to have this solved with WordPress's help soon.

I would like to start working on redoing the Join Website. If you have anyone at your station who would be interested in helping with the redesign send me their name and email address.

#### III. Gear

Elise asked if there was any easier way to get gear. Christina said she would pass along Elise's contact information to Battalion Chief Walker and Brandon Madison to reach out to her to discuss how members get gear, as she was unaware of how this process works.

The meeting adjourned at 1817 hours. The next scheduled meeting is on Monday, October 14 at 1800 hours.

# **Townhouse (TH) Guide**

## 701.1 PURPOSE

This document provides arrival and on-scene procedures for Albemarle County Fire Rescue units operating at incidents involving fires in townhouses.

## 701.2 SCOPE

This procedure applies to all members of the Albemarle County Coordinated Fire and Rescue System as defined in Albemarle County Code Chapter 6, Article I, Division 2, Section 6-102.

## 701.3 OVERVIEW

Fires in townhouses often present a life safety hazard and present with attached exposures where fire can spread, whether the exposure is separated by a firewall or not.

The term townhouse is a generic term used to describe various styles of attached dwellings. Townhouses are constructed in a variety of layouts. Because of this, a thorough sizeup where as many sides of the structure are viewed as possible (360 lap) is paramount. The sizeup and 360 lap will allow the initial IC to determine the location of the fire within the building as well as life hazards, conditions in the rear, and eventually the attached exposures.

Townhouses range from two to four or more stories in height and may differ in height from front to rear. Additionally, townhouses may have garages which can store one or two vehicles. The garage may be on the lowest level, or it may be detached in the rear off a common alley.

Commercial townhomes and residential townhomes are similar to each other in both construction and firefighting tactics. The occupancy type is the primary difference between commercial and residential townhomes. Commercial establishments may operate in townhomes and may not involve the same life safety concerns.

The Effective Response Force (ERF) for townhouse fires should be 21 for hydranted responses and 21 for non-hydranted responses.

## 701.4 DISPATCH PLAN

701.4.1 HYDRANTED AREA

(4) Engines, (2) Trucks, (1) Transport Unit, (1) Chief Officer (Minimum ERF 21 Personnel)

701.4.2 NON-HYDRANTED AREA

(5) Engines, (3) Tankers, (1) Transport Unit, (1) Chief Officer (Minimum ERF 21 Personnel)

## 701.5 DISPATCH ASSIGNMENTS

See attachment: Quick Reference Guide.pdf

701.5.1 1ST ENGINE Expected Actions:

# Townhouse (TH) Guide

- Determine and announce water supply as soon as possible
  - o In hydranted areas companies should generally lay in from a hydrant.
  - 0 In non-hydranted areas companies should not lay in and should commit to the driveway.
- Size-up and command.
- Determine and announce Mode of Operation.
- Place 1<sup>st</sup> line in service.

#### **Tactical Considerations:**

In hydranted areas the first engine shall normally lay in from a hydrant to the fire scene. If a hydrant is within 100' of the fire scene the company officer may elect to have the DPO hand jack the LDH and humat valve to the hydrant where the 2<sup>nd</sup> engine will complete the connection. If a hydrant is within 50' then the 1<sup>st</sup> engine may make an independent hydrant connection. Occasionally, exigent circumstances such as a known rescue or need for VEIS may negate the 1<sup>st</sup> engine from laving in. In these situations, the water supply plan must be passed to the next arriving engine(s).

In non-hydranted areas the first engine shall commit to the driveway and shall not deploy any LDH. This allows for additional companies to deploy closer to the residence and increase the number of personnel and equipment immediately available on the scene.

Apparatus positioning shall provide room for the arrival of an aerial apparatus if dispatched. Additionally, positioning shall take into consideration the anticipated hose deployment and generally shall not be more that 100' from the fire scene.

Initial decisions must be made based on a systematic consideration of deployment following the guidance of RECEO (Rescue, Exposure, Confinement, Extinguishment, Overhaul).

As stated in the overview, the size-up is of paramount importance and should be used to determine layout, exposures, fire location, fire growth, flow paths, and victims. The officer should perform a complete 360-lap as part of the size-up. For fires involving middle units, consideration should be given to entering Bravo or Delta exposure to obtain a view of Side Charlie. If physical barriers make the 360-lap impractical, the lap may be assigned to another unit. However, interior operations should not commence until a report from Side Charlie is received. In situations where immediate action is needed to mitigate an immediate life hazard, the initial IC shall transmit the need to bypass the visualization of Side Charlie and the completion of the 360-lap.

As the officer performs the walk-around of the structure, attention should be given to controlling or noting utilities. Gas utilities should be easily controlled during the walk-around while electric utilities may not be easily controlled. However, the location of the electric utility should be noted for future control.

The rapid application of water is the primary goal of the first arriving engine. Crews should work to insure this takes place, often simultaneously of the officer's walk-around. Generally, fire attack

System

Procedure Manual

should be transitional with the primary attack beginning from a safer area and pushing towards the fire. The placement of the line should be to provide for the most advantageous location for fire attack (i.e., deck fires, vinyl siding fires, etc.). Attention should also be given to flow paths and any potential flow paths should be controlled. Once the fire attack transition has begun, the first line should be placed between the fire an any persons endangered by the fire. This is generally accomplished by stretching the line to the primary means of egress, normally the front door.

The purpose of the initial attack line is to protect occupants, the interior stairwell, and, if possible, advance to the seat of the fire. The conditions found upon arrival and the information gained during the size-up may dictate changes in these tactics. If it is determined there is no life hazard in the occupancy then the first line shall be positioned between the fire and the most at-risk exposure, either internal or external. Additionally, the requirement of rapid water application may require fire attack to be direct and to begin from the location of the original transitional attack. It should be noted that this tactic does not insure the first line enters via the primary egress point but does address rapid water application; additional attention should be directed towards the primary egress as appropriate.

Townhouse construction practices include regular use of vinyl siding and may have less substantial eaves and soffits than many other multiple dwellings. These practices can lead to an external fire extending internally and into the attic. Fire incidents that present with fire on the exterior of the structure where vertical transmission is likely should have the eaves and soffits swept with the fire attack stream prior to entry.

As time and actions permit, the operator should look to deploy ladders to the building with an emphasis on placement to the fire room.

#### 701.5.2 2ND ENGINE Expected Actions:

- Water Supply: •
  - 0 Complete water supply for the 1<sup>st</sup> engine when in hydranted areas.
  - o In non-hydranted areas deploy LDH down the driveway (less than 1,000') or perform a split lay of LDH down the driveway (greater than 1,000').
- Perform primary search and rescue in coordination with the fire attack (1<sup>st</sup> engine).

## **Tactical Considerations:**

In hydranted areas the second engine shall complete the water supply (make the hydrant connection) for the first engine.

In non-hydranted areas the second engine shall deploy LDH down the driveway. When the driveway is less than 1,000' the LDH shall be deployed from the end of the driveway with the Siamese. When the driveway is greater than 1,000' the LDH shall be deployed from a location approximately 1,000' from the 1<sup>st</sup> arriving engine and efforts should be made to prepare for relay-pump operations. Special consideration should be made to identify the water supply. If an appropriate non-pressurized source is available within 3,000' of the fire scene then relay-pumping is desired over a tanker shuttle.

When the mode of operation is **Offensive**, the 2<sup>nd</sup> engine shall establish the initial 2-out until relieved of the responsibility by the next arriving company.

When the mode of operation is **Rescue**, the 2<sup>nd</sup> engine shall assist the 1<sup>st</sup> engine with rescue efforts or assume a complementary role such as fire attack. Generally, the assumed role should be the complement to the role of the 1<sup>st</sup> engine, either search or fire attack, unless immediate assistance is required by the 1<sup>st</sup> engine.

Search priorities and efforts shall focus first on any known area of victim location or refuge. Efforts shall then focus on the fire area, fire floor, floor above the fire, and remaining floors. It is critical to understand that sleeping areas and means of egress are considered highly critical areas in need of search.

Support for the primary search should include ladders to upper story windows and hoselines engaged on the fire.

When accessing the fire floor, crews should begin their search while making their way to the fire area. Crews going to the floor above the fire must also begin searching immediately, but with the objective of quickly getting to the area above the fire first, and then searching outward.

701.5.3 3RD ENGINE Expected Actions:

- Water Supply:
  - Position for secondary water supply in hydranted areas.
  - <sup>o</sup> In non-hydranted areas the 3<sup>rd</sup> engine shall generally assume the role of the dump side engine.
- Deploy second line.

## Tactical Considerations:

In hydranted areas the third engine shall look to establish a secondary water supply.

In non-hydranted areas with driveways less than 1,000' the third engine shall assume the role of the dump site engine and shall work with arriving tankers to provide for continuous water to the fire scene. If the driveway is longer than 1,000' then the third engine shall prepare to operate within a relay-pump operation and deploy the Siamese as appropriate.

Unless directed otherwise, the second line shall be deployed to back up the first line. This tactic allows for a rapidly deployable line in the event the first line suffers a burn through or catastrophic failure. The second line may also be used in a simultaneous fire attack in coordination with the first line. If the second line is not needed to support the primary fire attack, it may be deployed to the floor above. Additionally, the second line may be used to protect the crew searching above

the fire. This may be accomplished by deploying the line to the base of the stairs on the fire floor to observe fire conditions and to prevent fire from spreading to and up the stairs.

An additional consideration for the second line is that the second line may be deployed to the Charlie Side of the structure. The 3<sup>rd</sup> engine should consider the possibility of deploying the line from their engine or from the first arriving engine. A second line to the Charlie Side provides for additional reports from that side to the IC, access to potential basements or cellars, and for access to the interior for typical second line objectives via an alternate entrance from the first line.

# 701.5.4 4TH ENGINE

Expected Actions:

- RIT
- Water Supply:
  - In hydranted areas the operator should complete the hydrant connection for the 3<sup>rd</sup> engine or for the tower ladder.
  - In non-hydranted areas the operator should assist the dump site operator after positioning out of the way. If no assistance is needed, the operator should join the crew to bolster the size of the RIT.

## Tactical Considerations:

The Rapid Intervention Team (RIT) shall perform proactive measures to increase the safety of crews operating in the IDLH and on the fireground. These measures include the preparation of the RIT pack and the readiness of forcible entry and rescue equipment. Additionally, this may include the deployment of ladders for rescue / escape, the preparation of the search tag line, and / or the deployment of a dedicated hose line. Efforts should be made to soften the structure without creating additional flow paths (remove window bars).

# 701.5.5 5TH ENGINE

Expected Actions:

- Hydranted Dispatch:
  - <sup>o</sup> In the hydranted area and in the absence of an available tower ladder, a 5<sup>th</sup> engine will be added. The 5<sup>th</sup> engine should perform a walk-around and provide the IC an update and be prepared to fulfill duties typically assigned to the tower ladder.
- Non-Hydranted Dispatch:
  - <sup>o</sup> In non-hydranted areas the 5<sup>th</sup> engine shall become the fill-site engine and should proceed to the nearest and most capable water site and prepare to fill tankers with attention to efficiency.

Tactical Considerations:

#### Procedure Manual

# Townhouse (TH) Guide

In non-hydranted areas the 5<sup>th</sup> engine should work to identify the most appropriate and accessible water source. Upon identification of the water source, they shall proceed to the location and set up to provide adequate water supply to maintain water shuttle requirements.

In hydranted areas, the 5<sup>th</sup> engine should position out of the way of the scene. Generally, the crew should abandon the apparatus and proceed to the scene. Upon arrival to the scene a walk-around should be performed with a status update provided to the IC. The crew should then be prepared to perform duties normally assigned to the tower ladder that are not yet completed. Ladders shall be placed to the fire building with focus on areas directly involved in fire, where crews are operating, and areas of potential civilian / victim refuge. Additionally, if utilities have not been fully controlled,

the 5<sup>th</sup> engine shall work to ensure all utilities are controlled. As appropriate and necessary, under the guidance of the IC, ventilation shall be performed. The 5<sup>th</sup> engine may also be deployed to bolster the efforts of the Fire Attack Group and the Search Group.

#### 701.5.6 1ST TRUCK Expected Actions:

- Position on Side Alpha unless directed otherwise by the IC.
- If arriving first, perform size-up, establish command, as well as determine and announce mode of operation.
- Perform 360# and communicate findings to IC.
  - For fires involving middle units, consideration should be given to entering the Bravo or Delta exposure to obtain a view of Side Charlie.
- Prepare for immediate VEIS when appropriate.
- Perform forced entry.
- Initiate primary search and rescue if arriving prior to the second engine; this is inclusive of searching for fire. If arriving after the second engine, begin secondary search and / or assist in the primary search based on conditions and extent.
- Perform ventilation in coordination with fire attack and the IC.
- Ladder the structure.
- Control utilities and prepare for salvage and overhaul.

## Tactical Considerations:

The role of the truck company is very important to the success of fire ground operations and personnel assigned to the truck must be able to adapt based on needs and at the direction of the IC. In the absence of a truck company, all tasks must still be completed and will generally fall to the 5<sup>th</sup> engine.

Nothing should delay the efforts of the primary search or VEIS if conditions warrant.

Ventilation shall be coordinated with fire attack and the IC. Ventilation shall give special consideration to flow path and unnecessary flow paths shall be controlled.

Generally, the truck operator shall be responsible for ladders and utilities. The operator should place initial ladders to the fire building with focus on areas directly involved in fire, where crews are operating, and areas of potential civilian / victim refuge. If ladders are already in place, then additional ladders should be placed to enhance operational safety and increase ingress and egress points.

Based on the structure, fire extent, and at the IC direction the truck company should be prepared to perform elevated master stream operations. Additionally, some townhouses may require the truck to be used for access to upper floors. Special consideration should be made to ensure apparatus placement allows for both operations.

There are three general locations for turntable placement at townhouse fires. These are determined by degree of fire extension and location.

- Typically, turntable placement at townhouse fires should consist of the turntable being placed one unit away from the involved unit towards most of the exposures. This will facilitate the best placement of the aerial to windows, if needed. Additionally, the aerial will be able to be raised to the roof or to adjoining exposures if needed.
- For a large fire volume / heavily involved situation that may require the use of an elevated stream, the turntable of the first truck should be in front of the most threatened exposure. Additional tower ladders / trucks that may arrive should position their turntable(s) at the next most severely threatened unit. If possible, all turntables should be able to rotate back to the originally involved unit to assist with completion of extinguishment.
  - Ouring large volume fire incidents, the truck should utilize their elevated stream to defend the firewall(s) of the involved unit. This is accomplished by applying heavy caliber streams to the fire side of the firewall to prevent horizontal spread of fire to the attached exposure.

# 701.5.7 2ND TRUCK

Expected Actions:

- Position on side Charlie or to access side Charlie. When there is no side Charlie access available, the 2nd truck should position opposite of the 1st truck to provide coverage of the uncovered exposure(s).
- Deploy ground ladders to the Charlie side.
- Provide the IC with an updated Charlie side report.
- Prepare to assist in the primary search.
- Prepare to search exposure units.
- Prepare to complete taskings not initiated or not completed by the 1st truck.

Tactical Considerations:

Procedure Manual

# Townhouse (TH) Guide

The primary positioning option for the 2nd truck should focus on gaining access to the rear of the townhouse, either by directly positioning on side Charlie or by positioning on either side of the complex to reach the rear. When access to the Charlie side is not available, the 2nd truck should position on side Alpha opposite of the 1st truck and in front of an uncovered exposure.

The taskings of the 2nd truck will be based on incident needs and at the direction of the IC and may include:

- Assist with the completion of the primary search.
- Deploy ground ladders to the rear of the structure with a focus on providing means of egress.
- Perform primary search in exposure units.
- Perform secondary search of the fire unit(s).
- Perform ventilation in coordination with fire attack.

#### 701.5.8 TANKERS Expected Actions:

- 1<sup>st</sup> Tanker
  - <sup>o</sup> Supply attack engine
    - If arriving prior to the 2<sup>nd</sup> engine, commit to the supplying the 1<sup>st</sup> engine.
    - If arriving after the 2<sup>nd</sup> engine, supply water through the Siamese to support fire attack and begin establishing the dump site. No water should be dumped; rather, a nursing operation should be continued, and any water used to fill the dump tank(s) should come from subsequent tankers.
    - If arriving after the 3<sup>rd</sup> engine, supply water to support fire attack, assist in establishing the dump site, maintain uninterrupted supply until empty, and then proceed to the fill site.
- Subsequent Tankers
  - <sup>o</sup> If  $1^{st}$  Tanker has <  $\frac{1}{4}$  tank, then continue nursing operation.
  - <sup>o</sup> If 1<sup>st</sup> Tanker has > ¼ tank, then dump enough water to establish draft. Once the draft is established, then dump remaining water.
  - <sup>o</sup> Proceed to fill site when empty.

#### Tactical Considerations:

While the presence of townhouses in the rural area is rare, it is not impossible. Tanker operators must be aware that townhouse fires will likely involve the need for more personnel to arrive rapidly on the scene to control the incident and they should attempt to maintain some access to the scene.
#### Townhouse (TH) Guide

The primary responsibility shall always be to supply and support the fire attack and to maintain an uninterrupted flow to the fire scene. Tankers should continue nursing operations if the tanker currently supporting fire attack has  $< \frac{1}{4}$  tank. In addition to appropriately supplying fire attack efforts, continued nursing provides the fill site unit enough time to establish an appropriate fill site.

The secondary responsibility of tankers is the establishment of the dump site in conjunction with the dump site engine.

Additional personnel that arrive on tankers and that are not needed for tanker operations should report to Staging or in the absence of Staging, the IC, for deployment as needed.

#### 701.5.9 TRANSPORT UNITS

Expected Actions:

- Position for rapid egress
- Treatment of initial patients
- Set up and prepare for rehab
- Support fire ground operations at the direction of the IC
- If first arriving, perform size-up, establish command, and determine and announce mode of operation.

#### Tactical Considerations:

There are multiple types of transport units that operate within Albemarle County. There are differences between EMS capability (BLS versus ALS) and differences between suppression capability. The IC shall consider the capabilities of the transport unit assigned to the incident and make any adjustments or additions that may be deemed necessary.

In general, the transport unit shall be responsible for maintaining a position that allows for rapid egress from the scene with focus placed on not becoming trapped due to apparatus and hose deployment. The transport unit shall be responsible for the treatment of initial patients. In the absence of initial patients, the transport unit shall prepare for and set up rehab.

If the transport unit is suppression capable and the arrival order warrants, the transport unit may be utilized in a suppression role such as search. If the transport unit is used in a suppression role a second transport unit shall be added.

#### 701.5.10 CHIEF OFFICERS Expected Actions:

- 1<sup>st</sup> Chief Officer
  - <sup>o</sup> Position with view of incident with attention to preferred apparatus placement
  - Receive CAN from IC
  - Size-up and assume role of IC

- 0 Reaffirm or update the IAP
- Subsequent Chief Officers
  - 0 Meet with IC
  - o Be prepared to operate any of multiple roles:
    - Safety Officer
    - Accountability Officer
    - **Division Command**

**Tactical Considerations:** 

The standard plan of action for fires in townhouses shall be to address them according to the guidelines contained herein. However, it is understood that situations involving fire are dynamic and may require actions that are outside of standard practice. In those instances, all changes must be announced by the IC.

The goal of the IC should be to continue and / or update the appropriate IAP for the incident. The IAP shall be based on a thorough and continuous size-up, recognition of who and what are in danger, attention to safety considerations, and resource needs. The anticipated need for additional resources should be requested early.

Objectives at fires shall set within the following areas: Rescue, Exposure, Confinement, Extinguishment, Ventilation, and Salvage.

#### 701.6 CONSTRUCTION STYLES

The region contains multiple construction styles and types of townhouse structures. These styles include, but are not limited to, modern townhomes, back-to-back townhouses, piggyback townhouses, over-under townhouses, rowhouses, duplexes, quads, and hybrids. Each occupancy has its own address and own entrance.

#### 701.6.1 MODERN TOWNHOUSE

The modern townhouse is a multi-story dwelling that is normally attached to several other similar units. Typically, each townhouse has rated floor and wall assembly separation. Townhouses will most often have an attic with a pitched roof.

Procedure Manual



#### 701.6.2 BACK TO BACK TOWNHOUSE

A back-to-back is a townhouse that consists of two or more occupancies under one roof connected by the Side Charlie wall.



Townhouse (TH) Guide



#### 701.6.3 PIGGYBACK TOWNHOUSE

A piggyback townhouse consists of two stacked dwellings (one over the other), each with a separate address and entrance. These occupancies share a common floor separated by a fire wall on that floor.



#### 701.6.4 OVER-UNDER TOWNHOUSE

An over-under townhouse usually consists of two stacked dwellings (one over the other). These are usually two-level occupancies over one-level occupancies with entrances on opposite sides; however, other floor plan variations exist. Occasionally, an over-under townhouse may have two dwellings stacked above two dwellings. Over-under dwellings such as those are typically referred to as **two-over-two townhouses**.



Procedure Manual

#### Townhouse (TH) Guide



#### 701.6.5 ROWHOUSE

A rowhouse is a multi-story dwelling attached to at least two other dwellings. These dwellings may or may not be separated by fire walls. Typically, a rowhouse will have a common cock loft under a flat roof.



#### 701.6.6 DUPLEX

A duplex is two dwellings under one roof sharing a common wall.

Copyright Lexipol, LLC 2024/08/18, All Rights Reserved. Published with permission by Albemarle County Fire Rescue System

Procedure Manual

#### Townhouse (TH) Guide



#### 701.6.7 QUAD

A quad is four dwellings connected, under one roof, with separate addresses. A quad may have entrances on four different sides.

Procedure Manual



#### 701.6.8 HYBRID

A hybrid is a building construction style that can be inclusive of various types of townhouse styles (piggyback, back-to-back, and over-under) under one roof.



# Albemarle County Fire Rescue System Procedure Manual



#### 701.7 ISSUE AND REVIEW

ISSUE	EFFECTIVE	REVIEW	REVIEWER
12/1/2022	4/1/2023		

**Attachments** 

### **Quick Reference Guide.pdf**

7/29/2024 47

#### HYDRANT AREA RESPONSE PLAN

	Single-Family Dwelling	Townhouse	Strip Mall/Commercial	Garden Apartment	Midrise	High Rise
Assignment	4E/1T/1Amb	IAmb 4E/2T/1Amb			5E/2T/2Amb	
1 <sup>st</sup> Engine	Lay supply line or establish own water supply, size up, establish command, complete 360 lap (if size permits) and report findings via follow-up report, determine mode, deploy and manage initial attack line		Lay supply line or establish own water supply, supply FDC, size up, establish command, assess FACP, report findings via follow-up report, determine mode, identify fire floor, identify attack stairwell, place first line in service			
2 <sup>nd</sup> Engine	Complete water supply for 1st engine if needed, assume Search and RescueComplete water supply for 1st engine if needed, FDC if on Side A, deploy second line to assist fire attack/protect public stairs, perform search and rescue in absence of a truckComplete water s assess FACP, assist second line to as public stairs/hallw rescue on fire		Complete water supply assess FACP, assist 1st e second line to assist fin public stairs/hallway, pe rescue on fire floor i	for 1st engine if needed, ngine with fist line, deploy re attack and/or protect rform primary search and n absence of a truck		
3 <sup>rd</sup> Engine	Position for seconc assume 2r	l water supply, Id line	Position on Side C, secure water supply if available, forced entry on fire and exposure units, FDC if on Side C	Initiate secondary water supply, provide Charlie side or opposite side report, deploy line above fire	Be prepared to supply secondary water supply,	the 2nd FDC or initiate deploy line to floor above
4 <sup>th</sup> Engine	Assume RIT, DPO to complete water supply for 3rd engine or truck       Entire crew abandons apparatus and whole assumes RIT in the attack stairwell, staged below the fire floor			oparatus and whole crew stairwell, staged one floor e fire floor		
5 <sup>th</sup> Engine	Assist 3rd engir establish second *SPECIAL REQUEST ONLY* CMD post, assur lobby control			Assist 3rd engine establish secondary water supply, report to CMD post, assume lobby control		
1 <sup>st</sup> Truck	Position Side A with effort to reach fire area and exposure(s), forced entry, search and rescue, ladders, ventilation, utilities, assist fire attack forcible entry and primary search		loor, DAO remains with floor with 1st engine for d primary search			
2 <sup>nd</sup> Truck	*SPECIAL REQUEST ONLY*	Position for Side C coverage as able, roof, ventilation       Position to reach fire floor, DAO reapparatus, crew to floor above with		loor, DAO remains with or above with 3rd engine		
1 <sup>st</sup> Transport	Position for rapid egress, treatment/transport of injured, rehab or support fire ground ops, if first arriving: complete size up, mode declaration, establish command					
2 <sup>nd</sup> Transport	*SPECIAL REQUEST ONLY* *SPECIAL REQUEST ONLY* treatment/transport of establish lobby treatment/rehab area			Position for rapid egress, treatment/transport of injured, prepare to establish lobby treatment/rehab area		
1 <sup>st</sup> Chief		Position with view of incident, receive CAN report, size up, assume command, reaffirm or update IAP				
2 <sup>nd</sup> Chief	Meet with IC, assume position as requested by IC (Prepare for Division/Tactical Supervisor, Safety, Accountability)					

#### NON-HYDRANT AREA RESPONSE PLAN

	Single-Family Dwelling	Townhouse	Strip Mall/Commercial	Garden Apartment
Assignment	5E/3K/1Amb		5E/3K/1T/1Amb	
1 <sup>st</sup> Engine	Size up, establish command, complete 360 lap and report findings, determine mode, deploy and manage initial attack line			
2 <sup>nd</sup> Engine	Lay supply line. If the driveway is over 1000 feet, split lay. Search and rescue.			
3 <sup>rd</sup> Engine	Dump site; complete split lay if needed and assume relay Engine role. Assume second line.			
4 <sup>th</sup> Engine	Assume RIT. Position out of the way. If 3 <sup>rd</sup> Engine is relay, assume dump site. DPO should assist w/ the dump site. If no assistance is needed, the DPO should join the crew to bolster RIT.			
5 <sup>th</sup> Engine	Fill site.			
1 <sup>st</sup> Truck*	*SPECIAL REQUEST ONLY*	Lap with up	date, ladders, utilities, ventilation, assist Fir	e Attack, Search and Rescue
1 <sup>st</sup> Tanker	If arriving prior to the 2 <sup>nd</sup> Engine, commit to the driveway and supply the 1 <sup>st</sup> Engine. If arriving after the 2 <sup>nd</sup> Engine, stage at the end of the driveway and supply the Siamese; assist with the dump site.			
Subsequent Tankers	Be prepared to either continue nursing supply or dump water for the dump site.			
2 <sup>nd</sup> Truck*	*SPECIAL REQUEST ONLY*			
1 <sup>st</sup> Transport	Position for rapid egress, treatment/transport of injured, rehab or support fire ground ops, if first arriving complete size up, mode declaration, establish command			
2 <sup>nd</sup> Transport	*SPECIAL REQUEST ONLY*			
1 <sup>st</sup> Chief	Position with view of incident, receive CAN report, size up, assume command, reaffirm or update IAP			
2 <sup>nd</sup> Chief	Meet with IC, assume position as requested by IC (Prepare for Division/Tactical Supervisor, Safety, Accountability)			
Notes	<ol> <li>Unlike fires in the hydranted area, a 2<sup>nd</sup> Truck will only respond based on special request. Personnel should consider access and need prior to the request.</li> </ol>			

#### 703.1 PURPOSE

This document provides arrival and on-scene procedures for Albemarle County Fire Rescue units operating at incidents involving fires in high rise and midrise structures.

#### 703.2 SCOPE

This procedure applies to all members of the Albemarle County Coordinated Fire and Rescue System as defined in Albemarle County Code Chapter 6, Article I, Division 2, Section 6-102.

#### 703.3 PROCEDURE LAYOUT

Operations at fires involving high rise and midrise structures are very similar. As such, this procedure is prepared in a manner to first cover operations at high rise structures with fires involving midrise structures being discussed at the end in section 703.10.

#### 703.4 OVERVIEW

High rise buildings, for the purposes of Albemarle County Fire Rescue, are those buildings that are five stories and greater. This definition ensures that the appropriate dispatch complement is assigned to fires in these buildings. However, the inclusion of five and six story structures creates some overlap with the definition of midrise buildings (discussed in the included addendum) and likely code differences should be noted.



The Virginia Uniform Statewide Building Code was modified in February of 1976 to require a fire control room in buildings with occupied/occupiable floors located more than 75' above the lowest level of fire department vehicle access. It is important to note that fires that occur in structures with fewer floors or lower building height can still present the same challenges experienced in much taller buildings. Buildings that have four to six, at least one standpipe, and at least one elevator may require the same tactical considerations as a high-rise, yet they likely lack the same built-in fire protection systems.

High-rise buildings present a wide variety of occupancies and may be strictly residential, strictly commercial, or house a combination of residential and commercial occupancies. These buildings often contain community rooms, restaurants, gyms, swimming pools, parking garages, trash

rooms and chutes, trash compactors, dumpsters, and commercial occupancies. These buildings may present with large footprints and/or odd designs that result in excessively long hose stretches and the potential for large distances between stairwells.

Data related to fires in high-rise structures indicates that nearly three-quarters of fires in high-rise structures occur in residential structures with cooking being the leading cause. The overwhelming majority of those fires originate at or below the 4th floor.

High-rise structures are scarce within Albemarle County. However, they are all within the hydranted area of the County.

High-rise structures are served by several utilities: water, sewer, gas, electric, and communications systems. These utilities may be in a variety of locations based on the occupancy.

The Effective Response Force (ERF) for high-rise fires should be 27 based on a hydranted area response.

#### 703.5 INCIDENT OBJECTIVES

The following incident objectives serve as an initial incident action plan (IAP) for fires involving high-rise buildings. However, it is essential that the Incident Command continuously evaluate the scene and modify the IAP based on the unique circumstances of the incident. Although the objectives are listed in sequential order, it may be appropriate to prioritize lower-priority objectives if achieving them will expedite incident stabilization. Additionally, if sufficient resources are available, objectives may be accomplished simultaneously.

- (a) Life Safety / Rescue / Civilian Protection
- (b) Exposure Protection / Fire Attack / Confinement
- (c) Search
- (d) Water Supply
- (e) Extinguishment
- (f) Overhaul / Ventilation / Salvage

The action with the highest potential to positively impact victim survivability and the safety of firefighters at any fire is to accomplish extinguishment of the fire as quickly as possible in its smallest state. Fires in high-rise buildings require effective size-up to identify the fire location and to recognize when an aggressive and overwhelming fire attack is the most appropriate action. It also requires recognition of when conditions are beyond the ability to control effectively by a standard interior fire attack. Size up must include the recognition of structural involvement as early as possible with a pessimistic perspective.

It is paramount that determination is made as to the occupancy of the high-rise. High-rise structures containing housing units pose a high-life hazard and should generally be addressed within the strategic mode of Rescue. Conversely, high-rise structures that house solely commercial occupancies that operate during normal business hours may indicate a need to operate within

any of the defined strategic modes of Offensive, Rescue, or Defensive. High-rise structures with mixed occupancy should be addressed as residential housing.

For the incident objectives to be met, fires in high-rise buildings require five basic actions:

- (a) determination of the fire floor,
- (b) verification of the fire floor,
- (c) control of occupants,
- (d) control of building systems, and
- (e) confinement and extinguishment of the fire.

#### 703.6 DISPATCH PLAN

(5) Engines, (2) Trucks, (2) Transport Units, (2) Chief Officers (Minimum ERF 27 Personnel)

#### 703.7 DISPATCH ASSIGNMENTS

See attachment: Quick Reference Guide.pdf

#### 703.7.1 1ST ENGINE

Expected Actions:

- Determine and announce water supply plan. 1st arriving engines should generally plan to either secure their own water supply or lay in from a hydrant to the scene.
- Supply the FDC.
- Size-up and initial command.
  - Assess Fire Alarm Control Panel (FACP)
  - Identify fire floor
  - Identify attack stairwell
- Determine and announce Mode of Operation.
- Place 1st line in service
  - Standpipe deployment
  - Preconnect deployment
  - Leader line
  - Hose bundle/high rise pack
  - Well stretch
  - Ladder advancement
  - Rope hoist options

Tactical Considerations:

All high-rise structures are within the hydranted area of Albemarle County, and the water supply plan should follow the anticipated deployment for the hydranted area. Generally, the 1st engine should plan to supply the FDC. As such, the 1st engine may opt to lay in from the hydrant to the scene remaining cognizant to maintain access for the truck(s) and other responding apparatus. If a hydrant is within 100' of the fire scene the company officer may elect to have the DPO hand jack the LDH and hydrant assist valve to the hydrant where the 2nd engine will complete the connection. If a hydrant is within 50' then the 1st engine may make an independent hydrant connection. The FDC should be immediately charged with company reports of fire or visible smoke or upon the direction of the IC.

Due to the potential for fire growth within high-rise structures and the impact smoke travel, the 1st engine should fully commit itself to the tasks associated with supplying the FDC and placing the 1st line in service. If the 1st line deployed is not a standpipe line, the operator should still connect to and supply the FDC if available. There is more potential to positively impact higher numbers of building occupants by limiting fire growth as the 1st engine. The practice of immediately forgoing the hose line deployment to focus on rescue should be avoided and left to either the truck or later arriving engines.

The size-up is of paramount importance and should begin at dispatch and continue throughout the incident. High-rise structures offer unique features and challenges. Serious fires can develop in areas remote from the exterior and personnel must aggressively investigate reports of "nothing showing." The FACP is a great resource that must be checked; additional signals from the FACP should serve as a strong indicator of a growing/advancing fire. The company officer should attempt to view multiple sides of the structure during the approach to the scene and make note of any fire location, extent of smoke, and any obvious rescues. If all sides of the structure are not able to be viewed prior to initiating actions on scene the company officer should make that announcement and assign the task to a later arriving company. The size-up should include all aspects of the initial and follow-up reports as listed in the Incident Command Procedure.

Additional items pertinent to size-up include, but are not limited to:

- Wind direction and strength
- Information garnered from building occupants, security, and/or maintenance
- Lobby directory review
- Determination of attack stairwell
- Determination as to whether elevators are viable for fire department use
- Determination of standard versus odd floor labeling or configurations

All items determined during the ongoing size-up must be announced to incoming companies and to the incoming/on-scene IC. It is the responsibility of the 1st engine company officer to identify and verify the fire floor.

The rapid application of water is the primary goal of the first arriving engine. Crews should work to ensure this takes place as rapidly as possible. The primary purpose of the first line should be to:

- Protect occupants.
- Protect stairwells.
- Confine the fire.
- Extinguish the fire.

The first line, rather deployed from a preconnect or utilizing the high-rise pack and standpipe, will typically be the 1 <sup>3</sup>/<sub>4</sub>" line to allow for the needed speed, mobility, and fire flow. The deployment method utilized will be based on the size-up and determination of fire location and fire progression. If the fire attack is planned to commence from a stairwell, efforts should be made to determine that the stairwell is clear of fleeing occupants above the point of attack. Once the doorway to the fire floor is opened and the line advanced, the doorway will remain open, and the stairwell may become polluted with smoke.

The 1st engine officer must be prepared to operate as a team with the 1st truck. In a perfect deployment model, the 1st engine and 1st truck should proceed to the fire floor together. Once on the fire floor, the truck should initiate reconnaissance operations to locate and identify the extent of the fire. Simultaneously, the 1st engine should be preparing the hose line for deployment from the stairwell but must remain aware and maintain the ability to relocate based on information from the reconnaissance efforts. In the absence of a truck, it is the responsibility of the 1st engine to accomplish these necessary tasks.

As time and actions permit, the operator should look to deploy ladders, as feasible and practical, to the building with an emphasis on placement to the fire room.

## 703.7.2 2ND ENGINE Expected Actions:

- Water Supply:
  - <sup>o</sup> Complete water supply for 1st engine.
  - If the 1st engine obtained their own water supply and there is no need to assist in the primary water supply for the incident the operator should dress out, abandon the apparatus, and deploy with the crew of the engine.
- Assess Fire Alarm Control Panel (FACP)
- Assist 1st engine with deployment of the first line
- Deploy second line to assist fire attack and/or protect the hallway/stairs.
- Perform primary search and rescue in coordination with fire attack (1st engine) in absence of a truck.

#### Tactical Considerations:

Generally, the 2nd engine should complete the water supply (make the hydrant connection) for the 1st engine. If the 1st engine has obtained its own water supply, the 2nd engine's operator should dress out, abandon the apparatus, and deploy with the crew of the engine.

The company officer should obtain building keys, if available, and assess the FACP to identify any changes since the assessment by the 1st engine.

The crew from the 2nd engine should deploy to the location of the 1st engine with hose packs, forcible entry tools, and additional SCBA cylinders. The 2nd engine's primary objective is to assist the 1st engine with the deployment of the initial attack line. After the initial attack line has been deployed the 2nd engine should work to deploy the second line. The second line may be used to assist with fire attack on the fire floor and/or protect the hallway/stairs.

In the absence of a truck, the 2nd engine may need to initiate/complete the primary search of the fire floor. In this instance, the crew should work with the 1st engine to coordinate search efforts. Refer to the *Tactical Considerations* section under *1st Truck* to determine taskings.

#### 703.7.3 3RD ENGINE Expected Actions:

- Water Supply:
  - Be prepared to:
    - Establish water supply to secondary FDC if present
    - Establish water supply to ground-level stairwell standpipe discharge to provide secondary water supply in absence of a secondary FDC
    - Initiate secondary water supply with support for potential aerial operations
- Deploy hose line to the floor above the fire
- Work in conjunction with the 2nd truck to perform fire attack, search/rescue, and check for extension

#### Tactical Considerations:

Deployment of the line above the fire is highly important. This line increases the safety of the crew(s) performing search above the fire and provides a means of extinguishment when fire extension is encountered.

The best-case scenario(s) for the deployment of the third line/line above involves buildings that are equipped with 3 or more stairwells. This allows for the third line to be deployed from a stairwell standpipe riser that is not being used as the primary attack stairwell and is not being used as the evacuation stairwell. At the very least, every effort should be made to use a stairwell standpipe riser that is different from the attack stairwell as both the first and second lines will typically deploy from the same riser.

If the evacuation stairwell must be used for the advancement of the third line personnel should work to limit contamination of the stairwell by allowing the truck company to search and assess for

#### High Rise (HR) and Midrise (MR) Guide

extension while the door to the floor remains closed. During this time the line should be deployed and staged in the stairwell while members of the engine company assist occupants around the obstruction(s).

703.7.4 4TH ENGINE Expected Actions:

- Position away from building; all personnel abandon apparatus
- Assume RIT
  - <sup>o</sup> Stage one floor below the fire floor via the attack stairwell
  - When faced with a below-grade fire RIT should be established just outside of the IDLH but still in proximity to the working crews

#### Tactical Considerations:

The Rapid Intervention Team (RIT) shall perform proactive measures to increase the safety of crews operating in the IDLH and on the fireground. This includes deploying to the appropriate location in or adjacent to the attack stairwell with appropriate equipment. The 4th engine should bring, not only their RIT pack, but RIT packs from several apparatus. Additionally, they should deploy with search rope and tools potentially necessary to mitigate a firefighter rescue. While staged, the RIT should actively assist with the movement of hose lines through the stairwell.

#### 703.7.5 5TH ENGINE

#### Expected Actions:

- Assist the 3rd engine establish the secondary water supply
- Report to the IC for potential alternative assignment(s)
- Report to the lobby and assume lobby control

#### Tactical Objectives:

The 5th engine must be highly organized, knowledgeable, and capable of operating multiple building systems to successfully manage lobby control. Lobby control manages several tasks. The successful management of the responsibilities associated with lobby control will generally require the 5th engine to split their crew. The specific tasks managed by lobby control may include:

- Internal accountability.
  - Personnel assigned to manage internal accountability should position themselves in a conspicuous location and be prepared to track pertinent information related to operating companies on a command board. The information tracked should resemble:

UNIT ID	TASK and LOCATION	ENTRY TIME	PAR
Engine 72	Second Line, 4th floor	2145	3

- Building systems control.
  - <sup>o</sup> The management of building systems can be a daunting task. Personnel assigned to manage building systems should make every effort to identify and work with building maintenance or building engineer(s). Personnel and building staff should move to the fire control room. Building systems that may require control include:

Fire Pump	Determine operation of fire pump and activate if necessary. Communicate discharge pressure of fire pump.
Fire Alarm	Monitor alarm system status for changing activations and communicate.
Sprinkler System	Monitor the floor/location with activated sprinkler heads. Notify command if the sprinkler system is in trouble or indicating water flow.
Fire Phones	Constantly monitor and answer fire phones.
HVAC System	Initially shut down the HVAC. Coordinate with building staff and IC regarding reactivation to utilize the HVAC in an exhaust function.
Elevator Systems	Determine the status and location of all elevators. Elevators not already recalled to the lobby will require identification and search.

- Elevator operations.
  - Elevators may be used to deliver personnel and equipment to staging and/or the fire floor. Elevators may also be used to rapidly evacuate patients from upper floors. Tasks associated with elevator operations includes:

Retrieve keys, either from the Knox Box or from the fire control room.
Recall elevators (firefighter service Phase 1) if not already performed.
Determine which elevators have firefighter service.
Confirm the shaft is clear of any fire, smoke, or water. If clear, enter the car and take control of the car operations (firefighter service Phase 2).
Do not allow operation of the elevator above the fire floor.

- Evacuation coordination.
  - There is the potential for evacuating and displaced persons to congregate in the lobby. Personnel may need to evacuate civilians to an alternate area.

#### 703.7.6 1ST TRUCK

Expected Actions:

- Position on side Alpha unless the fire location is different and can be readily identified.
- Position to reach the fire floor.

- When arriving first, perform size-up, establish command, as well as determine and announce mode of operation.
- Prepare for immediate rescues as appropriate.
- Perform forced entry.
- Perform reconnaissance of the suspected fire floor.
- Perform primary search of the fire floor.
- Perform ventilation in coordination with fire attack and the IC.
- Ladder the structure.
- Control utilities and prepare for salvage and overhaul.

#### Tactical Considerations:

The role of the truck company is vital to the success of fire ground operations and personnel assigned to the truck must be able to adapt based on needs and at the direction of the IC. Delays in the arrival of the truck may result in some taskings being performed or initiated prior to the truck's arrival. In these instances, the truck officer should work with the IC and other company officers to determine tasking priorities.

The 1st truck should position on side Alpha unless the fire location is different and can be readily identified. In those instances, the truck should position on the fire side of the building if accessible. Personnel should work to make an immediate determination as to the anticipated effectiveness of the aerial. If smoke, fire, and/or victims appear within reach of the aerial, the crew should:

- Utilize the aerial to access the unit or location while attempting to maximize the scrub area.
- Avoid placing the aerial to a window or balcony directly involved in fire unless there is an indication that there is an occupant requiring immediate rescue in that area or the elevated master-stream tactic is planned to be used for a portion of the initial fire attack.
- Raise the aerial to an adjoining unit if the apartment or unit is fully involved.

The 1st truck should generally plan to deploy with the DAO remaining exterior to operate the aerial while the crew enters the structure for interior taskings (recon, search, etc.). It should be noted that accomplishing the interior taskings may be delayed when the interior crew of the truck is comprised of fewer than three personnel. If there is no need for the aerial, or if the fire floor is completely out of reach, the officer should consider deploying the entire crew interior.

While en route to the fire floor the truck crew should assist the 1st engine as necessary. Upon arrival at the anticipated fire floor the truck crew should:

• Consider deploying a search line to assist in maintaining orientation.

- Determine and announce the location of the fire. In times when the fire location is not readily apparent, the crew should perform reconnaissance while the engine prepares the line.
- Perform forcible entry on the fire unit.
- Initiate the primary search of the fire unit.
- Coordinate the evacuation of occupants from the fire floor.
- Remove obstructions that may hinder the hose deployment and fire attack.

Once the fire is located, the fire attack is initiated, and the fire unit has been searched to the extent possible, the truck crew should begin their search of the remainder of the fire floor.

Search priorities for residential occupancies are:

- The fire unit,
- Exit hallways,
- Adjacent/exposure units, and
- All other units on the fire floor.

Search priorities for commercial occupancies are:

- The immediate fire area and floor,
- The floor above the fire area,
- The top floor, inclusive of the involved hallways, stairwells, and elevators, and
- The floors between the floor above the fire and the top floor.

#### 703.7.7 2ND TRUCK

Expected Actions:

- Position to reach the fire floor
- Ensure the identification of the evacuation stairwell
- Deploy to the floor above the fire for reconnaissance, search and rescue, ventilation, and aid the engine operating on the same floor

#### Tactical Considerations:

During the response and arrival sequence, the 2nd truck should attempt to view as much of the structure as possible and note changes from initial reports and persons in distress. The company officer should assess the potential need for elevated master streams. The positioning of the 2nd truck should be based off this information and coupled with wind direction and strength.

The deployment of the crew from the 2nd truck may be based on several factors. If the aerial can reach the fire or victims, it should be raised to the fire floor with a minimum of the DAO left exterior to operate the aerial. If the 2nd truck is a tower ladder and is operating as a crew of three, the DAO may operate the aerial from the bucket and elevate to the level of the fire and remain ready for

placement as needed. The DAO should not raise the bucket above the fire except for immediate rescue(s). If the tower ladder is operating with a crew of four, the officer may split the crew into an inside team and an x-ray crew with the x-ray crew handling the exterior taskings. If there is no ability to access the fire floor, victims or roof, the entire truck crew should deploy to the interior of the structure to assume their role on the floor above.

### 703.7.8 TRANSPORT UNITS

Expected Actions:

- Position for rapid egress.
- Provide treatment for initial patients.
- Set up and prepare for rehab.
- Support fire ground operations at the direction of the IC.
- When first arriving, perform size-up, establish command, and determine and announce mode of operation.

#### Tactical Considerations:

There are multiple types of transport units that operate within Albemarle County. There are differences between EMS capability (BLS versus ALS) and differences between suppression capability. The IC shall consider the capabilities of the transport unit assigned to the incident and make any adjustments or additions that may be deemed necessary.

In general, the transport unit shall be responsible for maintaining a position that allows for rapid egress from the scene with focus placed on not becoming trapped due to apparatus and hose deployment. The transport unit shall be responsible for the treatment of initial patients. In the absence of initial patients, the transport unit shall prepare for and set up rehab.

If the transport unit is suppression capable and the arrival order warrants, the IC may direct the unit to be utilized in a suppression role. If the transport unit is used in a suppression role, an additional transport unit shall be added.

Based on the complexity of the scene, and at the direction of the IC, the second transport unit may be directed to establish a treatment and/or rehab area within the lobby of the structure.

### 703.7.9 CHIEF OFFICERS

Expected Actions:

- 1st Chief Officer
  - Position with a view of the incident with attention to preferred apparatus placement.
  - Receive CAN from IC.
  - Size-up and assume role of IC.
  - Reaffirm or update the IAP.

#### High Rise (HR) and Midrise (MR) Guide

- 2nd Chief Officer
  - Meet with IC.
  - Assume Division/Tactical Supervisor.
- Subsequent Chief Officers
  - Meet with IC.
  - <sup>o</sup> Be prepared to operate any of multiple roles:
    - Division/Tactical Supervisor(s).
    - Group Supervisor(s).
    - Branch Director(s).
    - Lobby Control.
    - Logistics and Planning.
    - Safety Officer.
    - Accountability Officer.

#### Tactical Considerations:

The standard plan of action for fires in high-rise structures shall be to address them according to the guidelines contained herein. However, it is understood that situations involving fire are dynamic and may require actions that are outside of standard practice. In those instances, all changes must be announced by the IC.

The goal of the IC should be to continue and/or update the appropriate IAP for the incident. The IAP shall be based on a thorough and continuous size-up, recognition of who and what may be in danger, attention to safety considerations, and resource needs. The anticipated need for additional resources should be requested early. Fires in high-rise buildings require more resources than similar fires in smaller structures and additional alarms should be considered early. Additionally, the IC should consider requesting additional resources to bolster the RIT assignment.

Objectives for fires shall be set within the following areas: Rescue, Exposure, Confinement, extinguishment, Ventilation, and Salvage.

High-rise building fires present oversite and management challenges not typically encountered by chief officers operating at single family dwelling fires. For this reason, later arriving chief officers should be immediately prepared to operate within an assigned tactical supervision role such as a Division Supervisor. Chief officers assigned to this role must anticipate managing all aspects of suppression, search/rescue, ventilation, salvage, and overhaul for the assigned area. Chief officers should refer to the Tactical Supervisors Procedure for additional information and best practices.

#### 703.8 OPERATIONAL CONSIDERATIONS

#### 703.8.1 HOSE SELECTION AND ADVANCEMENT

Typically, hose operations within high-rise buildings will involve the use of standpipes. However, for fires occurring below grade or on the first through the third floors, personnel may elect to deploy preconnected lines from the engine due to speed and familiarity. It is imperative that even when this tactic is employed the standpipe system must still be supplied.

Residential occupancies are considered to have a low fire load requiring 10 gpm per 100 sqft of involved area. If the fire occurs in a residential or hotel building, use of the 1 <sup>3</sup>/<sub>4</sub>" hose high-rise pack is likely preferred. Based on the tip size, personnel should achieve 160-210 gpm, and one or two lines should achieve extinguishment in residential settings. This size of line also provides more mobility which may be needed due to the inherent compartmentation found in residential high-rises. Consideration should be given to large diameter hose lines for fires on extreme upper levels of a high-rise structure due to the potential delay in achieving the benchmark of "water on fire."

Commercial occupancies are considered to have a moderate fire load requiring 20 gpm per 100 sqft of involved area. Company officers should consider whether 1  $\frac{3}{4}$ " hose, 2" hose, or 2  $\frac{1}{2}$ " hose would be better suited based on the extent of any fire on arrival. 1  $\frac{3}{4}$ " and 2" hose offer more maneuverability and offer flows from 160-240 gpm. 2  $\frac{1}{2}$ " hose offers flows from 260-300 gpm along with increased reach and penetration. However, 2  $\frac{1}{2}$ " hose will increase the number of staff required to operate the line. For fires involving compartmentalized commercial spaces the 1  $\frac{3}{4}$ " or 2" hose line offers the best option.

#### 703.8.2 STANDPIPE OPERATIONS

Great care and attention should be given to identifying and determining the attack stairwell. Incorrectly designating the attack stairwell prior to confirming the fire location may cause hose lines to be stretched short of the objective. Initial companies should work to identify the fire location prior to announcing the attack stairwell. Likewise, ICs should exercise patience and allow companies a reasonable amount of time to determine the fire location.

Standpipe operations should include the use of flow meters or pressure gauges. Companies should include these devices in their high-rise bag and deploy them inline between the standpipe and the hose line. This increases the ability of companies to troubleshoot and overcome water supply problems and allows companies to adjust flows.

#### 703.8.3 SEARCH OPERATIONS

Typically, commercial high-rises are most populated during the daylight hours whereas residential high-rises experience higher occupancy rates during the evening and nighttime hours. However, personnel should note that there is no hard rule delineating occupancy rates; it is not uncommon for commercial occupancies to have some occupants after hours and it is not uncommon for residential occupancies to have daytime occupancy.

Personnel should greatly consider the use of a search rope. Even small fires may experience rapid growth creating conditions that significantly impact visibility.

Search priorities for residential occupancies are:

Procedure Manual

#### High Rise (HR) and Midrise (MR) Guide

- The fire unit,
- Exit hallways,
- Adjacent/exposure units, and
- All other units on the fire floor.

Search priorities for commercial occupancies are:

- The immediate fire area and floor,
- The floor above the fire area,
- The top floor, inclusive of the involved hallways, stairwells, and elevators, and
- The floors between the floor above the fire and the top floor.

Personnel should note that search operations also include evacuation of occupants via a controlled manner. Personnel must work to prevent panic amongst the fleeing occupants, control the evacuation, and ensure all searches are complete. Throughout the entire process of search and evacuation personnel must monitor changes in smoke, heat, and fire and be prepared to alter the evacuation plan as necessary.

#### 703.8.4 VENTILATION

Smoke is a major issue during fires involving high-rise structures. Smoke may travel through the many passageways (stairs, elevator shafts, utility shafts, HVAC, etc.) found in high-rise structures and poses a danger to building occupants.

Newer high-rise structures are tightly sealed and are designed to be highly energy efficient. The tight seal of these structures influences smoke travel.

Smoke may mushroom within a structure. This occurs when the smoke rises vertically, uninfluenced by external environmental conditions, until it reaches the roof or ceiling level. The smoke then banks down and begins to fill the area working back towards the fire.

Additionally, smoke may contaminate the structure via the stack effect. This is more likely in tightly sealed structures during winter temperature extremes. During the stack effect, smoke rises until the temperatures balance, at which point the smoke will settle and stratify. This occurs when the smoke is not sufficiently hot enough to rise all the way to the roof or ceiling.

A reverse stack effect may occur during summer temperature extremes. During the reverse stack effect, heated smoke will rise through shafts and chases as normal. However, smoke will also migrate to floors below the fire floor due to temperature differences with the exterior of the tightly sealed building.

Personnel must be prepared to ventilate the heat, smoke, and dangerous gases that build up during a fire. These efforts must be coordinated with attack, search, evacuation activities, and the IC. There are generally three tactics that may be considered for ventilation of a high-rise structure. The impacts of wind and the stack effect will impact the decision regarding the tactic utilized.

Additionally, it is generally better to have the fire knocked down prior to initiating ventilation during a high-rise fire. The three tactics that are generally considered for ventilation include:

- Horizontally through windows, •
- Vertically through stairwells, or
- Through the building's HVAC system.

Horizontal ventilation in high-rise structures poses difficulties for a multitude of reasons. Many windows in high-rise structures are sealed closed and unable to open. Some windows are made with the ability for firefighters to break them, however, this creates a hazard to units operating on the exterior of the structure. Additionally, personnel must pay careful attention to the wind when utilizing windows for horizontal ventilation. Preferably, horizontal ventilation would be performed by utilizing the pressurized attack stairwell to pressurize the fire floor. From there only window(s) in the fire unit can be opened to perform the ventilation. Personnel must monitor smoke travel to ensure that it only vents out of the fire unit window(s) and does not collect in any common hallways or the attack stairwell.

Vertical ventilation may be accomplished through stairwells. However, it is important for personnel to understand that evacuation stairwells cannot be used for this purpose. Those stairwells must remain pressurized with any top-side openings, such as bulkhead doors, closed. Additionally, vertical ventilation through the stairwells depends on the extent of progress of the fire attack to avoid fire pushing back towards advancing hose and search teams. Once an appropriate stairwell has been identified, personnel can utilize PPV from the ground level to pressurize the stairwell and push smoke through a suitable roof opening. Personnel should note that elevator shafts are generally not a viable option for vertical ventilation as they likely do not have a suitable opening to expel the smoke and the presence of smoke in an elevator shaft removes that elevator from service.

The HVAC system is another option for ventilation within high-rise structures. Initially, during the beginning phases of a high-rise fire, the HVAC system should be shut down to limit any fire spreading through the system. Once knock down has been achieved, companies may consult with the IC and/or building maintenance/engineering to determine the feasibility of the HVAC system to ventilate the structure. Many newer HVAC systems can be placed into an exhaust function to remove smoke on one or more floors. During this process, personnel should monitor the status of the system to ensure that the desired effect is observed.

#### 703.9 CONSTRUCTION CHARACTERISTICS

#### 703.9.1 DESIGN DIFFERENCES

High-rise structures can generally be classified into two basic designs, either residential or commercial. Often, newer high-rise structures contain a mixture of commercial space and residential space. These high-rises should be treated as residential by the responding companies.

Residential high-rise buildings are characterized by center-fed hallways, numerous interior compartments, and 24-hour occupancy. These buildings include apartments, hotels, condominiums, hospitals, and/or assisted living facilities. An example of common center-fed hallway design in residential high-rise buildings is below.



Many commercial high-rise buildings are characterized by center-core construction. This construction technique places utility routes up through the center of the building with circuit and utility corridors around the building's core. These buildings likely have large, open expanses on each floor. Elevators, stairwells, and mechanical rooms generally reside in the building's core with office or residential spaces comprising the perimeter of each floor. An example of center-core design is below.



Utility Shaft

A common construction practice, particularly in hotels, is the inclusion of an atrium as shown below. Atriums are typically located at the main entrance of the building. Atriums can increase the difficulty of controlling smoke conditions as they allow multiple floors to be exposed to smoke, fire, and heat.



High-rise buildings may present with long hallways. Often, these long hallways will be sectioned with fire-rated doors. Personnel should regularly perform pre-incident planning to gain knowledge of these structures. Personnel may also perform reconnaissance on a floor below the fire area to determine door locations, floor layout, and standpipe locations. Generally, if areas are sectioned by fire doors, each section should include a stairwell and a standpipe.

High rise structures greater than 75' in Albemarle County were constructed after the 1976 building code change and therefore have:

- Fire resistive construction,
- Class 3 standpipe system(s),
- A compartmentation option if built between 1976 and 1991,
- Sprinkler protection,
- Firefighter service to the elevators,
- Some form of smoke control system or compartmentation inclusive of windows that may be opened, tempered glass panels on at least two sides of the building that can be broken out, or an HVAC system that can exhaust smoke to the outside,
- At least two approved means of egress from each floor,
- A building communications system if built after 1991,
- In building emergency communications enhancement if built after 2003,
- A fire control room, and

#### High Rise (HR) and Midrise (MR) Guide

• Standby and emergency power systems.

#### 703.9.2 FIRE WALLS

High-rise structures are constructed with multiple fire walls. Fire walls, either gypsum or masonry, typically enclose shafts (stairway, elevator, and utility) within high-rises. These fire walls are typically constructed to provide a minimum of a 2-hour fire resistance rating. Fire walls may also be utilized to separate occupied areas from storage, utility, and commercial areas.

#### 703.9.3 ROOFS

The most common roof design of high-rise structures is the flat roof. Typically, the roof is designed to be much lighter than that of the other floors. Most commonly, these roofs are constructed using composite metal floor decking with a rubberized or tar-and-gravel layer supported by steel bar joist. Occasionally, the structure may include a roof-top community room or community space. This structure typically differs from the noncombustible lower floors in that it is constructed of lightweight combustible materials.

Flat roofs are often accessed through a hatch or a bulkhead at the top of the stairwell(s). Occasionally, this access may be gained through a machine room located off a penthouse. Personnel should make note during preplans of which stairs provide access to the roof.

Often, flat roofs are hidden with facades. These facades are used to hide utilities installed on the roof and to create the appearance of a decorative pitched roof or of an additional floor. HVAC units are the primary utility that is installed on the roofs. Personnel should be cognizant of the increased deadload these present and be prepared to access the roof to control power to these units.

Additionally, flat roofs may be used to house elevator control rooms, antennae, microwave dishes, helicopter pads, and communications equipment.



#### 703.9.4 EXTERIOR WALLS

A common feature found on many newer high-rise structures involves the installation of exterior curtain walls. These curtain walls are normally constructed of either glass or panels made from precast masonry or metal. Occasionally, structures may be designed to have a "living curtain wall" where lattice panels are installed, and vining plants are encouraged to grow throughout the lattice work. Depending on the type of bracket used to mount the curtain wall to the building a gap of 6" - 12" may exist. Any gap that may exist is required to have firestops. Personnel should be cognizant

and remain vigilant for vertical, both upward and downward, spread of fire with the presence of curtain walls.

Additionally, some structures are designed with exterior cladding used to enhance a buildings appearance and to improve the overall performance of the façade. This design feature presents challenges for service personnel. On some structures, this added design feature includes lightweight materials such as Styrofoam designed to mimic carved stone and enhance the insulation of a structure. On other structures, this added design feature includes the installation of thick, dense insulation mounted on the exterior of the building and then covered with cladding. There is an air gap between the cladding and the insulation to allow for ventilation. This air gap can act as a chimney resulting in rapid fire growth and development. An extreme example of the dangers associated with this design feature was evidence in the Grenfell Tower fire that occurred in London, England on June 14, 2017.



#### 703.9.5 STANDPIPES AND SPRINKLERS

High-rise buildings in Albemarle County were all constructed after 1976 and, as such, contain automatic sprinkler systems. Design features such as compartmentation may result in these structures being either partially or completely sprinklered.

Buildings with standpipe and sprinkler systems often utilize a combination fire department connection (FDC) that supplies both systems. Occasionally, buildings may have individual FDCs for each system. The FDCs for these systems may be either mounted directly to the building or away from the building on the surrounding property. Each FDC will have an accessible hydrant located within 100 feet of the standpipe and sprinkler FDC.

It is important to note that not every stairwell may contain a standpipe riser. Standpipe riser outlets can vary depending on the stairwell type and location; some stairwells may lack standpipe riser outlets due to proximity to other risers within the building.

Some buildings, due to layout and floorplan, may house standpipe riser outlets at hallway midpoints. While these are useful, they should not be a primary option for fire personnel due to the inherent safety and level of protection afforded to crews by the landing door when using stairwell standpipe riser outlets.

Sprinkler control valves for each floor may be found at stairwell landings. In buildings with hallway riser connections personnel may find sprinkler control valves in hall closets or recessed above a drop ceiling.

Some high-rise structures may have pressure-regulating devices on standpipe discharges. These are designed to reduce, regulate, control, or restrict water pressure. There are two types of pressure-regulating devices: pressure-restricting devices and pressure-reducing valves. Pressure-restricting devices are typically mounted on the exterior of the riser outlet and are designed to reduce downstream water pressure only in flowing (residual) conditions. If possible, personnel should remove any pressure-restricting devices prior to use. Pressure-reducing valves include a device with internal components affixed to the riser discharge. These valves cannot be easily removed or adjusted. Personnel should note the presence of any pressure-reducing valves and be prepared to alter their method of fire attack if the valve disallows appropriate flows and pressures.

One tactic for the supply of the standpipe riser involves the DPO connecting directly to the standpipe riser in the stairwell. This tactic is typically utilized when exterior FDC connections are found to be out of service. The presence of a pressure-reducing valve on the standpipe riser outlet will not allow this technique to work due to the presence of a one-way valve within the reducer.

#### 703.9.6 PARKING GARAGES

Vehicle fires within attached parking garages pose a challenge to fire service personnel. Parking garages may be found attached to high-rises, below grade within a high-rise, designed as the center-core, or in other configurations. Personnel should be prepared to address fires in parking garages at grade, below grade, and above grade. These structures can easily exceed several

thousand square feet and can house any number of vehicles. Additionally, these structures are often now equipped with electric vehicle charging stations.

Personnel have two primary options for addressing fires in parking garages:

- Deploy a hose line directly from the engine to attack the vehicle fire. In this instance, the FDC should still be supplied.
- Operate a hose line off the standpipe from the riser on the fire floor.

Other options for addressing above grade parking garage fires include:

- Utilize an aerial for an elevated standpipe connection.
- Deploy a leader line.

When the fire is located on a lower level of a below grade parking garage, personnel should utilize a combination of positive pressure ventilation and the garage ventilation system to keep the attack stairwell clear of smoke.

#### 703.10 MIDRISE BUILDING FIRES - ADDENDUM

#### 703.10.1 OVERVIEW

Midrise buildings, for the purposes of Albemarle County Fire Rescue, are three and four stories.

Midrise buildings may be strictly residential, strictly commercial, or house a combination of residential and commercial occupancies. These buildings allow for a greater occupancy density than garden apartments without the code requirements or regulations associated with high-rises. Additionally, midrise structures may present with large footprints and/or odd designs that result in excessively long hose stretches and the potential for large distances between stairwells.

Midrise buildings share many characteristics with both garden apartments and high rises. Three factors will dictate the shared characteristics and whether the specific midrise is more akin to a garden apartment or to a high rise. Those factors are the year of construction, the building code enforced during construction, and the original intent of the occupancy.



Characteristics that may be shared with garden apartments:

- Full, partial, or no sprinkler protection
- No standpipe system
- Ordinary construction
- Lightweight wood construction
- Large/open attic space

Characteristics that may be shared with high rises:

- Full, partial, or no sprinkler protection
- A standpipe system
- Hallway riser connections
- Firefighter elevator service
- Standby and emergency power systems
- Noncombustible construction
- Hallways to access work or living areas
- Fire doors in the hallways
- Center core floor plans
- Center fed hallways
- Lower-level commercial occupancies
- Parking garages

Fire data (property loss, fire numbers, and deaths) does not exist specifically for midrise structures. Rather, reported fire data tracks the number of residential versus nonresidential structure fires. Residential fires are broken down into "home structure fires" (one/two-family homes and apartment/multi-family homes) and "other residential structure fires." In 2022 there were 80,000 apartment/multi-family fires resulting in 470 civilian deaths. Those 470 deaths account for 17% of residential fire deaths.

Midrise structures can be found throughout the hydranted area of the County.

Midrise buildings are typically served by several utilities: water, sewer, gas, electric, and communications systems. These utilities may be in a variety of locations based on the occupancy.

The Effective Response Force (ERF) for garden apartment fires should be 22 based on a hydranted area response.

#### 703.10.2 INCIDENT OBJECTIVES

The incident objectives for fires involving midrise structures mimics those for fires involving highrise structures. Personnel should focus on:

#### High Rise (HR) and Midrise (MR) Guide

- (a) Life Safety / Rescue / Civilian Protection
- (b) Exposure Protection / Fire Attack / Confinement
- (c) Search
- (d) Water Supply
- (e) Extinguishment
- (f) Overhaul / Ventilation / Salvage

The action with the highest potential to positively impact victim survivability and the safety of firefighters at any fire is to accomplish extinguishment of the fire as quickly as possible in its smallest state. Fires in midrise buildings require effective size-up to identify the fire location and to recognize when an aggressive and overwhelming fire attack is the most appropriate action. It also requires recognition of when conditions are beyond the ability to control effectively by a standard interior fire attack. Size up must include the recognition of structural involvement as early as possible with a pessimistic perspective.

It is paramount that determination is made as to the occupancy of the midrise. Midrise structures containing housing units pose a high-life hazard and should generally be addressed within the strategic mode of Rescue. Conversely, midrise structures that house solely commercial occupancies that operate during normal business hours may indicate a need to operate within any of the defined strategic modes of Offensive, Rescue, or Defensive. Midrise structures with mixed occupancy should be addressed as residential housing.

#### 703.10.3 DISPATCH PLAN

(4) Engines, (2) Trucks, (1) Transport Unit, (2) Chief Officers (Minimum ERF 22 Personnel)

#### 703.10.4 DISPATCH ASSIGNMENTS OVERVIEW

Midrise buildings share characteristics found in both high-rise buildings and garden-style apartments. Because of this, the tactics necessary for mitigating fires in midrise buildings can overlap with tactics employed during fires in garden apartments or high-rise buildings.

The presence of a standpipe system should drive the tactical decisions regarding operations at fires in midrise structures. For structures that lack a standpipe system personnel should refer to the Garden Apartment (G-APT) Guide. For structures with a standpipe system personnel should refer to the tactics outlined in the High Rise (HR) Midrise (MR) Guide.

Responding units should position and operate based on the initial tactical plan identified by the first arriving officer. This plan should generally align with either the Garden Apartment (G-APT) Guide or the High Rise (HR) and Midrise (MR)Guide.

While operating at fires in midrise buildings without a standpipe system the 5<sup>th</sup> due engine company may be utilized to:

- Assist the 3<sup>rd</sup> engine with completion of the secondary water supply.
- Assume lobby control.
## High Rise (HR) and Midrise (MR) Guide

• Perform tasks as requested and deemed necessary by the IC.

### 703.10.5 CONSTRUCTION EXAMPLES

As discussed earlier, construction styles may greatly mimic those found in high-rise construction without the inclusion of the associated regulations and code requirements. Midrise structures that are only three stories are not required to have a standpipe system.

### 703.10.6 COMMERCIAL MIDRISE



703.10.7 RESIDENTIAL MIDRISE





# Albemarle County Fire Rescue System Procedure Manual

High Rise (HR) and Midrise (MR) Guide



# Attachments

# **Quick Reference Guide.pdf**

7/29/2024 76

#### HYDRANT AREA RESPONSE PLAN

	Single-Family Dwelling	Townhouse	Strip Mall/Commercial	Garden Apartment	Midrise	High Rise	
Assignment	4E/1T/1Amb		4E	/2T/1Amb		5E/2T/2Amb	
1 <sup>st</sup> Engine	Lay supply line or establish own water supply, size up, establish command, complete 360 lap (if size permits) and report findings via follow-up report, determine mode, deploy and manage initial attack line FACP, report findings via folor, place first li				blish own water supply, ablish command, assess bllow-up report, determine identify attack stairwell, ne in service		
2 <sup>nd</sup> Engine	Complete water supply for 1 <sup>st</sup> engine if needed, assume Search and Rescue		Complete water supply for 1st engine if needed, FDC if on Side A, deploy second line to assist fire attack/protect public stairs, perform search and rescue in absence of a truck		Complete water supply for 1st engine if needed, assess FACP, assist 1st engine with fist line, deploy second line to assist fire attack and/or protect public stairs/hallway, perform primary search and rescue on fire floor in absence of a truck		
3 <sup>rd</sup> Engine	Position for seconc assume 2r	l water supply, Id line	Position on Side C, secure water supply if available, forced entry on fire and exposure units, FDC if on Side C	Initiate secondary water supply, provide Charlie side or opposite side report, deploy line above fire	Be prepared to supply secondary water supply,	the 2nd FDC or initiate deploy line to floor above	
4 <sup>th</sup> Engine	Assume RIT, DPO to complete water supply for 3rd engine or truck assumes RIT in the b				Entire crew abandons a assumes RIT in the attack below the	oparatus and whole crew stairwell, staged one floor e fire floor	
5 <sup>th</sup> Engine	*SPECIAL REQUEST ONLY*				Assist 3rd engine establish secondary water supply, report to CMD post, assume lobby control		
1 <sup>st</sup> Truck	Position Side A wit	Position Side A with effort to reach fire area and exposure(s), forced entry, search and rescue, ladders, ventilation, utilities, assist fire attack forcible entry ar					
2 <sup>nd</sup> Truck	*SPECIAL REQUEST ONLY*	Pos	sition for Side C coverage as able, roof, ventilation Position to reach fire apparatus, crew to fl			loor, DAO remains with or above with 3rd engine	
1 <sup>st</sup> Transport	Position for rapid egress, treatment/transport of injured, rehab or support fire ground ops, if first arriving: complete size up, mode declaration, establish command						
2 <sup>nd</sup> Transport	*SPECIAL REQUEST ONLY*       Position for rapid egress, treatment/transport of injured, prepare to establish lobby         treatment/rehab area						
1 <sup>st</sup> Chief	Position with view of incident, receive CAN report, size up, assume command, reaffirm or update IAP						
2 <sup>nd</sup> Chief	Meet with IC, assume position as requested by IC (Prepare for Division/Tactical Supervisor, Safety, Accountability)						

#### NON-HYDRANT AREA RESPONSE PLAN

	Single-Family Dwelling	Townhouse	Strip Mall/Commercial	Garden Apartment			
Assignment	5E/3K/1Amb	5E/3K/1T/1Amb					
1 <sup>st</sup> Engine	Size up, establish command, complete 360 lap and report findings, determine mode, deploy and manage initial attack line						
2 <sup>nd</sup> Engine	Lay supply line. If the driveway is over 1000 feet, split lay. Search and rescue.						
3 <sup>rd</sup> Engine	Dump site; complete split lay if needed and assume relay Engine role. Assume second line.						
4 <sup>th</sup> Engine	Assume RIT. Position out of the way. If 3 <sup>rd</sup> Engine is relay, assume dump site. DPO should assist w/ the dump site. If no assistance is needed, the DPO should join the crew to bolster RIT.						
5 <sup>th</sup> Engine	Fill site.						
1 <sup>st</sup> Truck*	*SPECIAL REQUEST ONLY* Lap with update, ladders, utilities, ventilation, assist Fire Attack, Search and Re		e Attack, Search and Rescue				
1 <sup>st</sup> Tanker	If arriving prior to the 2 <sup>nd</sup> Engine, commit to the driveway and supply the 1 <sup>st</sup> Engine. If arriving after the 2 <sup>nd</sup> Engine, stage at the end of the driveway and supply the Siamese; assist with the dump site.						
Subsequent Tankers	Be prepared to either continue nursing supply or dump water for the dump site.						
2 <sup>nd</sup> Truck*	*SPECIAL REQUEST ONLY*						
1 <sup>st</sup> Transport	Position for rapid egress, treatment/transport of injured, rehab or support fire ground ops, if first arriving complete size up, mode declaration, establish command						
2 <sup>nd</sup> Transport	*SPECIAL REQUEST ONLY*						
1 <sup>st</sup> Chief	Position with view of incident, receive CAN report, size up, assume command, reaffirm or update IAP						
2 <sup>nd</sup> Chief	Meet with IC, assume position as requested by IC (Prepare for Division/Tactical Supervisor, Safety, Account						
Notes	1. Unlike fires in the hydranted area, a 2 <sup>nd</sup> Truck will only respond based on special request. Personnel should consider access and need prior to the request.						