

FIRE RESCUE 1

YOUR MAYDAY SURVIVAL GUIDE

INSIDE

- Lessons from a personal mayday experience
- Simplicity and speed in RIT training
- How to command a mayday event
- The portable radio as a mayday lifeline

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FROM THE EDITOR

A mayday is the critical moment where the incident can go one of two ways – rescue or tragedy.

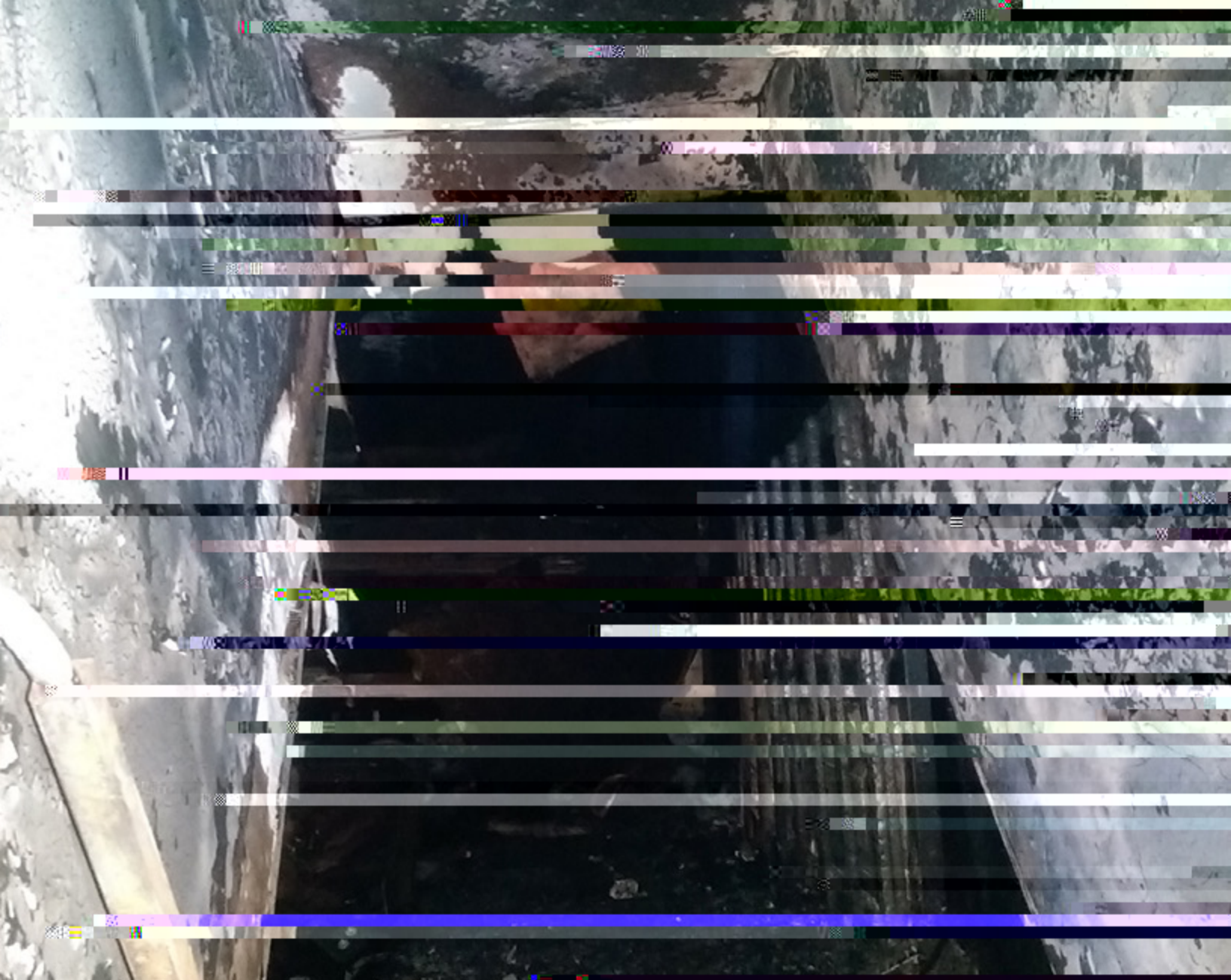
Key to avoiding tragic outcomes is mayday training, particularly for newer members with less muscle memory aligned with real-world fireground emergencies. But even seasoned firefighters can find themselves paralyzed with panic, unsure how to proceed.

This special edition shares one battalion chief’s personal mayday experience, plus how the department handled the incident aftermath and lessons learned; offers a back-to-basics guide to rapid-intervention training; and addresses the command component of mayday training. Additionally, learn more about mayday training and policies at our mayday survival guide resource page: firerescue1.com/mayday-survival-guide.

I encourage you to read and share these resources with your members. It could be the tool that helps you or a fellow member navigate your way to safety following a mayday transmission.

Janelle Foskett
Editor-in-Chief, FireRescue1.com

EDITOR-IN-CHIEF
Janelle Foskett



I'M TRAPPED IN THE BASEMENT

The after-action review gives our future selves a fighting chance to survive the unexpected and thrive in an unpredictable career

By Steve Conn

March 21, 2003, began like any other spring day in Cincinnati – gloomy, overcast and humid.

Colerain Township Station 26's crew had just completed our morning checks and was sitting down at the dayroom table for a briefing and a cup of coffee when we heard that Cincinnati Fire, our neighbor to the south, had a mayday situation and it didn't sound good.

Our thoughts and attention turned to our brothers and sisters from CFD as we learned about the tragic death of 25-year-old Firefighter Oscar Armstrong III of CFD Engine 9. We spent that morning reflecting on what it means to be a firefighter, the risks we face, and the toll this profession takes on our families.

After lunch, I took my crew into the bay, and we practiced firefighter safety and survival techniques – drags and carries, radio procedures, disorientation drills. This was our way to honor the memory of a local brother whom we had never met. It's what firefighters do. We look for ways to make sense out of tragedy, and this is how we chose to do it, thinking we most certainly would NEVER have to use these skills for ourselves.

Aggressive attack – without all the intel

Runs came and went, fire alarms distracted us, and my crew of eight sat down to a late dinner.

As we were cleaning up, Engine 26 was dispatched first due to a working structure fire. Station 26 sent the Engine, Rescue and Medic as part of a one-alarm complement to a working fire in a small residential occupancy.

Car 2503, the on-duty assistant chief, arrived on scene first with a working fire in a single-story ranch and declared an offensive strategy. When I arrived in Engine 26, I saw a working fire showing at the front window and heavy fire involvement in the attic. I was going in!

In 2003, the standard on-scene report simply stated if we had a fire or not. The 360-degree walk-around just wasn't a "thing" yet. We typically felt that looking at three sides of a building was sufficient to get a good look at what we faced. Therefore, my radio report just mentioned the lightweight wood truss roof with heavy involvement. Had I completed a walkaround to the rear, I would have noticed that there was a walk-out basement with heavy fire that had already broken out a window, had spread up the side and into the eaves of the roof, thus giving us both a basement and an attic fire – a deadly combination that certainly would have warranted a reconsideration of the declared strategy.

I concluded that entry into the home would best be made through the breezeway between the house and the attached garage. Upon entry, we were immediately hit by high heat and heavy, dense smoke. We pushed our way into the kitchen and began knocking down the fire in the living room through the kitchen. I had left my thermal imaging camera by the door and asked my rookie firefighter to turn around and get it while I took a quick look down the hallway.

This is how quickly things happen.

A long fall followed by panic

As my rookie turned around to get my TIC, I leaned a little bit to get a view of the hallway when the floor suddenly opened, plunging me into the basement. The fall was 8-10 feet (standard basement height), and I imagined I rode the hose gently down to the floor.

Immediately after landing, I sprung to my feet and looked around to get my bearings. I remember things being eerily grayish-orange, but I could clearly see the hole that I had fallen through.

“EMERGENCY TRAFFIC! EMERGENCY TRAFFIC!”
I called into my radio. I quickly realized that this

Calmness led to self-rescue

According

document or even a discussion during a bumper huddle, while other reviews should be more involved, methodical presentations for all to see.

Here's what stands out from my mayday incident:

- **Incident command:** First and foremost, I have to acknowledge the incredible calmness and organization of the incident commander. This IC was a captain working as an acting shift commander. Our organization has always taken a very strong stance on incident command, and this night it paid off. His calmness and reassuring voice over the radio kept me calm and focused while he organized the fireground, activated the RIT, and continued with firefighting operations.
- **Muscle memory:** Our training earlier in the day in response to the Oscar Armstrong fatality in Cincinnati certainly paid off, as these firefighter rescue concepts were still fresh in everyone's mind, especially mine. Muscle memory is very real.
- **360 size-up:** The elephant in the room is undoubtedly the lack of a 360 size-up on arrival. However, as I stated earlier, this simply wasn't the practice in 2003. If it had



BACK-TO-BASICS RIT TRAINING

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Content by Chris DelBello

I must confess that earlier in my career, I didn't really appreciate the power of the RIT assignment. I preferred being in the action.

I believe my disdain for the RIT assignment laid squarely on a lack of realistic training that underscored the importance of the role. Training was simply, "Learn your RIT bag," and deployment wasn't much more than, "Grab the RIT bag and stage." Well, that's not real training or real planning.

It seems that formal RIT activation and success is so infrequent that most companies do not want much to do with the assignment. There's only one case that I'm personally familiar with where the RIT reached the trapped firefighter and removed him. In this incident, the firefighter was conscious but pinned by roof structural materials in a collapse.

The RIT likely wasn't able to use any of the scenarios they had trained for, as the downed member was out of reach from the RIT. The RIT officer had to remove his own SCBA, add an additional 8-foot length to the air hose from the RIT bag, and then use a pike pole to slide the replacement mask to the trapped firefighter. The trapped firefighter donned the mask, and the RIT went to work on removing the roof pieces that were pinning his legs. This RIT officer made on-the-fly decisions to quickly rescue the trapped firefighter.

This is reality, folks. This was a real deployment of a formal RIT. Training, understanding and common sense are all critical in times like this.

The importance of establishing a formal RIT should never be downplayed. RIT is for us. We only have each other in a mayday situation. Who else is going to come?

The gold standard

Recently, there have been some online discussions, social media posts and even speakers on the conference circuit downplaying the role of RIT. Good thing for the rest of us that [NFPA 1407](#), [NFPA 1710](#) and [NFPA 1720](#) all very



Selecting, staging and deploying RIT bags and other associated equipment should be different tactical decisions. Equipment decisions should be made based on size-up, radio reports, and the training level and experience of the RIT assigned to the mayday.

specifically lay out training and deployment recommendations for RIT. Regardless of anyone's opinion about the NFPA, these standards are the law of the land, so to speak, and to ignore or downplay the recommendations could cost you your job and even land you in court.

Yes, statistics show that most firefighter maydays are handled by interior crews or the crew itself; however, to suggest that we should dismiss the need for a formal rapid-intervention team (RIT) is a narrow-minded train of thought that ignores the potential for a catastrophic event in which multiple crews are needed for intervention. In other words, if you are focusing your RIT training

Some training groups, self-proclaimed “experts,” and equipment manufacturers have taken RIT to entirely new and absurdly extreme levels that are actually counterproductive to the RIT mission. Gadgets may have their place in some instances, but it’s essential that RIT officers focus first on common sense, considering when and how to deploy tools in a manner that will aid the mission.

Snatch-and-grab or load-and-go techniques should be primary tactics for the RIT. Just because you have the equipment or have trained on complex methods doesn’t mean you should use them if the scenario does not call for it. Use the approach that will save time and serve your safety and that of the downed firefighter. For example, if RIT comes across a non-breathing firefighter, taking the time to put them on air is a complex operation that typically takes 3-5 minutes in a zero-visibility environment. Focus instead on getting the downed firefighter out of the building where more focused life-saving medical procedures can be initiated.

Remember, we should not be looking for an easy method to remove a downed firefighter; we should be using a quick method. In a mayday situation, easy is not necessarily fast. Simple is quick and quick plans in our profession require a lot of physical exertion and brute force and that’s what we need to train for. It doesn’t get any simpler or faster than using physical force to move the downed firefighter out of a building to receive the care they need.

A proactive RIT

It’s time to rethink our idea of a formal RIT starting with some basic questions:

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entirely on interior companies working single-family occupancies, then it’s time to shift your approach to one that incorporates a formal RIT.

No matter if you are adding companies to the first attack line to get the hoseline in position faster or adding a company to act as an interior RIT, you are still placing that interior RIT under the same roof that could collapse on the attack team. If your department experiences a catastrophic fire event with trapped or downed firefighters, the formal RIT is the gold standard that will save time and lives.

Simplicity and common sense

Simple, common-sense approaches to firefighter RIT training and operations – this is what the fire service needs. Simplicity equates to time-saving and lifesaving. Once you have mastered the basics, then you can build your knowledge for those more extreme events.

outside of the structure, and then determine what equipment they would bring inside with them if they are deployed for a mayday.

A formal RIT staged at the entrance of Side Alpha simply waiting to be deployed is a waste of resources. Use the team! The RIT can and should do their own size-up – an assignment encouraged and supported by the IC. Further, the RIT can soften the building while doing their size-up, they can get a general layout of the building, and they can determine how deep the interior crew is based on looking at the hoseline and even possibly looking through windows during their size-up. This will also give them a good idea of the interior conditions.

In



RIT training should focus on firefighter removal from the second floor. Firefighter removal can be accomplished with one ladder if the members are physically capable, but it is safer and easier with multiple ladders. When the RIT locates a firefighter on an upper floor, a staged crew can be deployed to utilize the ladders. Training on this method may seem awkward at first, but with repetition, this method becomes quite rapid and fluid.



The Denver Drill is quite possibly the best training drill. It provides for realistic firefighter removal and the strength requirements necessary to perform it. If drilled on enough, it doesn't necessarily become any easier, but it does become quicker and a more fluid operation as your members begin to get on the same page working and training together.

Officer training

Officers who receive the RIT assignment need to be prepared to actually lead in these instances. The officer should perform a quick recon of the situation and determine the equipment that will be needed inside the structure. The officer will need to minimize unnecessary equipment or actions being added to an already chaotic situation.

Speaking of chaos, it is the officer's responsibility to remove or limit the amount of chaos associated with the situation inside the structure as well. To do this, the officer should be training their crew frequently on RIT/firefighter-down scenarios. Train them to full comprehension – how, what, why and when.

Critical communication

Fireground communication is critical. Communication is listed within the top five factors related to almost every LODD report involving interior operations that has been produced in the last 24 years. Being able to successfully communicate with the IC and have them understand what you are trying to express is critical and, unfortunately, uncommon.

Solid communications begins before the incident. Train with officers from your department, and even outside of your area, to help eliminate any confusion on the fireground. Let the ICs know your capabilities, plans, and explain any jargon or buzzwords they may not know. This will simplify

your communications on arrival and will get the RIT into operation quicker with less radio traffic.

In closing

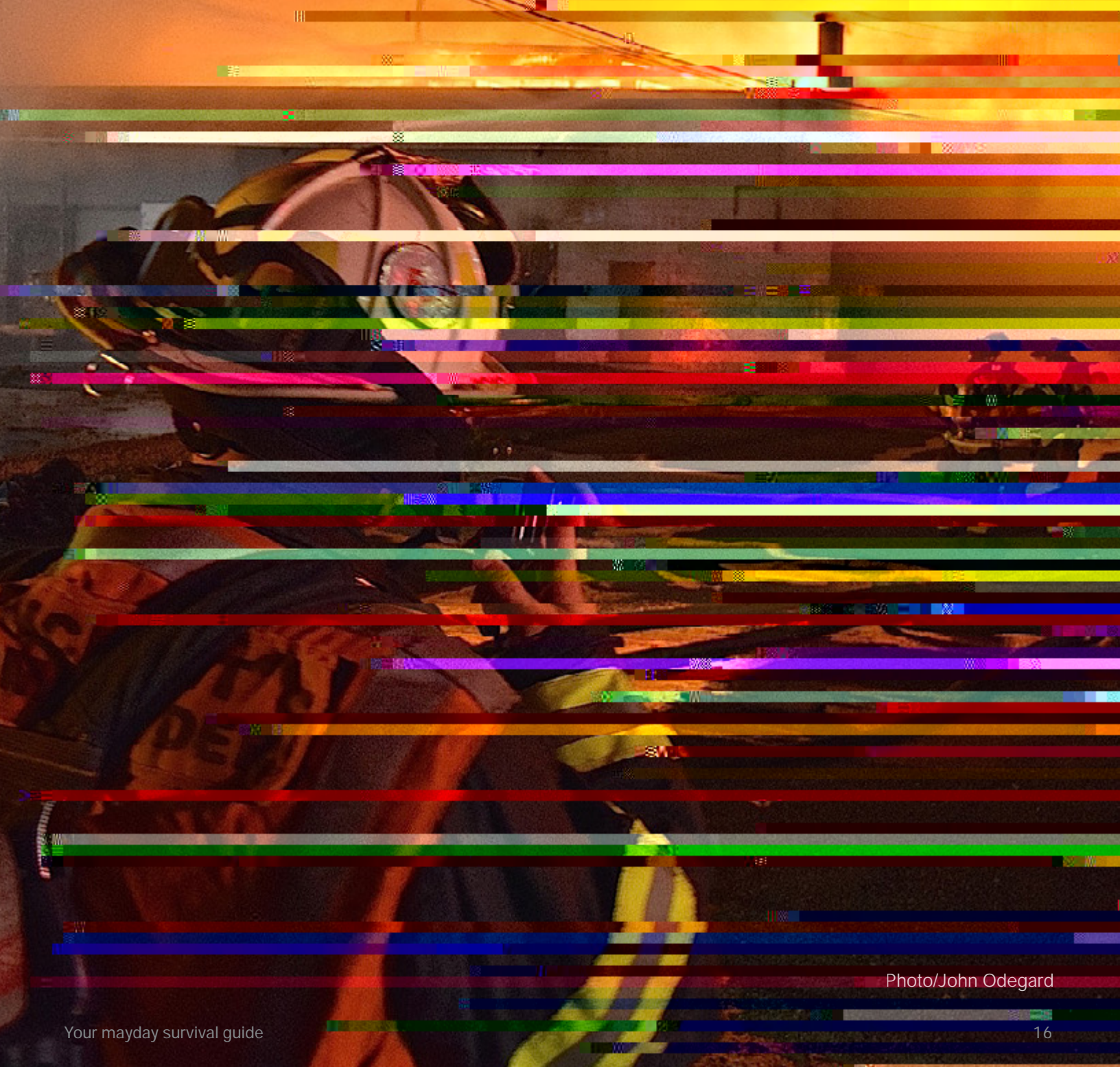
In a zero-visibility environment, a non-breathing, unresponsive or a badly injured firefighter does not have time for you to be running complex, potential irrelevant training scenarios through your mind. The key is realistic, common-sense training and operations. I cannot stress enough how important it is to keep your RIT operations simple. Make your scenarios and drills realistic, but keep your operations simplified and minimize the need for extraneous gadgets that only add confusion into an already chaotic situation. Focus training on drags, lifting, ladders and basic hand tools, as this is where we can keep things simple and save time from the beginning. Communicate with your ICs before an incident occurs, as this allows for better understanding and buy-in related to crew abilities. Communicate frequently and use a lot of common sense when deploying RIT operations.

Train a lot and stay safe. **1)**

About the Author

Chris DelBello is a 31-year veteran of the fire service. He currently holds the rank of senior captain with the Houston Fire Department, working in the Midtown District. He is also the district training officer, which encompasses all the stations in downtown and midtown. DelBello holds a Training Officer II certification and serves as an adjunct instructor with Houston Community College.

LEARN TO COMMAND A MAYDAY EVENT



Photo/John Odegard

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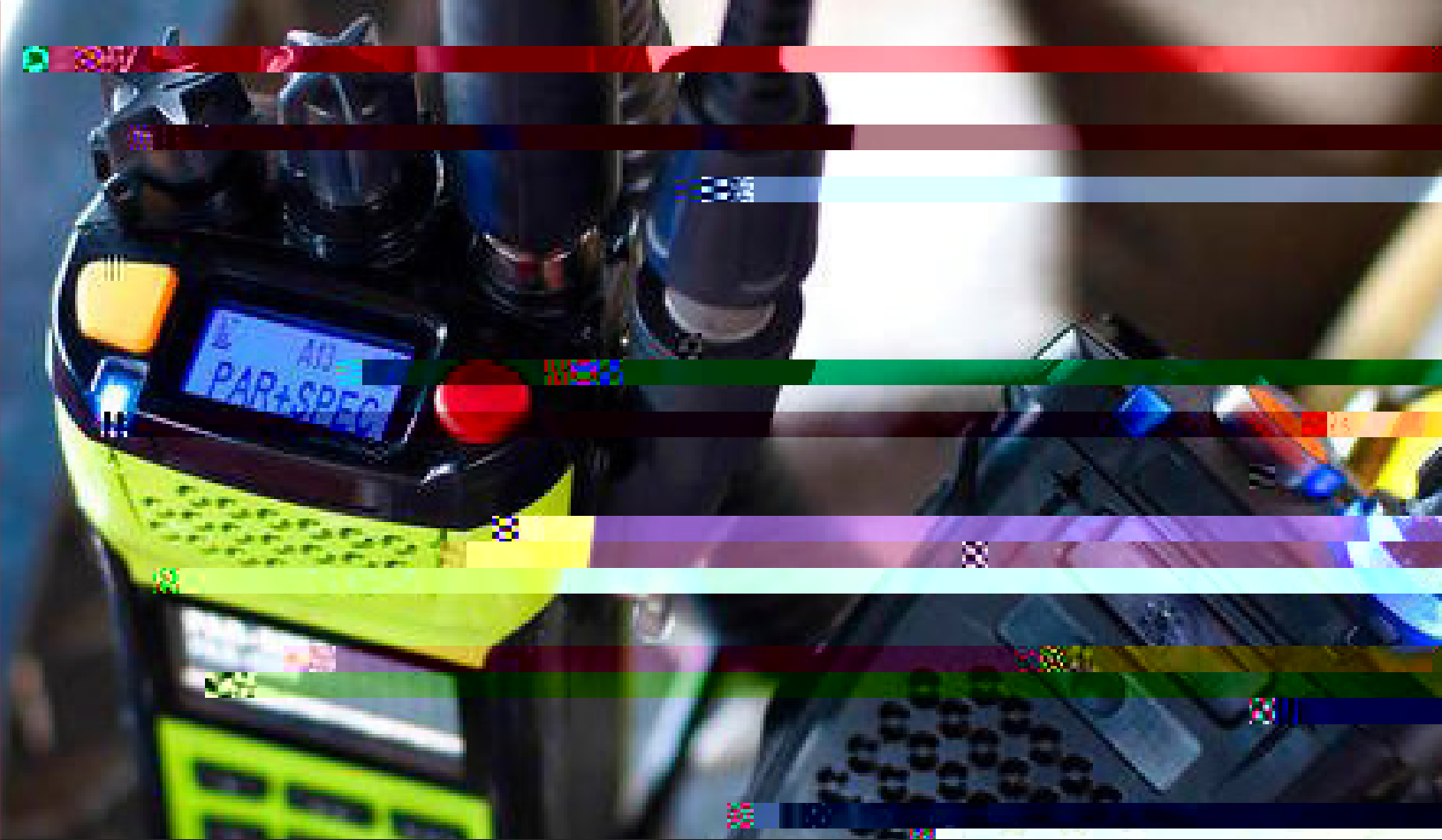
We never trained for failure. Think about that.

or build in a mayday scenario into our live-fire evolutions. This is done to prevent confusion and for the safety of our participating members who could miss or fail to respond to a potential emergency appropriately.

About 15 minutes into the training evolution, a mayday was transmitted over the radio for a member experiencing a medical emergency. The member was inside the burn building and had been assigned to the second hoseline. I acknowledged the emergency and deployed our RIT. However, our member was immediately located and removed by the interior company assigned to secondary search within a minute or two of the radio broadcasts. The RIT never entered the building, and all ended well for the ill firefighter.

ICs need training reps, too

Remember all the RIT scenarios you got to conquer as a firefighter and company officer? Well, how many reps have you been able to get in as shift commander? Does your department build in scenarios to bolster



THE PORTABLE RADIO:

Radios serve as a critical communications and safety tool on any hazardous scene

- You've fallen through a roof, through or down a set of stairs, or through a floor.
- Your primary exit is blocked by any type of collapse, and you cannot reach a secondary exit within 30 seconds.
- You are caught in a flashover condition or recognize that a hostile fire event is about to occur, or your primary exit is blocked by fire.
- You've lost your mobility for any of these reasons – entanglement, trapped, pinned, stuck, caught or wedged – and cannot extricate yourself within 60 seconds, or your SCBA low air alarm activates while you are trying to extricate yourself.
- You've become disoriented or confused inside a structure within an IDLH environment and are no longer sure where you are or where the exit is located because you have lost contact with your crew, your hoseline or your rope lifeline, and you cannot reconnect within 30 seconds.
- Your SCBA's low air alert device activates, and you cannot positively reach an exit door or window within 30 seconds.
- Your SCBA malfunctions, or you have difficulty with maintaining proper operation of your SCBA for any reason while operating within an IDLH environment.
- You are operating within an IDLH atmosphere, and you become injured or sick and your crewmembers cannot safely assist you out of the building immediately.

Without a working portable radio, and your ability to use its safety functions, you are at serious risk for injury or death.

Designed to enhance firefighter safety

If you ask firefighters for some of their most common complaints about their portable radio, many will likely say one of three things:

1. I can't operate the controls with my gloves on.
2. I have a tough time ensuring I'm on the correct channel.
3. It's hard to see the control display in low-visibility environments.

Those are exactly the sort of problems you don't want to face in a mayday scenario.

Advances in technology have enabled manufacturers to develop portable radios that provide tools critical to a firefighter's ability to survive a mayday event.

L3Harris Technologies, a leading manufacturer of portable radios for the fire service, has expanded its family of XL Project 25 (P25) radios by introducing its [XL Extreme 400P](#), which includes features designed for ease of use, especially in hazardous conditions:

- "Glove friendly" to ensure ease of operation by a firefighter in full PPE.
- Large Emergency Activation Button (EAB) for use with gloved hand.
- Loud audio by default for use in loud environments.
- Confirmed power-off feature to prevent accidental power down.
- Multiple new voice annunciations to indicate the unit is powering off, over temperature, has a low or dead battery or that a failed RSM has been attached.
- Cable faults detection that assesses if the RSM cable has been compromised and alert the user via a voice announcement that the radio has automatically reverted to its internal microphone and speaker.
- "Over temperature" detection to alert the user that they are operating the radio and RSM outside of their safe temperature range.
- Support Bluetooth-capable accessories, such as an SCBA mask.

Essential command tool

When a firefighter declares a mayday, the incident commander must quickly take two critical actions, and both involve portable radios:

1. Assign a fire operation to a specific channel, and have everyone except the distressed firefighter move to that channel.

ABOUT THE SPONSOR

L3Harris Public Safety and Professional Communications is a leading supplier of communications systems and equipment for public safety, federal, utility, commercial and transportation markets. The business



WATCH: BEYOND BOYD STREET: INSIDE THE BLAST THAT INJURED 11 FIREFIGHTERS

In this on-demand webinar, LAFD Fire Chief Ralph Terrazas leads a panel discussion about the 2020 explosion and mayday that rocked the department.



LISTEN: DON ABBOTT DETAILS KEY TAKEAWAYS FROM PROJECT MAYDAY RESEARCH

In this episode of the Side Alpha Podcast, Chief Marc Bashor speaks with Project Mayday creator Don Abbott about what firefighters can glean from mayday data.

