



Training



ENGINE 3 WORKS ON FORCING IMPACT GLASS DURING A VEIS DRILL AT AN ACQUIRED STRUCTURE.

Introduction

Search and rescue training is some of the most physically demanding training you will undergo in the fire service. It requires coordinated, efficient team movement in zero visibility under noisy and high-heat conditions to find a victim. If a victim is located, it requires the crew to work even harder to remove the victim from the structure as fast as possible to save their life. A full search and rescue drill will leave any crew taxed and exhausted afterward.

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Meaningful search and rescue training does not always have to involve being fully geared up, on air, and pushing your physical limits, but it does have to serve a purpose. That purpose is usually best served when one or two skills are taught and repeated. The difficulty of search drills is coming up with evolutions that can be repeated a few times and still leave the crew with enough energy to complete their shift.

Guidelines to consider when planning a training regimen:

- 1. Assess your crew:** To what extent are you familiar with the people you're working with and their skills, or them with yours? Do you have insight into their experience, distinguishing between newcomers and seasoned veterans? If you're teamed up with an experienced firefighter, it's valuable to gather details about their past assignments and the supervisors they've worked under. This information serves as a foundational step in gauging their training needs.
- 2. Crawl before you walk:** When it comes to acquiring proficiency in the various skills and tasks required on the fireground, adopting a gradual progression is essential for the learning journey. Begin by discussing the various methods for executing a skill or task and always provide a rationale for why it should be performed in a particular way. Deconstruct the task at hand into smaller, more manageable components and hone these individual skills in a controlled environment, free from the constraints of bunker gear. Over time, you can integrate all these elements and practice in a more realistic setting, donning the full array of gear and all the equipment used on the fireground.

If the drill is organized with skill stations concluding in a final evolution, begin with low intensity to create an accessible learning environment and gradually transition into a high-intensity, scenario-based, and realistic situation. This drill structure is ideal for progressive learning.

- 3. Realistic training:** As previously mentioned, the most effective learning process would be a crawl-before-you-walk approach. Practicing one or two skills while keeping the crew fresh for the rest of the shift can be very efficient. Ultimately, your goal should be to practice your skills in the most authentic and realistic fashion possible. Our exceptional Training Center boasts a plethora of realistic features and props, providing an ideal environment for honing your skills. Furthermore, our acquired structure program offers excellent structures for realistic training purposes.

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Even at the firehouse, you can orchestrate a drill that closely mimics real-life scenarios simply by beginning the drill inside the truck, then by fully equipping yourself with all the gear you would use in an actual fire response, and finally by donning your mask and going on air, gradually progressing towards mastering the skills required in a realistic manner.

A practical training objective is this: If you can excel in what you can control – typically starting from the truck and extending to just before you would enter a building or engage in forcible entry – you greatly enhance your chances of achieving your goals with greater efficiency.

- 4. Skills vs. endurance training:** The primary objective in training is to progressively master all the necessary skills. However, it's important to recognize that our duties on the fire ground are exceptionally demanding, and simply sticking to easy drills for skill purposes won't prepare us for the reality of the job. Progressive training should not only enhance your skills but also your endurance. While hitting the gym to stay in shape is crucial, it's equally fundamental to don your gear and practice the required skills to build our fireground endurance.

Just suit up and engage in activities like ladder throwing, sliding down the bay and dragging your partner back to the starting point or add multiple strikes on a tire with the sledgehammer after the ladder toss or after the victim drag. The possibilities for combining workouts are endless; inject some creativity to make it enjoyable. Incorporating actual fireground skills into gear workouts not only boosts endurance but also hones your skills.

When it comes to pushing your crew during drills, it's a delicate balance. You must be mindful of your crew's limits, recognizing that you'll need them to be at their best for the remainder of the shift. However, you should gradually progress towards realistic and challenging drills without exceeding those limits. It's essential to strike this balance intelligently to ensure effective training without overtaxing your team.

- 5. Single company vs. multi-company drills:** A single company drill is considered to be just you and your crew. Typically, it centers on honing individual skills or mastering a specific unit task. In contrast, a multi-company drill capitalizes on the opportunity to collaborate with other units, emphasizing scenario-based exercises that foster communication skills and seamless coordination on the fireground.

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These occasions are ideal for a Battalion Chief to participate actively, as they facilitate the acquisition of strategies and tactics that are crucial for handling specific situations in a multi-company setting.

- 6. Tabletop vs. hands-on training (H.O.T.) drills:** Although a tabletop drill can be crucial for covering a variety of subjects and should be incorporated into your training routine, the majority of fireground skills demand a practical, hands-on approach.

A final thought on training: The only way to solidify knowledge is through muscle memory. Repetition builds confidence. Repetition allows us to push personal boundaries, and repetition allows a crew to learn how to work cohesively in some of the most demanding environments.

What follows are some company drills that will reinforce the techniques outlined in this manual. The drills are formatted in a specific yet user-friendly manner to streamline training coordination. This format includes three key components: Objectives, Potential Skill Stations, and the Final Evolution. The coordinator has the flexibility to rearrange the drills as they see fit. In order to deliver this training effectively, the coordinator must thoroughly review and comprehend the relevant sections in the manual.

Search & Rescue H.O.T Drills

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Dummy Bingo



“Dummy Bingo” is a highly effective drill tactic designed to sharpen search techniques. The concept is straightforward: scatter multiple dummy targets throughout the search area, with the object of increasing their number to maximize the challenge. Meanwhile, the participating team members are in blackout conditions as they execute their search. Exposing the mannequins to sunlight or cold conditions before the drill enhances the temperature contrast during TIC exercises.

Whenever a team member locates one of the dummy targets, they enthusiastically shout "bingo" and seamlessly continue their search. This ingenious approach enables the team to comprehensively search the entire area without the need to disrupt the process by extracting a simulated victim.

The beauty of "Dummy Bingo" lies in its versatility – it can be seamlessly integrated into any blackout search. To challenge the crew, a live victim can be positioned towards the conclusion of the search-for the team to extract. This dual focus allows the crew to refine both their search techniques and rescue skills. Moreover, working with a realistically limp live victim provides the most authentic training experience for victim removal scenarios.

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Basic Search Drill

As stated in the "Searching Residential Structures" section, the "Basic Search" serves as our alternative search method when the TIC is unavailable for any reason. Please refer to this section for comprehensive, step-by-step instructions on how to execute this tactic. Moreover, you can find comprehensive, step-by-step instructions for all techniques within the "Searching Techniques" and "Victim Removal Techniques" sections of the manual. The drill coordinator has the flexibility to incorporate additional elements into the drill to challenge participants as they deem appropriate.



CREWS INVOLVED IN A SEARCH AND RESCUE DRILL AT THE PORK AND BEANS.

1. Objectives:

- a. Instruct and reinforce various "Basic Search" techniques, including wall-walking, punch-outs, threshold search and searching furniture, with a focus on ensuring that firefighters comprehend when and how to employ these techniques effectively.

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- b. Firefighters should depart with a solid grasp of a team concept search. In larger spaces such as a living area, the "Basic Search" method employs a team-based approach.
- c. Firefighters should depart with a strong understanding of an oriented search. In smaller spaces like bedrooms, the "Basic Search" technique involves an oriented search approach.
- d. Emphasize to firefighters the significance of employing closed-loop communication during search operations and the critical importance of promptly calling out any discoveries made during the search, as well as a good understanding of the 7 rules of engagement.
- e. The team should demonstrate a high level of efficiency when conducting a residential Basic Search.

2. Potential Skill Stations:

- a. **Living Area Search:** The aim of this station is to hone team concept search skills within larger living spaces. This station encompasses techniques such as wall-walking, punch-outs, threshold searches, and searching furniture. Additionally, effective communication methods will be emphasized.
- b. **Bedroom Search:** This station is designed to refine search techniques tailored for smaller rooms. Participants will practice one- and two-firefighter oriented searches, with an emphasis on threshold searches, anchoring doors and specific furniture searches, including beds and bunk beds. Communication strategies will also be emphasized.
- c. **Victim Removal:** The primary objective at this station is to practice fundamental victim removal techniques. This includes maneuvering victims in confined spaces, executing flips, turns, posts, and various drags. Participants will also focus on the team concept for victim removal, covering both one-firefighter and two-firefighter drags. The OIC will lead the way to the egress point while emphasizing efficient communication throughout the process.

3. Final Evolution:

The optimal setting for this final scenario is within an acquired structure, the residential house of the Training Center, or the second-floor apartment within the tower, all of which should be fully furnished. Distribute multiple dummies strategically throughout the space for "Dummy Bingo." Instead of filling the area with smoke, as is done in a TIC drill where visibility is maintained through the TIC, it is preferable to keep the space clear during this drill. This way, the drill coordinator can assess the crew's performance more effectively.

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Position a live victim at the conclusion of the search, representing a real victim that needs to be rescued. Be creative when crafting the scenario, ensuring it simulates a realistic situation. Provide clear instructions for the "Dummy Bingo" game and allow the crew to apply the knowledge and skills they have acquired at the skill stations to complete the search and successfully extricate the live victim.

Always conclude the drill with a debriefing and critique session to review the crew's performance and identify areas for improvement.

TIC Guided Trash Bag Drill

The "Trash Bag TIC Drill" is a straightforward, low impact, no gear required exercise conducted at the firehouse. It involves covering the OIC with a large black trash bag while they use the TIC underneath it to direct the crew who are completely blacked out to various objectives within a room. The OIC stands in the center of the room and relies solely on the TIC inside the bag for visibility, meanwhile the search team only relies on the OIC's orders to negotiate the room. It's important to note that this drill can only be conducted in a room with air conditioning.

The primary goal of this exercise is to enhance communication between the TIC operator and the search team. For effective communication, utilization of wall numbering is highly recommended during the drill.

TIC Directed Search Drill

1. Objectives:

- a. Instruct and reinforce various "TIC Directed Search" techniques, 3 level TIC scan, wall numbering and searching furniture, with a focus on ensuring that firefighters comprehend when and how to employ these techniques effectively and what are the roles of each crew member.
- b. It is crucial for firefighters to recognize that a TIC Directed Search demands strict adherence to OIC's instructions without any freelancing.
- c. Firefighters should grasp that the OIC will be responsible for clearing all open spaces, with hand searching limited to areas that the TIC cannot scan effectively, which becomes their responsibility. They must complete this task thoroughly and search slightly beyond what they were ordered to search without freelancing.

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- d. Firefighters should depart with a strong understanding of how to function in a Living Area TIC search (larger room) as well as in a oriented TIC search in smaller spaces like bedrooms.
- e. Emphasize to firefighters the significance of employing closed-loop communication during search operations and the critical importance of promptly calling out any discoveries made during the search, as well as a good understanding of the 7 rules of engagement.



LT. WLOSEK AND HIS CREW PERFORMING A TIC DIRECTED SEARCH DURING A TRAINING EVOLUTION.

2. Potential Skill Stations:

- a. **Living Area Search:** During this station, firefighters will engage in practicing the 3-level scan technique to create a mental and crew-shared visual representation of the room.

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Emphasis will be placed on dividing the room into smaller, manageable sections and keeping the crew within these designated areas. The station will cover the guidance of searchers to areas that require hand searching, as well as the responsibility of clearing open spaces in a systematic manner across the entire living area. Effective communication strategies will also be highlighted.

- b. **Bedrooms Search:** This station is designed to refine search techniques tailored for smaller rooms. Participants will practice one- and two-firefighter oriented searches assisted with the TIC, with an emphasis on threshold searches, anchoring doors and specific furniture searches, including beds and bunk beds. Communication strategies will also be emphasized.
- c. **Victim Removal:** The primary objective at this station is to practice fundamental victim removal techniques. This includes maneuvering victims in confined spaces, executing flips, turns, posts, and various drags. Participants will also focus on the team concept for victim removal, covering both one-firefighter and two-firefighter drags. The OIC will lead the way to the egress point while emphasizing efficient communication throughout the process.

3. Final Evolution:

The optimal setting for this final scenario is within an acquired structure, the residential house of the Training Center, or the second-floor apartment within the tower, all of which should be fully furnished. Distribute multiple dummies strategically throughout the space for "Dummy Bingo." The TIC drill is most effective when conducted in a smoke-filled environment. This ensures that the TIC becomes the sole source of vision for the OIC, completely obscuring the vision of the searchers.

Position a live victim at the conclusion of the search, representing a real victim that needs to be rescued. Be creative when crafting the scenario, ensuring it simulates a realistic situation. Provide clear instructions for the "Dummy Bingo" game and allow the crew to apply the knowledge and skills they have acquired at the skill stations to complete the search and successfully extricate the live victim.

Always conclude the drill with a debriefing and critique session to review the crew's performance and identify areas for improvement.

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VEIS Drill

1. Objective:

- a. The objective is to educate and reinforce various "VEIS" techniques, emphasizing efficient reflex time at the first and second-floor windows.
- b. This includes practicing forcing and clearing windows, as well as entering window techniques.
- c. Additionally, door isolation and rapid room search tactics will be covered.
- d. Victim removal techniques will also be addressed.
- e. The focus is on ensuring firefighters understand when and how to effectively employ these techniques, as well as the roles of each crew member.



VEIS DRILL AT AN ACQUIRED STRUCTURE BEHIND STATION 17.

2. Potential Skill Stations:

- a. **Reflex Time Efficiency:** Crews will learn to carry tools, set up ladders, mask up, and break glass efficiently to prepare for entry, with a focus on first and second floor VEIS.
- b. **Forcing Windows:** Multiple props at the training center allow practice on forcing any type of glass, including impact glass, particularly on the second floor.
- c. **Bedroom Search:** Objectives include sweep and sound and floor, efficient and safe room entry through windows, room isolation, and swift room search completion.
- d. **VEIS Removal Techniques:** Crews will practice quick drags, lifting techniques with and without webbing, and window transitions on both first and second floors.

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2. Final Evolution:

The Training Center serves as an ideal location for this drill. A live victim will be placed in the target room or hallway adjacent to it. Crews will demonstrate full VEIS operations on both the first and second floors. Realism can be enhanced by using smoke and an actual window on the portable window prop.

Rope TIC Search Drill



LARGE AREA SEARCH TRAINING AT AN ACQUIRED RENTAL CAR CENTER [PHOTO BY RICHARDO STEPHENS]

1. Objectives:

- Ensure all participants understand their roles within the search crew, including OIC, Point/Rope, GIB, and Anchor Points, and their responsibilities.
- Demonstrate proficiency in deploying and managing search ropes, including proper anchoring techniques and maintaining tension throughout the search operation.

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- c. Execute a Perimeter Rope TIC Search, focusing on running search lines parallel to exterior walls to create an interior perimeter and eliminate unknown square footage.
- d. Practice transitioning from the perimeter search to a Backbone Rope TIC Search as needed, extending the search into multiple unexplored areas.
- e. Understand when to allow the point to lead ahead in open spaces and when leading as the OIC is required in more confined areas.
- f. Ensure proper communication and coordination among team members while maintaining continuous contact with the search rope.

2. Potential Skill Stations:

- a. **Rope management:** At this station, the focus is on honing your rope handling skills. Begin by establishing different anchor points such as outdoor, interior walls, fixed interiors, and human anchors. Familiarize yourself with the most comfortable method for carrying the rope bag. Emphasize the importance of maintaining control over the rope deployment, ensuring that only the necessary amount is released, with a hand always on the rope. Practice shooting the rope in increments of 20 feet, using a tool guide, while sliding and on foot. Understand, the rope must always be kept taut and off the ground. Practice how to gather rope for redeployment. Finally, practice how to properly pack the rope bag.
- b. **Perimeter Rope TIC Search:** Focus on running search lines parallel to exterior walls. Emphasize the importance of maintaining communication and proper rope tension throughout the search. Practice getting off rope and utilize the TIC to scan for victims while staying within voice distance of the crew.
- c. **Back Bone TIC Search:** Transition from the perimeter search to a Backbone Rope TIC Search as necessary. Practice deploying the backbone search efficiently while maintaining connection to the perimeter rope with a human anchor. Practice gathering rope and redeploying it.
- d. **Victim removal:** The primary objective at this station is to practice fundamental victim removal techniques. This includes maneuvering victims in confined spaces, executing flips, turns, posts, and various drags. Understand that anchoring at this point is crucial, especially in situations where running low on air will require leaving the victim at the end of the rope for the next crew. Transfer of information amongst the crews is paramount. Participants will also focus on the team concept for victim removal, covering both one-firefighter and two-firefighter drags. The OIC will lead the way to the egress point on the rope while emphasizing efficient communication throughout the process.

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3. Final Evolution:

Utilizing multiple crews to conduct the evolution. For a realistic setting utilize an acquired structure warehouse if available. This is the perfect drill for Dummy Bingo. The crews will search, locate the dummies, and continue the search until completed. Add a victim removal to this drill only when the crews have a good grasp on the searching portion. Require the crews to establish a full perimeter rope structure and transfer to multiple Back Bone searches, try to cover the entire area.

Conclude the drill with a debriefing and critique session to assess the crew's performance and identify areas for improvement.

Victim Removal Drill

Practicing victim removal is essential and can be conducted in various settings. A recommended practice is to simulate scenarios in the firehouse bay, where individuals can take turns being victims. It's crucial to commence with lightweight gear and slow, deliberate movements. As proficiency grows, firefighters should aim to execute full removals as a crew, equipped with complete Personal Protective Equipment (PPE), breathing apparatus, and in simulated smoky conditions.

1. Objectives:

- a. Instruct and reinforce different "Victim Removal Techniques" with and without webbing.
- b. Emphasize the importance of teamwork in swiftly extracting victims.
- c. Clarify that the firefighter who discovers the victim typically decides on the removal technique, while the Officer in Charge (OIC) oversees the process, identifies the nearest exit, communicates with command, and the second firefighter typically will guide their partner who is completing the drag toward the OIC. Practice switching roles when required to save energy and practice two-person drags.
- d. Progress to scenarios such as multiple victims, large victims, window rescues, and ladder rescues.
- e. Emphasize to firefighters the significance of employing closed-loop communication during the operation and the critical importance of understanding their role in this process.

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2. Potential Skill Stations:

a. **Fundamental Removal Maneuvers:** Focus on practicing essential victim removal techniques. This involves maneuvering victims in tight spaces, executing flips, turns, post-ups, and quick drags. Use live victims in confined spaces like corners, bathrooms, or between furniture. Firefighters should swiftly move victims out into space, prepare for their drag and adapt techniques like two-leg drag, cross-leg drag, or torso drag as necessary.



FIREFIGHTER OTERO IS REMOVING A TRAINING CAPTAIN OUT OF A TUBE AT THE TRAINING CENTER.

b. **Webbing Drags:** Practice employing webbing techniques during removal. Position a live victim supine on the floor and repeatedly apply webbing in different configurations. Practice low-profile drags, navigating stairs, and narrow space drags with one and two firefighters. Understand the appropriate situations for webbing use.

3. Final Evolution:

Conduct the evolution in a realistic setting, preferably utilizing the training center props. Position a live victim in a confined location to allow for the application of multiple techniques. The crew will search, locate the victim, announce it, search the vicinity for additional victims, if necessary, gather the crew, and communicate with command regarding the victim's location and extraction plan. Focus on proper techniques and teamwork to swiftly remove the victim. Upon removal the attention will be focused on the potential resuscitation needs.

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Conclude the drill with a debriefing and critique session to assess the crew's performance and identify areas for improvement.

Final Thoughts

The assignment to search for victims is difficult, time sensitive, and dangerous. It requires teamwork and coordination in the most challenging of conditions, and your work is only getting started if you actually find a victim. Then your strength and endurance will be taxed trying to save them.

It is our hope that the Search & Rescue Manual has provided some guidance and uniformity in attacking this daunting task. There is no short cut to proficiency, and there is no greater truth than an active fireground to tell you whether you have done all you can to prepare for your assignment. Train. Train. And then train some more.

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