



Classroom Sessions

**The following is a preliminary list of classroom sessions and specific dates and times will be assigned by November 2023. Check back for more information.*

Wednesday, April 17-Friday, April 19, 2024

Expectations and Accountability

Captain Matt Aalto, Gaston (OR) Fire District

What is the number one reason for failure in the firehouse or on the fireground? Communication. And while 90% of the fires we fight are in the firehouse, we rarely spend the time practicing the critical communication skills that solve the majority of our problems, and that's active communication solutions for firefighters. Learn key critical areas of communication in the firehouse. Topics include critical question reviews, accountability, setting expectations, managing conflicts, developing work plans, how to have tough conversations, removing emotion and adding logic, and other helpful communication tools.

Rural Water Movement Operations

Captain Bill Adkins, Loveland-Symmes (OH) Fire Department

This class will discuss various strategies and tactics for rural water movement, from nurse tankers to the rural hitch, drafting operations, vacuum tankers, and the jet syphon. Learn the advantages and disadvantages of these strategies, why a certain strategy may or may not work for your department depending on resources, apparatus placement, pump operations, and assignments. The class will see flow charts and times of loss of water in each strategy.

SWAT Medic Tactics

Lieutenant Jarred Alden, Akron (OH) Fire Department

Attendees will be exposed to various forms of tactical EMS assessment strategies in the field. When SWAT medics respond with a SWAT operator team, they must be flexible but firm with the command staff. The mission to stop the criminal, drug distribution, and gun running is paramount. However, medics also have a mission, and that is to prevent casualties, treat casualties, and promote the treatment of preventable deaths in the tactical setting: extremity exsanguination, tension pneumothorax, and airway compromise. Junctional wounds can also be a major challenge if the medic is not familiar with how to treat these casualties. The medic's mission is to support the command staff but to be the operator and victim's advocate. Prevention of medical issues such as hypothermia and hyperthermia will also be discussed. The importance of understanding the Lethal Triad of Trauma will conclude the class.

Rethinking First Responder Mental Health: Beyond the Calls

Battalion Chief Dena Ali, Raleigh (NC) Fire Department

This class is designed to address our understanding of first responder mental health and our responses to trauma. In the past few years, PTSD has become a common phrase in emergency services, yet our understanding of its true manifestation, diagnosis, and treatment is not well known. This class will lean on evidence-based research to explain the origins of trauma and,

more importantly, the path toward resiliency and growth. It will describe the importance of understanding our own trauma stories and learning the common routes toward growth. These include meaningful relationships, mindfulness, rest, sleep, psychological safety, leadership, and meaning making. This class will address the impacts of poor leadership and the value of deliberate leadership on the mental wellness of our members.

The Hat Dance: Realities of the Short Staffed Company Officer

Battalion Chief Marc Aloan, West Columbia (GA) Fire Department

With adequate staffing continuing to be more of a fantasy than a reality for many departments, the modern company officer is asked to wear many hats ranging from tailboard firefighter to command level officer. With a strong company officer often being the difference between fireground failure and success, we must reconsider what we are asking of our company officers and how they carry out their duties. This class aims to empower and encourage company officers battling the realities of limited staffing armed only with strategies found in formal training and education designed for staffing models that are no longer realistic for the average fire department. We will break down how to balance firemanship and leadership, adapting leadership and managerial responsibilities to low staffing environments, the delicate balance of mentor and boss, proper approaches to delegation, the importance of humility, and strategies for accomplishing mission-critical tasks early in the incident without the staffing to do so. By bridging personal and departmental expectations with the realities of limited staffing, current and aspiring company officers will leave with the tools and attitudes necessary to successfully lead their teams both on and off the fireground!

The 7 C's of Fire Officer Trust

Chief John Alston, New Haven (CT) Fire Department

It's a privilege and an honor to train new officers in a variety of ranks and disciplines. It is a privilege because it gives us all a chance to share, learn, and gain insight into the many components of successful fire officers and command. The prevailing questions on their minds have always been: What does that person look and sound like? How do I know when I know? How do I become what I am not? How do I overcome Imposter Syndrome?

Ladder Company Operations

Chief Joseph Alvarez, South Essex (NJ) Regional Fire Department

This class will cover ladder company operations and placement.

Hazmat Hotzone Rescues: The Gray Area

Battalion Chief Phil Ambrose, Glendale (CA) Fire Department

A common-sense approach to first-in hazmat that is relatable to all levels as well as volunteer and career departments, this class explains when firefighters in structural gear can make a rescue in a hazmat hot zone and when they need to wait for the hazmat team. It dispels the go/no-go myths surrounding increasingly common hazmat incidents like chemical suicides and drug labs. Learn how to read the incidents and recalibrate the rules of thumb on when to fall back and when to move forward.

Intelligently Aggressive Search Operations

Captain Thomas Anderson, Charlotte (SC) Fire Department; Lead Instructor, Insight Fire Training

Technology must always go hand in hand with sound fundamentals. This class combines sound search fundamentals with modern technology in a model that rescues victims faster. It will discuss how thermal imaging can change the game on the modern fireground, understanding the technology and how it relates to search, how to communicate and what to communicate from the TIC to the searching firefighters, and the roles and responsibilities of the TIC operator. This class is about developing a complete search crew and using all the tools at your disposal and when to and how to use them properly.

Personnel Law for the New Company Officer

Consultant Alisa Arnoff, Scalabrino & Arnoff, LLP, Evanston, Illinois

As an officer, you are responsible for effective EEO training, setting the standard and resolving any problems that arise, before things get out of hand. This program will not focus greatly on what the law is--you already know that. It will explain the transition in thought (and perhaps action) once promoted and explore ways for you to effectively define and communicate your expectations about EEO matters to your team while maintaining their respect.

Leadership from the Bottom Up!

Battalion Chief Candace Ashby, Indianapolis (IN) Fire Department

This fun and engaging personal leadership development class is designed to inspire, educate, and motivate attendees to reignite the passion! To build and maintain a winning organization, we need everyone to bring their "A" game! Take control of the things you can change and let go of the things you cannot. It is time we all come together, shed the negative narrative, and become part of the solution. If you love the job, want to have fun, and be the change, this class is for you! Attendees will leave fired up!

Aggressive Search and VES

Captain Arthur Ashley, Lexington (KY) Fire Department

This class is about the mission of the fire service in saving those who need us. Primary search has taken place for decades and yet fire departments struggle to understand the tactic and all that goes into searching and saving lives. Firefighters to chiefs should be able to conduct an aggressive search or vent-enter-search (VES) or at least understand that all members need to be highly trained. This is no longer a basic skill; it goes much farther--to the ability to read the smoke conditions given, the fire location, and the building layout based on occupancy. From the primary search to the oriented search and VES, learn all aspects and the skills that work.

The Data that Drives Emergency Medical Care

Chief Medical Officer James Augustine, North Collier (FL) Fire Rescue Department

This class for fire EMS leaders will discuss data from current sources related to emergency care in America and the trends in emergency service utilization to forecast future needs for emergency medical services. This will allow fire EMS leaders to project the impacts of health system reform efforts and the need for unscheduled care options in their region. This will improve the chief's ability to understand, communicate, and lead applications of the fire EMS service in the regional health care system.

The Medical Director Is on the Scene

Chief Medical Officer James Augustine, North Collier (FL) Fire Rescue Department

The role of the fire EMS medical director is evolving in this post-pandemic era. There are old and new challenges to providing safe and effective care in an “all hazards” environment. The medical director is a valuable addition to the response resources. This session will feature 10 great cases that are instructive of the role that a physician can play in scene management. This unique insight will deliver lessons in improved operations for all types of agencies.

AHORA Spanish Stroke Scale

Medical Director Paul Banerjee, Polk County (FL) Fire Rescue

More than 20 years of stroke research has shown that Hispanic Americans have strokes at younger ages and are more likely to experience poorer outcomes across the board compared to non-Hispanic white Americans. Patient delay in seeking medical attention is a major barrier to timely access to life-saving medical interventions. A primary factor influencing these delays likely relates to a lack of awareness regarding stroke signs and symptoms. AHORA enables EMS to communicate with Spanish-speaking patients to help identify acute stroke patients.

Bings on Brains

Medical Director Paul Banerjee, Polk County (FL) Fire Rescue

Traumatic brain injury (TBI) is a form of nondegenerative acquired brain injury resulting from a bump, blow, or jolt to the head (or body) or a penetrating head injury that disrupts normal brain function. The functional impact of TBI in children can be different than in adults—deficits may not be immediately apparent because the pediatric brain is still developing. TBI in children is a chronic disease process rather than a one-time event, because symptoms may change and unfold over time. Polk County Fire Rescue partnered with local pediatric trauma centers to create a new and innovative way to control intercranial swelling with immediately post injury.

Rural Firefighter Operations: Training and Tactics for Fire Departments

Deputy Chief of Operations Seth Barker, Big Sky (MT) Fire Department

Identify the training needs of your department by performing a gap analysis. Use this with the guidance of current best practices in the industry to formulate a one- to three-year training program that covers all the NFPA standards. This job performance-driven methodology is used as the foundation to incorporate sound training and techniques to accommodate every staffing and department model in the rural setting. This approach will ensure that the local fire department will walk away with a sound set of skills and templates to formulate a skill-based training program that drives a "best practice" manual that is in line with each standard operating procedure. Each student will leave the class with every tool they need to formulate a training program that meets the current NFPA 1002-2013 standard, develop a contextual training program, ensure realistic delivery methods, and yield a best practice manual to jumpstart their organization.

Rapid Intervention: A More Proactive Approach

Captain (Ret.) Art Bloomer, Kearny (NJ) Fire Department

Rapid intervention is a commonly assigned task at every fire incident. Some companies tend to view it as being “out of the action” and unimportant, but nothing could be further from the truth. It is an integral part of the suppression effort at a fire and needs to be viewed as such. It's not just

arriving on scene, doing a 360, and setting up in the front yard waiting for a Mayday to be called. We can't just react; we need to be proactive: arrive on scene, do a full and in-depth walkaround of the structure, find obstacles that will hinder our access to and removal of a Mayday, soften the structure to aid access and removal, do an initial and ongoing RIT size-up, and know the latest tactic to find and remove a firefighter in distress. This class will help you make your next RIT assignment more proactive.

Refractory Ventricular Fibrillation: Old and Novel Therapies

Andrew Bowman, No Fire, Lebanon, Indiana

A review of historical treatment of cardiac arrest due to ventricular fibrillation and new novel therapies that may improve outcomes.

Humanizing Fireground Performance: Rethinking LODD Risk and Causality Narratives

Lieutenant Jason Brezler, Fire Department of New York

Line-of-duty death (LODD) research and reporting serve as the cornerstone of a national effort to learn from firefighter fatalities and prevent similarly tragic outcomes. NIOSH LODD reports are a significant mechanism for learning—the most influential catalyst for change in the American fire service. Curiously, human performance and behavior are largely absent from LODD report findings and recommendations. This class will highlight five human performance deficiencies that are common in LODD reporting that raise several important questions regarding the validity of outcome centric narratives, causality (the NIOSH 5), claimed predictability of serious injury and death, and the operational risk profile purportedly associated with LODD fires. The American fire service possesses a detailed understanding of how firefighters die, but a rigorous analysis of LODD reporting suggests that the fire service lacks a comprehensive understanding of why firefighters die. This conversation will equip leaders with an appreciation for an increasingly objective performance analysis framework that serves to humanize narratives. Additionally, leaders will be encouraged and informed to develop a process-centric and nuanced risk-management philosophy for the fireground that is responsive to uncertainty.

High-Rise Firefighting: "Practical to Tactical"

Acting District Chief Brent Brooks, Toronto (Ontario, Canada) Fire Services

Tall buildings pose unique firefighting challenges that require practiced operational decision making and tactics to overcome a host of potential problems. This presentation will discuss and review tactical response options to address challenges and catastrophic failures in operational deployment. Topics include coming up short and adding a length, taking nozzle reaction to ground, flowing with door control, the punch, steps for making entry, and testing glass. View a short video on "Exterior Control" options using portable monitors, bent pipe, distributor and opposing tip nozzles for fire, autoexposure, cladding, and void space control along with water supply solutions.

The Engine Company's Guide to Large Handlines

Firefighter Jonathan Brumley, Denver (CO) Fire Department

This class is designed to guide fire departments on the ins and outs of large attack lines. As the usage of small, preconnected handlines has become the go-to option, comfort level in the deployments and tactical decision making surrounding attack lines of greater diameters has declined significantly. This puts us at a greater risk for property loss, multiple-alarm fires, and

even LODDs; our fire attack must escalate to match fire growth beyond a typical residential fire. With dozens of hoselines being classified as a large handline, there is additional confusion as to which should be employed. To combat this trend, we will take an in-depth look into large attack line deployments and how these packages are selected, stretched, and flowed. Through a clear understanding of the intended purpose of line sizes with diameters greater than 2-inch and less than 3-inch, we will find solutions that will guide any department in developing competency, regardless of department staffing or size.

Civilian Rescue: The Reason We Exist

Training Officer Brian Brush, Midwest City (OK) Fire Department

The fire service has done a great job of emphasizing the need for firefighter safety, especially over the past 25 years. Rapid intervention, two out, the 16 Firefighter Life Safety Initiatives, Project Mayday, and many other efforts have been a critical part of the overall firefighter safety enterprise. These groundbreaking efforts have undoubtedly saved firefighter lives. The time has come to place an equal emphasis on civilian rescue, including quantitative and qualitative data collection, tactical considerations, and command techniques that can increase our success rate toward civilian rescue. We will look at the latest statistical data regarding civilian rescue and how this awareness may increase emphasis and a training culture toward the civilian victim.

Initial Size-Up Reports for First-Due Incident Commanders

Deputy Chief of Operations (Ret.) Leonard Carmichael Jr., Trenton (NJ) Fire Department This class covers the initial on-scene size-up for the first-arriving officer at incidents. It sets up the framework for the entire fireground experience from assessing the incident scene arrival information to setting up an IMS organization. Through lecture and individual scenario assessment, students will use a systematic mental checklist using the CASH acronym (Command, Actions, Size-Up, and Help) for on-scene size-up reports that can be used at all incidents. Topics include the establishment of command, the 13-point size-up factors, first-due company assignments, and additional resources that will be needed. A plus for promotional exams.

Managing Your Fire Department's Promotional Process

Superintendent (Ret.) Dave Casey, Florida State Fire College

Review the issues that get fire departments into grievances, legal action, or just mistrust with the test takers. Included are federal requirements, legal decisions, and the actions to take to reduce the chance of errors and miscues. Discussed are internal tests vs. outside providers and what to look for with outside vendors and the development of bid specifications.

Backdrafts, Smoke Explosions, and other Fireground Phenomena

Captain John Ceriello, Fire Department of New York

In December 2018, a fire in a one-story taxpayer in Queens, New York, resulted in a spectacular smoke explosion captured on video. The instructor, who was at that event, will present an in-depth look at the odd fire behavior, which, to the untrained eye, may seem like a one-off isolated incident. However, many of these events have been captured on video in recent years. From these videos, the fire service has been able to learn more and more about the events, the science behind these events, and reexamine our standard operating procedures to ensure they are in alignment with the new-found knowledge.

Trauma Airway Management Do's and Don't's

Director Greg Chapman, Center for Prehospital Medicine, Carolinas Medical Center, Atrium Health, Bellingham, WA

Airway management in itself is a difficult and highly debated topic. When airway management is needed for the trauma patient, this is amplified tenfold. This class will draw from the instructor's

Deputy District Chief (Ret.) Steve Chikerotis, Chicago (IL) Fire Department

This 45-year veteran of the fire service discusses leadership development, the power of positivity, conquering PTSD, the power of mentors, critical incident decision making, fireground tactics, achieving your goals, and motivating your team. The instructor will share case studies and powerful lessons learned from his personal experiences including his 36-year career on the Chicago Fire Department. He shares lessons learned from the many mentors in his life as well as those learned by trial and error while working on the busiest fire companies and battalions in the Chicago Fire Department. The goal of this presentation is to motivate those in attendance to enrich their lives by taking control of their life; conquering their goals; and becoming better leaders, better mentors, and better people.

Evidence-Based Engine Operations

Battalion Chief Chad Christensen, Los Angeles County (CA) Fire Department

Most incident priorities start with life—their life. Thus, getting water where it needs to go in a timely manner can allow you to be more aggressive in your search procedures. We can increase survivable space on the inside for everyone by getting water where it needs to go quickly. This interactive class will discuss the facts and fiction of hose streams and use from interior or exterior positions. Using today's UL-FSRI research, we will identify best practices on the fireground depending on your staffing, built environment, and deployment model. We will discuss and show how water and air can positively and negatively affect the fireground. We want what is best for the victim; the goal is to identify how to get to the victim as quickly as possible using the research to support your operations.

Smart instructors + Smart Tech = Smarter Students

Assistant Chief Shea Chwialkowski, Richfield (MN) Fire Department

This class offers an easy-to-follow blueprint for creating training content to meet the expectations of modern-day fire and EMS students. We will demonstrate how to quickly and easily adopt a vast array of technologies into fire training and education. The session will highlight budget-conscious, easily available mobile applications; virtual and augmented reality; hardware; online software; and online SaaS. Attendees will leave motivated and equipped with the confidence to implement innovative, ready-to-use, low-cost options for modernizing and maximizing their training delivery model's efficacy in today's digital information age.

Tower Ladders Tactics, Tips, and Tricks

Lieutenant Michael Ciampo, Fire Department of New York

Students will review tower ladder operations such as positioning, setup, and operating from the pedestal and bucket and review many proven tactical street smarts in master stream operations, roof ventilation from the bucket, and bucket positioning at fire escapes and at windows. Numerous tips will allow the student to learn from street proven experience the value of this most versatile piece of firefighting apparatus.

Developing the Next Generation of Fire Service Officers

Assistant Chief Douglas Cline, Horry County (SC) Fire Rescue

Professional development is the planned, progressive, and lifelong process of education, training, self-development, and experience that you gain during your development. In the fire service, professional development is a critical element of being a leader and a professional. When we step

up to accept the responsibility of leadership, we also accept obligation to continuing our training, education, learning, personal experience, and growth and work to improve our effectiveness. Professional development is an excellent tool for meeting that obligation. As fire service organizations, we must strive to provide continuing guidance to our most valuable resource, our personnel, through a carefully crafted professional development plan that meets the specifics of the organization. This class will help students with developing a model for their organization.

Be the Target!

Lieutenant (Ret.) Paul Combs, Bryan (OH) Fire Department

It is not enough to want to make a positive difference; you must put in the hard work and be prepared for the success of your goals and the inevitable backlash from critics! Any cause worth your passion makes you a target for criticism, but it's how you respond to your critics that in most circumstances dictates the success or failure of your mission. Criticism can make you stronger, prove your point, make you wilt under the scrutiny, or destroy your reputation—it's up to you. This class explores these scenarios in an interactive environment where student participation is encouraged with positive discussions on how best to respond to critics. It will give you the tools to succeed where others fail. The instructor will share some of the criticism he has faced over the years and how he responded. Not only will you be better prepared when you're the target, but you will put yourself in a better position to be the target of aspiration, as well.

Fire Service Court: Burning Legal Issues

Chief David Comstock, Western Reserve (OH) Fire District

This class will review the hot legal issues affecting fire and EMS organizations on a daily basis. Topics include guns, alcohol, and medical and recreational marijuana in the firehouse; transgender and gender related claims; social media rants, raves, and retaliation; First Amendment audits; the FLSA and the volunteer fire service; NFPA 1583 medical exams; dash and vest cameras; and many more!

TIGHTROPE: Mastering the Art of Efficient and Effective Leadership

Deputy Chief Training and Safety Larry Conley, Collinsville (IL) Fire Department

Today's fire service requires excellence on all fronts. Your department expects efficiency regarding training, recordkeeping, agency compliance, and safety measures. The citizens expect effectiveness in delivering all-hazard services to mitigate emergencies. Both demands are equally important—hence, the TIGHTROPE. This class is an interactive experience that will teach practices to help master the balance between efficiency and effectiveness. Takeaways from this class will provide you with actionable resources to be the complete leader your agency and community need.

Improvement and Management of Post Cardiac Arrest Care

Firefighter/Paramedic Tristan Coomer, Springfield Township (OH) Fire Department

Post-cardiac arrest management is of utmost importance to emergency medical services personnel as it plays a crucial role in determining the outcomes and long-term prognosis of patients who have suffered a cardiac arrest. The knowledge and skills required to provide critical care in these situations cannot be underestimated. The goal of this lecture is to emphasize the significance of a coordinated and organized approach to implementing post-cardiac arrest care

strategies in the prehospital setting. EMS personnel have the opportunity to enhance their ability to deliver effective resuscitation, optimize patient outcomes, and contribute to the chain of survival for cardiac arrest patients. This knowledge empowers EMS personnel to make informed decisions, apply advanced life support techniques, and ultimately save lives in these critical situations.

Avoiding Warehouse Disasters: A 21st Century Approach

Professor Glenn Corbett, John Jay College, New York City; Technical Editor, Fire Engineering

This class will offer both fire prevention and firefighting personnel detailed information about how to avoid warehouse disasters. Recent major incidents involving warehouses have highlighted the need for advanced training in assessing warehouse challenges, most notably the capability of sprinkler systems when pitted against the fuel load in the building as well as the operational role of the fire department, including support of the sprinkler system. Building construction details and firefighting hazards are discussed. Preplanning, including the critical partnership between fire prevention and firefighting personnel working together, will be highlighted.

Merging EMS into a Fire-Based System

Division Chief of Medical Services Charles Coyle, Palm Beach County (FL) Fire Rescue

This session will help EMS officers learn how to integrate with the fire side of their agency. The fire department is steeped in culture, and years of tradition have built a stigma that focuses on fire suppression. Over the years, fire departments have started to work in the areas of education and prevention, and now EMS has become a major component of fire rescue departments. In most such agencies, EMS makes up a majority of emergency calls, and it also tends to be the largest source of income for the department (due to transport and treatment fees). Regardless of the percentage of calls and income, EMS still has a lot to overcome regarding culture. This session is not intended to change your culture, but we will work collaboratively to create innovative ways to address your department's issues. Our goal will be to create an authentic fire rescue culture that will most efficiently care for our customers.

The 10 Trauma Protocol Changes You Are Too Scared to Make

Division Chief of Medical Services Charles Coyle, Palm Beach County (FL) Fire Rescue

Over the past 100 years, trauma care has made a full circle on the battlefield with whole blood administration while treating the men and women who serve our country. But why does it take the trauma centers and EMS providers so long to adapt the latest literature? This session will focus on some of the most controversial trauma care protocols for trauma centers and EMS providers. During the session, we will share best practices among the attendees and strategize an approach for you to implement the discussed topics at your agency.

RIT Operations: Commanding and Managing a Firefighter Rescue Mayday

Assistant Chief James Crawford, Midway (SC) Fire Rescue

Directing a rapid intervention team on a Mayday will be very stressful on any command staff. Knowing how to precisely navigate the team to a successful outcome for a firefighter in distress will take knowledge, ability, strength, and courage. A strong RIT command staff must be in place to accomplish the multiple tasks and objectives that will be required to rescue one of our own. This class will guide you through the process of establishing a strong firefighter rescue

command presence, how to systematically attack the problem at hand, and the steps needed to give a firefighter in distress a better chance at survival. It is designed for company and chief officers who are responsible for directing rapid intervention teams on the fireground or will be in the future.

Drive to Survive: The Art of Wheeling the Rig

Assistant Chief (Ret.) Christopher Daly, Goshen (PA) Fire Company

This class is designed for serious fire apparatus operators who want to improve their driving skills and advance the art of driving an emergency vehicle. It addresses advanced topics not normally covered in basic driver training programs, including advanced vehicle dynamics, crash causation, and common driver errors. The class drives home multiple teaching points that are essential for professional fire apparatus operators. Topics include vehicle dynamics, air brakes, brake fade, roadway friction, stopping distance, lateral g-force, rollover thresholds, siren limitations, and intersection crashes.

Fires in Mid-Rise Residential Buildings

Captain James Davis, Chicago (IL) Fire Department

This program is designed to examine the dynamics and complexities of today's contemporary residential, medium-to-large-density multidwelling mid-rise building. This type of building lends itself to specific unique operational challenges and concerns under fire conditions when occupied and during construction. A mid-rise fire will share many similarities and threats with a high-rise fire, especially fire extension and smoke propagation concerns. Problems include confusing floor layouts, long "maze-like" hallways, limited accessibility, life-hazard density, and lack of standpipes. This program will explore the technical and tactical aspects of the four- to seven-story multidwelling (residential) mid-rise fire, providing best practices and action-oriented tasks designed to influence decision-making priorities to safeguard building occupants and enhance fire suppression efforts within the confines of time and staffing absorption required to successfully bring the incident to a safe conclusion.

Aggressive Command Leads to Successful Outcomes on the Fireground

District Chief Mo Davis, Houston (TX) Fire Department

The incident commander is instrumental in the successful outcome of all emergency responses. A strong incident command presence will have a greater impact on the development of the emergency response than a weak command without direction. With multiple crews responding to incidents, we must get the response and assignments correct and in place promptly to achieve success. The duties of the incident commander include monitoring progression, determining the importance of incidents, and assigning crews. This class will discuss situational awareness, tactical decision making, and the importance of a well-trained and involved incident commander.

Fire Officer Development on Any Budget

Captain (Ret.) Lawrence Doelling, Palm Beach County (FL) Fire Rescue

The requirements of today's fire officer demand competence on more than just the fireground or EMS calls. Incidents that cause scandals, demotions, career loss, even line-of-duty deaths most often begin and end with a failure of leadership. Learn the elements required to set up a productive Officer Development Academy for new company officers, EMS captains, and 24-hour battalion chiefs. The class will discuss the elements of a successful training program and

show how to work within constraints such as available time, instructors, budget, and resources. These elements and principles are not just academic theory but have proven effective for several ranks and for multiple fire departments. The material presented has worked well with career and volunteer organizations and can be scaled up or down to meet the needs of any size organization. The importance of preincident training, confidence building, team building, and leadership development will be identified and discussed. Options for physical layout of the classroom, schedules, precourse requirements, postcourse training, and course evaluation will be presented.

Electric and Hybrid Vehicle Response

Firefighter Jason Defosse, Quinte West (Ontario, Canada) Fire Department

This class covers the latest in hybrid and electric vehicle response and addresses what rescuers need to know about interacting with autonomous vehicles. Topics include hybrid and electric vehicle components and safe rescuer interaction, charging station emergencies, extrication considerations for high-voltage vehicles, high-voltage vehicle shutdown and understanding stranded energy, autonomous vehicles and the future of vehicle extrication and rescue, and managing battery damage and high-voltage roadway debris.

Thriving in the Fire Service

Battalion Chief (Ret.) Daniel DeGryse, Chicago (IL) Fire Department

In addition to a full career in the fire service, the instructor has spent nearly four decades working in the field of substance use and mental health counseling. In this class, using some of his own life lessons, he will explore how attendees can use their own personal experiences to strengthen themselves and those around them. He will touch on how he believes all leaders within the fire service can respectfully and successfully intervene in the clear presence of behavioral health issues within our career. Learn the five "Stages of Change" an individual goes through to change behaviors for the better; how the fire service offers a number of protective factors to help us achieve a gratifying and healthy career; and about the Rosecrance Florian Program, a program model he developed with a tailored approach to treat fire/EMS and other first responders struggling with substance use and mental health issues.

Residential Lithium-Ion ESS and Fire Service Response

Director of Health and Safety Sean DeCrane, International Association of Fire Fighters, Cleveland, OH

As the implementation of residential energy storage systems has steadily increased and is forecast to increase by orders of magnitude, the U.S. fire service will necessarily respond to an increasing number of incidents involving lithium-ion Residential Energy Storage Systems (RESS). Responses to residential incidents involving lithium-ion batteries have presented new challenges to firefighters. This class will provide an overview of two research projects that provide the fire service with size-up and tactical considerations relating to the response to a house fire involving a RESS. First, UL Solutions and the IAFF partnered under a working agreement with the U.S. Department of Energy to evaluate fire scenarios involving li-ion RESS. UL and the IAFF designed the test scenarios, with input from a Project Advisory Panel, to be representative of a RESS installed in a single-family two-car garage. The goals of the tests were to evaluate the effects of RESS thermal runaway and fire involvement on compartment fire dynamics, explosion risks to responding firefighters and occupants of the home, and impacts of firefighter ventilation. Then the class will discuss follow-up UL Fire Safety Research Institute

(FSRI) testing that further evaluated hazards resulting from NCA and LFP chemistry li-ion battery thermal runaway gas releases in a typical residential attached two-car garage and results including pressures developed by deflagration, gas release thresholds that present life safety risks and structural damage, and tactical considerations for responding firefighters.

The Winning Firehouse: Unwritten Rules to Great Culture

Captain Michael Dozier, Horry County (SC) Fire Rescue

Firehouse culture is one of the most unquantifiable metrics on how effective a fire department will be. In a time when the minimum standard is often mediocrity, this class will dive into what it takes to create a winning culture inside the firehouse. It will lay out 10 unwritten rules for both firefighters and company officers--simple, straightforward expectations that will ensure a winning culture is cultivated among all members with the ultimate purpose of success around the firehouse and on the fireground. This class is suitable for all members from probie up to chief.

Elevator Emergency Management: Initial Response Procedures

Owner Michael Dragonetti, Dragon Rescue Management, Stamford, CT

This class focuses on the steps to take on arrival at a stalled occupied elevator, based on ASME A17.4/2015 recommendations. The safest way to remove passengers from a stalled occupied elevator is from the way they walked in and floor level. The ultimate goal is to have the elevator move itself and the doors to open on their own. These tried and true practices have work more often than not and should be performed every time on arrival.

Extrication and EMS: Coordinating Team Delivery of Critical Care

Captain Rommie Duckworth, Ridgefield (CT) Fire Department

Good vehicle extrication demands a unique collaboration between rescue and emergency medical personnel. Incorporating key victim assessment information in the extrication size-up will improve your strategic and tactical plans. To save a patient (not just chop up a vehicle), rescue and EMS must understand each other's jobs and work together effectively. This program uses a real-world approach to incorporate EMS care considerations in the extrication strategy. It shows how the most critical trauma encountered in vehicle collisions can be managed quickly and effectively by first responders. This program will help you make better strategic extrication decisions and more safely deliver immediate life-saving treatment, reducing the time from patient contact to patient removal to patient surgery.

There Is No Such Thing as a Routine House Fire

Battalion Chief/Shift Commander Jim Duffy, Wallingford (CT) Fire Department

Private-dwelling fires are the most common structure fire in the United States and Canada. About 75% of fire deaths occur in residential dwellings, and about 2,400 civilians die in these structures every year. Odds are most of your structure fires are in private dwellings. Just because it's the most common fire you go to, it doesn't mean that you let your guard down; a significant number of our firefighter injuries and deaths occur here. This class will explore command, fire attack, ventilation, and search in private-dwelling fires, coordinating all fireground tactics with your staffing. We will also briefly cover current scientific studies and how they may or may not relate to your tactics. Lessons learned here can also be applied to other types of structure fires.

Fireground Considerations

Captain Bobby Eckert, Camden City (NJ) Fire Department

The fireground is an ever-changing and often chaotic place, where firefighters are forced to make a multitude of split-second decisions to effect a positive outcome. This class provides experience-based tactics that take a simplistic and aggressive approach to thinking outside the box. From building construction and size-up to specific fire situations, this class covers an array of information that is paramount for your success. It will help instill confidence in your fireground decision making as well as give you knowledge to operate more effectively. Whether you're entry level or a seasoned veteran, take some of this information that some fail to consider and make yourself a game changer.

This House Rocks: Firehouse Excellence

Captain (Ret.) Michael Dugan, Fire Department of New York; and Captain (Ret.) Mike Gagliano, Seattle (WA) Fire Department

This program is designed for company officers and leaders inside a firehouse to learn how to interact with other members of the department. The idea is to make interpersonal relationships and required skills part of our daily lives in the firehouse. The firehouse can be a great place to work or it can be a tour in hell. This depends on the members, the leaders, and the organizational values of the firehouse. This class will review ways to make your firehouse a much better place to work or volunteer.

Promoting and Developing a Training Culture

Captain (Ret.) Todd Edwards, Atlanta (GA) Fire-Rescue

A lack of or inadequate training is often listed as part of most near-miss and line-of-duty death reports. At the same time, the fire service has made strides in training, from regional training events, online content, web-based classes, and the longest-running training in the world with FDIC. There are still glaring holes in our overall training programs. This class presents means and methods to fill these holes at the company and even the department level. A key to any successful training program or session is developing a culture and desire to train, starting with consistency. While it's easy to say, "Every day is a training day," executing this concept is much more complex, requiring a plan and people willing to work. This program will start with examining the importance of training/education and finish with a simple system to build consistency within our training programs.

Hybrid and Electric Vehicles: What Every Responder Needs to Know

Battalion Chief Jason Emery, Waterbury (CT) Fire Department

In 2020, the NTSB released a report on EV fires involving li-ion batteries and concluded that the U.S. fire service is not yet fully prepared with the knowledge on how to address them. This class provides a comprehensive review of the vehicles using these types of alternative drive systems and their impact on emergency operations, especially as it relates to firefighting operations and extrications. Auto manufacturers have invested heavily in their hybrid and electric vehicle programs. Many of them have committed to being all electric or electric/hybrid in the next decade. Some estimates indicate that by 2025, they will make up 10% of new cars sold. Last year alone, EV sales were up 55%. Attendees will gain the knowledge required to safely work around these vehicles and to educate other members of their departments on how to handle their presence on our roadways.

Fire Academy to the Fire Floor: Why the Disconnect?

Lieutenant Mickey Farrell, Fire Department of New York

The old “You’ll learn that in the firehouse” mentality has set young, motivated firefighters up for failure. Sadly, not every firefighter can be a part of an organization steeped in pride, tradition, and training. This class will begin to connect the dots not only for lost firefighters trying to find their way but senior firefighters looking for a rebirth into the job as we break down everything from your first day to your first fire and the consecutive fires throughout your career.

The Economics of Community Paramedicine (How To Get Paid for Mobile Integrated Health)

Co-Founder/Chief Executive Jonathon Feit, Beyond Lucid Technologies, Inc., Danville, CA

In virtually every forum where Mobile Integrated Health is presented as the future of Mobile Medicine (broadly defined as fire, EMS, nonemergency medical/interfacility transport, critical care, and community paramedicine), the question inevitably arises: How do you pay for it? Many agencies have discovered that readmission avoidance is actually the weakest of all economic models to successfully compensate and sustain CP/MIH. So what models work better? How do agencies translate their efforts into economics and finance? How do they convince payers to fund their programs? What payers should agencies be targeting, and what language—including data, which is basically a mathematical language—should they use to convey value in a way that goes beyond tugging heartstrings, to opening checkbooks? We will cover all of these and attendees will leave with an understanding of at least four specific models that can be used to translate their efforts into fee-for-VALUE calculations that get their CP/MIH programs compensated to the point where they can sustain, grow, and even help their neighbors.

Forget the Zebras ... It's the HIPPOS That Kill

Medical Director Will Ferguson, MD, Birmingham (AL) Fire and Rescue

In diagnostic medicine, there is a saying, “When you hear hoofbeats, don’t look for zebras,” meaning that diagnosis should begin with the simplest and most likely cause and then proceed in a methodical way. However, if you hear hoofbeats, that usually means something big and scary is coming, chasing the herd. This class will span the spectrum of several selected case-based studies to provide insight on how to manage patients with time-sensitive emergencies that kill if not recognized rapidly. It will cover cases in cardiology, pulmonary, metabolic, and more, emphasizing the key findings and pathophysiology that determine priority of care, along with the current treatment options for both the out-of-hospital provider and what we do in the ED.

The Company Officer as an Instructor

Captain Brad French, Dayton (OH) Fire Department

The company officer is the most critical position in the fire service training hierarchy, and making positive changes in your organization begins with officer development. This class examines ways to enhance the many roles of the company officer, including strategies for meaningful company-level drills, effective prefire planning, and creating an overall environment of elevated crew performance for efficiency on the fire scene. Emphasis is placed on innovative ways to maximize crew competence through company-level training and daily drills.

RIT: From the Outside Looking In

Lieutenant Trevor Frencic, Worcester (MA) Fire Department

This will be a class focusing on RIT from the time you are dispatched to an actual Mayday activation. We will go over case studies and statistics, theory on arriving on scene, tool utilization, and proactive preventives to stop a Mayday before it begins. Students will have opportunities to create a plan and diagnose the causes of potential Mayday situations before they begin. Student will go over techniques on finding a victim and assessing a victim. The class will implement the "anatomy of the low-air alarm" when searching for a down firefighter with a demonstration of how to use the speed of the low-air alarm to recognize time restraints in providing air.

Marketing Your Mission: Every Day Is an Election Day

Assistant Chief (Ret.) Michael Fronimos, Wytheville (KY) Fire-Rescue

Every time we interact with the public is an opportunity to gain support for your organization. Every day is an election day, where we can gain their support or lose their trust. Building relationships with our customers is imperative to our success. What is the perception of "what we do" or "who we are"? Whether it's our elected officials, citizens, customers, or even our own members, we must proactively market who we are and what we do. This class will discuss ways to proactively communicate and market your organization to the community as well as to your employees. Who is telling your story?

Recruitment and Retention: What's Working, What's Not!

Superintendent Eriks Gabliks, U.S. Fire Administration/National Fire Academy

The United States Fire Administrator's Summit on Fire Prevention and Control: State of Science identified recruitment and retention of personnel for career, volunteer, and combination organizations as one of six immediate concerns facing fire and EMS providers around the nation. In response, a stakeholder work group was formed to look into the issue and provide recommendations. This class will share the recommendations of the work group and more than three dozen innovative ideas on what's working and what's not.

Challenges of the Firefighter Marriage

Author Anne Gagliano, Saved From the Flame; and Captain (Ret.) Mike Gagliano, Seattle (WA) Fire Department

Marriage can either be a passionate, intimate love affair that lasts a lifetime or a toxic, contentious experience that ends in utter heartbreak. Add in the unique challenges presented by the rough and tumble world of the fire service, and making it work can be tough. In this class, husband and wife team Anne and Mike Gagliano take an honest, hard-hitting look at what is happening to firefighter marriages and why. They examine what makes this profession different than any other and how those differences impact marriage. With their 30-plus years of experience, they will share what they have learned that has helped their marriage stand the test of time and defy the odds.

The Art of Go/No-Go

Captain (Ret.) Mike Gagliano, Seattle (WA) Fire Department

The toughest and most critical decisions you make in your career typically revolve around committing to an interior attack or choosing another route. Seasoned officers know the difference between "We can get it" and "It's lost." You should too. Using a simple framework that allows

you to build on your experiences and those of others, you can develop an intuitive approach that grows with you throughout your career. This is not a magic class, and no one becomes a great decision maker by attending a few classes and watching a few videos. The goal is to create a framework of three varying profiles: Rescue, Building, and Fire. These profiles allow you to keep focused on your decisions and give you the ability to draw on what you've learned and react to changes in the dynamic fire environment.

Burn Through ECG

Clinical Coordinator/Paramedic Carolyn Gates, San Diego (CA) Fire-Rescue Department

Would you like to know when it is time to tap your medic on the shoulder? This will be a crash course in reading electrocardiograms. It will describe the electrical conduction system of the heart and connect it to the ECG waveform. Then it will relate that electrical stimulus with the mechanical response. We will clarify dangerous rhythms vs. normal rhythms. By the end, you will have a better sense of what is happening with your cardiac patient and what to expect next. Having an understanding of ECG rhythms will make you an even more valuable asset on a medical aid.

A Municipal Firefighter's Guide to Industrial Incidents

Captain Brian Gettemeier, Cottleville (MO) Fire Protection District

Industrial facilities are found in the majority of our communities; yet, there are very limited textbooks or training to provide guidance to these unique and complex facilities. Failure of a fire department to properly prepare for an industrial incident can result in a disaster. This class will include some of the common rules of engagement at an industrial facility. Topics include the importance of Unified Command, unique fire protection systems and specialized agents used in industrial firefighting, training and capabilities of industrial emergency response teams, and the uncommon hazards including electrical and combustible dust.

Performance Tactics for the Fireground: Psychology on the Training Ground

Chief Training Officer Dave Gillespie, Peterborough (Ontario, Canada) Fire Services

En route, what is going through your mind? Are you focused and bringing your A game? When you see the flames, is your heart pounding? Are you calm and controlled on the radio, or can you do better? If you want to to prepare for your top performance at every fire, every interview, every meeting, then you will learn performance tactics for the fireground. We will profile examples of high-performance operators who have prepared their minds using neuroscience and cognitive behavioural techniques in fields of SWAT, special operators, aviation, and professional athletes. Learn how they prepare pregame, preflight, and prebreaching. We can apply the same tactics to manage our bodies' ramp-up en route to the emergency, then how to reduce anxiety, heart rates, breathing, and unfocused neural activity. Perform like a tactical operator.

Technical Rescue Incidents: Where Do We Begin?

Lieutenant Mike Giroux, Yonkers (NY) Fire Department

This class will discuss the acronym WHATS UP when dealing with all types of technical rescues. Learn how easy it is to determine your priorities and initiate your IAP for technical rescues. The class will present technical rescue scenes and videos and the students will get involved in making decisions using the WHATS UP acronym.

Making It, Breaking It, or Losing It

Deputy Chief Billy Goldfeder, Loveland-Symmes (OH) Fire Department; and Research Consultant Gordon Graham

It's 2024, and the challenges firefighters, fire officers, and the fire service face can seem unsurmountable. From serious challenges of recruiting and keeping people to funding to training them to the issues of staffing and retaining people, the frustrations are not hard to find. "Why don't some people love this job if it's the greatest job on earth?" Goldfeder and Graham will discuss these very real current issues with some very frank discussion along with some solutions for these very different times.

Warriors, Wisdom, and Wheelbarrows

District Chief Clyde Gordon, Houston (TX) Fire Department

Learn from real-life experiences and leadership mistakes that led to a line-of-duty death (LODD). True leadership is not about asserting authority or seeking personal glory; it's about empowering others and creating an environment conducive to their success by creating relationships and understanding the generational gaps that cause misunderstandings among firefighters. One of the most important lessons the instructor learned was the significance of confronting and correcting performance issues promptly. As a young officer, he was confronted many times with employee issues; however, only one still impacts him today. Common everyday circumstances and his unwillingness to confront complacency, his lack of experience as a leader, coupled with a mindset of "he's transferring somewhere slow anyway" and "someone else can train him again" led to an unfortunate situation where a life was lost because of being unprepared for the fireground.

Without the Protection of a Hoseline: The Uncomfortable Reality

Lieutenant Daniel Gordon, Fire Department of New York

Getting water on the fire is the single most important action on the fireground. However, in the cases of a long stretch, delay in engine response, unable to locate the fire, known life hazard, and other fireground hazards, firefighters may find themselves temporarily operating without the protection of the hoseline. This class will help firefighters identify the hazards associated with these incidents as well as how to use the equipment and knowledge to be able to operate as effectively as possible.

Attack from the Burned Side

Captain Sean Gray, Cobb County (GA) Fire Department

There are many tactics for attacking structure fires. For years, the fire service has been preaching to attack from the unburned side. This isn't always the best tactic. The modern fireground is evolving more than ever before, and with the use of research to enhance our procedures, this class will show different tasks and tactics that can be used to extinguish fires from all angles. Recent firefighter safety research and data will be discussed in detail and the students will be shown how to apply evidence-based tactics to achieve a safer, smarter, and more efficient fireground. This class goes against the grain of traditional firefighting and has a common-sense research-based approach at fighting the fires we face today.

Man vs. Machinery: Are You Prepared?

Captain Mark Gregory, Fire Department of New York

Man vs. machinery incidents occur across the country. They may involve a person stuck in some sort of industrial machinery or be as routine as a ring stuck on a victim's finger. Is your department prepared to handle these incidents? This program will introduce students to tools and methods that have been proven to be effective in rescuing victims. Case studies will be reviewed as well as the pros and cons of various tactics. Medical issues will be addressed and the importance of a strong command structure and interagency operations will be stressed.

Autism Awareness for First Responders

Firefighter/Paramedic Sara Gruver, Millport (NY) Volunteer Fire Department/Schuyler Emergency Medical Services

As the rates of autism continue to increase in the pediatric population, it is inevitable that first responders will have encounters with people who have autism. This class will cover what ASD is, tips for interacting with people with autism and their families, physical assessment strategies, communication, and deescalation techniques. It is important to learn how to assist people on the autism spectrum in high-stress situations while keeping all those involved safe.

Operating Above a Fire

Captain and Training Officer Bill Gustin, Miami-Dade (FL) Fire/Rescue Department

There are two hazards that firefighters operating above a fire contend with: being caught in a flow path and floor collapse. Operating above a fire is always dangerous, but the risk is significantly greater when firefighters are unaware that there is fire below them. This class will examine how differences in elevation, concealed spaces, floor coverings, utilities, and fires that start on the outside of a building can mask the true location and extent of fire. It will also examine how research into fire dynamics and study of line-of-duty-death fires have influenced changes in tactics that firefighters perform to attack fires below them.

Engine Company Operations: Positioning, Pumping, and Problem Solving

Battalion Chief Eric Hankins, Yuba City (CA) Fire Department

The engine company is the backbone of all fireground operations. While the firefighters and officers on the hoselines get the glory, the pump operators must be on their game to ensure that the interior crews have the water they need to extinguish the fire. This all begins with the receiving of the alarm. Routes of travel, positioning, charging lines (properly), establishing a supply, and being able to troubleshoot any issues that may arise are all critical skills the pump operator must be proficient in. This class will identify best practices and common mistakes made and how to overcome them.

Through the Fire and Flames: Stabilizing the Burn Patient

Director of Professional Relations Debbie Harrell, Shriners Children's Ohio

Through current, evidence-based information, the EMS professional will discover proper acute care of the burn patient. This class will deliver case studies that highlight the role of EMS in the initial management of a burn patient including discussion of fluid resuscitation, intubation decisions, inhalation injuries, determining burn size, and treatment interventions. Acute burn care management of the patient with a thermal injury determines both short-term and long-term outcomes, including survivability.

Overcoming the Commercial Fireground

Deputy Chief (Ret.) Aaron Heller, Hamilton (NJ) Fire Department

The types of commercial fires covered in this class include big box stores, strip malls, warehouses, taxpayers, mom and pop shops, and parking structures. We will discuss building construction, strategies and tactics for engine and truck companies, firefighter survival and RIT considerations regarding these types of structures, considerations for the company officer and incident commander, and training considerations and drill ideas. With the rise in lithium-ion battery fires, the effects of micro-mobility devices, e-bike shops, and e-lawn equipment shops will be discussed.

Authentic Leadership: Being Genuine Is Harder Than It Sounds

Battalion Chief Kerry Henderson, James City County (VA) Fire Department

Learn what leadership of the future has to be. Buzzwords like authenticity and emotional intelligence are floating around in the leadership space, but this class will show you how to make them yours. Come learn how these concepts can truly change your life and your leadership abilities. Attendees will learn how to set their own personal values and how to help others do the same. This task will set attendees up to elevate and set expectations, improve their decision-making ability, and increase confidence.

Grant Writing for Emergency Services

Engineer/Senior Firefighter David Hesselmeyer, Buies Creek (NC) Fire Department

Many agencies are underfunded but still are expected to meet their mission and goals. The fire service falls within this realm. Fire service equipment, training, and related costs such as insurance are not cheap. In the current economy of inflation, this situation is even worse. Grants can be a good option to help achieve projects that may not otherwise be funded. However, a major issue with grants is that people are not aware of the process and often follow myths vs. facts. This class will focus on the art of the grant writing process and how to be successful. It will dispel myths, explain the overall process, and give helpful hints as to how to increase your chances of obtaining grant funding.

Intubating the Physiological Nightmare: Pharmacological Tips and Tricks

Clinical Coordinator/Specialist William Heuser, Northwell Health

We all have experienced the "super sick" patients in the field who often require tireless resuscitation and multiple medications. These patients are among the scariest patients to intubate, and performing RSI under these conditions is potentially life threatening. This class will discuss intubating these patients from start to finish and discuss the hottest topics of resuscitative prehospital medicine including the utility of delayed sequence intubation (DSI), invasive/noninvasive blood pressure management, as well as post-intubation pharmacological management.

Death by Rescue: Managing Crush Injuries

Lieutenant Douglas Hexel, Schenectady (NY) Fire Department

The most important component of technical rescue is the rescue. Rescue implies the removal of a live victim, which can only be accomplished with a built-in, comprehensive medical program. In many cases, lack of a medical component and prompt, advanced patient care will result in adverse effects or death. While all programs stress the highly technical component of scene

stabilization and victim disentanglement, only some programs also stress the vital patient care and packaging needed to maximize patient outcome. This class will bridge the gap between rescue and medical in complex technical rescue situations to avoid the proverbial “death by rescue.”

Pediatric Trauma: Everyone's Worst Nightmare

Lieutenant Douglas Hexel, Schenectady (NY) Fire Department

Pediatric traumas are some of the most dreaded calls we can receive. Regardless of licensure level, experience, or familiarity with kids, it's difficult to be comfortable treating an injured child. We know in medical scenarios that children are not just small adults, and the same rings true in trauma. This class will focus on recognition of injuries based on size, weight, and mechanism as well management techniques for those injuries and factors.

Forcible Entry Wins Are in the Details

Captain Samuel Hittle, Wichita (KS) Fire Department

Why are some forcible entry attempts efficient while others embarrassing? The answer is in the details. Setting forks, running a saw, and merely striking are not enough to ensure a win. It takes more than that. Success requires knowledge of the system being defeated, familiarity with tool potential, and understanding basic physics concepts (levers, force multipliers, torque, impulse, inertia, vectors). This class will analyze size-up considerations, residential and commercial doors, overhead doors, hinges, padlocks, magnetic locks, high-density commercial systems, window bars, glass block, shearing, boarded openings, and more. Techniques for the above mentioned will be shown in varying circumstances they are encountered including hand tools only, saw capabilities, single firefighter, or as a company. Numerical evidence and video will justify why details like body positioning, tool placement and alignment, striking techniques, and exploiting system flaws matter.

Command Considerations for Garden Apartment Fires

Chief Jason Hoevelmann, Florissant Valley (MO) Fire Protection District

Low-rise, combustible building fires create unique challenges for fire crews and incident commanders. This class will focus on unique considerations for incident commanders to operate effectively at fires in these buildings. The focus will be on construction, familiarization, the impact of codes and ordinances, data-driven decision making, and deployment options.

Suppressing Fires with Solar Power Energy

Firefighter William Hopson, Beachwood (NJ) Fire Department

This class examines the various types of solar power energy systems and how to deploy realistic and usable tactics to effectively extinguish fires in buildings where such a system is in use. It will also examine Tesla Power Wall systems and Timberline low-voltage roof systems.

Street Hydraulics

Firefighter Christopher Howard, Fire Department of New York

The fire service has experienced many changes in how we operate over the past 50 years; the transition from a throttle and relief valve setup, to a pressure governor on our engine companies was one of these changes. A paradigm shift is needed for an engineer to properly supply handlines on the fireground. We will go more in depth to explain some of the common mistakes

made on the fireground and teach why this continues to happen. This class will explore the differences in process to properly supply and pressurize handlines on the fireground, the difference between pressure and volume in a two-stage pump, and identify nozzle reaction as an issue in some cases. Teaching our chauffeurs to understand how the pressure governor works through engine cues, relationship of gauges, identifying how much volume of water is available, and the difference between using tank water or a positive water source are all identified and explained. Learn to choose between the backstretch and inline pumping, depending on hydrant location and staffing and to choose the proper intake to leave the front of the building clear for aerial apparatus.

Leadership and PTSD

Counselor Jada Hudson, Sugar Grove, IL

Leadership and PTSD training teaches first responder leaders how their leadership style before, during, and after potentially traumatic events (PTEs) influences if their subordinates develop PTSD, delayed healing, recovery, or resilience. This training looks at leaders leading away from PTSD and how leaders can equip subordinates with the "psychological body armor" of sufficient realistic training, social support, and empathic leadership style to help them appraise a PTE as a "challenge" rather than a "threat." It recognizes that many first responders are introverts and that introvert leaders bring unique strengths to the table. Leaders learn to model coping flexibility after PTEs and be vulnerable with subordinates, empowering them to discuss and mentally process traumatic events, developing mental and physiological toughness to face future PTEs.

Hidden in Plain Sight: Human Trafficking in America

Paramedic Suh Hugart, San Marcos Hays County (TX) EMS

Human trafficking is the fastest growing organized crime activity in the United States, averaging more than \$30 billion a year. Research has revealed that up to 88% of human trafficking victims accessed healthcare while being trafficked. This means that the chances are high that as an emergency responder or healthcare provider, you have treated a victim of human trafficking and may not have recognized it. Learn how to recognize the signs of human trafficking, how to identify a potential victim, and what you should do when you identify a victim. This class will include key takeaway points compiled from various resources including the human trafficking victim-witness coordinator for Central Texas, a human trafficking victim, Allies Against Slavery, the International Labour Organization, lessons learned from social services and emergency care providers, and the Institute for Family Violence Studies.

Challenging Sexism in the Fire Service

Captain (Ret.) Angie Hughes, Baltimore County (MD) Fire Department/Past President, Women in Fire

The fire service still struggles with the legacy of its all-male history. Sexism manifests differently, but the interpersonal and institutional sexist attitudes, behaviors, and policies that exist in many organizations still discourage women. The result: The effectiveness of fire and emergency services is reduced—not by women but by sexism.

Is It Really That Simple?

Deputy Chief EMS/Communications Supervisor Michael Hunter, UMASS Memorial Medical Center EMS

This interactive presentation will look at the science in treating critically injured patients. We will discuss past practices; current practice standards; and where we will be headed according to the science of treating hemorrhage, airway management, and ventilation in the most critical patients.

Help, This Job Is Killing Me!

Battalion Chief Jeremy Hurd, Palm Beach County (FL) Fire Rescue

This class will focus on the stress and trauma faced by first responders and will give a strategy for how to recognize the dangers, prevent exposure, and handle the effects of the trauma. There will be open-ended discussion regarding Post Traumatic Stress and how to turn that into Post Traumatic Growth. There will be a brief overview of how to recognize the issues in ourselves and others and how to get the appropriate next level of help based on the need of the individual. Topics include components of a behavioral health program, components of training within the program, how to deal with family tragedy and loss, how to make a death notification, suicide awareness, how to take care of our retirees, preparing our officers to recognize post-traumatic stress, how to train our EAP and counselors in traumatic awareness for firefighters, how to collaborate in the behavioral health world, and how to develop a curriculum for behavioral health training for new firefighters and new recruits.

“One Bad Day”: The Proactive Mindset of RIT Operations

Lieutenant Bassel Ibrahim, Orlando (FL) Fire Department

This class will discuss two major topics: Hands On Leadership, where we will cover this progressive leadership style as well as the key factors for success; and RIT Operations, where we will examine the many facets of RIT, from the stress response physiology, the command aspect, all the way down to the rescue itself. We will discuss the difference between a proactive and reactive RIT. Topics include the Mayday, size-up, access, search, troubleshooting, air management, victim packaging, extraction, and post-extraction care.

20 Training Props/Drills on a Shoestring Budget

Deputy Chief James Jester, Ocean City (MD) Fire Department

Funding is getting harder and harder to come by, and fire departments are forced to stretch their precious dollars to the limit each year. Unique funding sources are out there, but figuring out how and who to approach is often a lesson in futility. Timing of requests is also paramount in the successful acquisition of funds and materials for training props. These 20 training props—and the drills that go with them—won’t break the budget but will afford quality training to your department.

The Warrior’s Breath

Founder Ric Jorge, Tactical Resiliency Training, FL

The breath is the most misunderstood and least practiced skill set for a career that depends on air to work and survive. This class will cover the physiology of breathing as well as multiple breathing techniques that you will learn how to do in this class.

The Art of Reading Smoke: The Next Generation

Deputy Chief (Ret.) Phil Jose, Seattle (WA) Fire Department

The Art of Reading Smoke curriculum is a must for anyone looking to master the craft of

firefighting. First-in video and a dynamic teaching style help you develop the ability to see the volume, velocity, density, and color of smoke to answer three questions: Where is the fire? How big is it? How fast will the fire develop? Reading Smoke improves tactical decision making and enhances your ability to predict fire behavior. Whether choosing a tactic at the command level or performing that tactic at the company level, learn to read what the smoke is telling you for quick and accurate decision making.

Tailboard Takeaways Take 4

Assistant Chief Nicol Juratovac, San Francisco (CA) Fire Department

Tailboard Takeaways is the fourth series of aggressive fires fought by the San Francisco Fire Department presented at FDIC. It is packed with videos, photographs, and tactical channel audio of actual working fires that the San Francisco Fire Department has responded to in the past year. Learn what went well on the fireground and what left a little bit to be desired. This is a play by play of actual tailboard briefings held immediately after every working fire and covers the gamut of firefighting from access to extinguishment to ventilation--everything from running the play to apparatus positioning, roof operations, interior offensive aggressive attack, defensive operations, flow path, hoseline selection, and ladder placement in all five building types covered. Building construction will be discussed and how fire behavior affects the way we do business as an old school fire department meeting the challenges of today's fire environment.

Fight the Fire, Not the Building

Executive Inspector Ron Kanterman, Fire Department of New York

Commercial buildings present many challenges during a firefight, but knowing what they have to offer will make your job easier and safer. This class will review the built-in active and passive fire protection systems that make up the building's fire and life safety system and will give the participants an understanding of the basic working of said systems. Participants will be able to return to their home departments and examine buildings and target hazards in their first-due response district and make changes to strategy and tactics, prefire plans, and battle plans.

Leadership and Succession Planning for the Next Generation

Battalion Chief (Ret.) Anthony Kastros, Sacramento Metropolitan (CA) Fire District

Leadership is a vast topic and talked about throughout the fire service, but building modern leaders in house who are ready to fill the gap left by their predecessors remains an elusive accomplishment. Students will learn how to build leaders from the next generation for the next generation. Students will learn about the Millennials, Generation X, Generation Y, Gen Z, and Baby Boomers and learning methods for each. In addition, students will be introduced to several tools that they can employ in their departments to develop future company and chief officers including task books, officer academies, professional development series, mentoring, simulations, role plays, and strategic planning teams. These tools really work and have been used to develop countless new officers who hit the street ready to lead!

15 Steps to Creating a Culture of Health and Wellness

Chief (Ret.) Dan Kerrigan, Upper Providence (PA) Fire Township

This class will share 15 key elements of successful fire department wellness programs. From medical and fitness evaluations to cancer prevention and behavioral health support, to creating fitness SOGs and purchasing cost-effective fitness equipment, this offering will give all

firefighters (both career and volunteer) the tools they need to create a culture of fitness and wellness at their fire department. Doing so will improve fireground performance and safety, career longevity, and overall morale. Attendees will learn that any investment in firefighter wellness will pay huge dividends (physically and financially) for all parties involved. Firefighters will be healthier, and fire departments will save money. Creating a culture of firefighter fitness and wellness may at first seem daunting, but it is within reach for every firefighter and fire department.

Company Drills in Acquired Structures

Captain (Ret.) James Kirsch, Bergenfield (NJ) Fire Department

This class is designed for getting the maximum number of drills out of a donated property when the structure cannot be burned due to local restrictions or using the property to its fullest prior to conducting live burn exercises where allowed. The course will present drill topics for private dwellings, commercial properties, and multiple dwellings. Inspections of these properties to mitigate hazards prior to their use and the steps of completing the proper paperwork needed to operate in this such structures will be explained. The role of NFPA 1403 as a tool to safely prepare the structure, nonfire training scenarios involving building construction and size-up, utility emergencies, SCBA confidence courses, overhaul, and ventilation will be discussed. Ideas for using these structures for rapid intervention crew training with items found in these buildings to create props will be shown.

Tactical Response to Natural Gas and Propane Emergencies

Chief Jerry Knapp, Rockland County (NY) Hazardous Materials Team

Learn how to improve your response to explosive gas (natural gas and propane) emergencies. Complacency naturally develops because we are called to gas leaks when civilians smell gas at very low levels, in the 1- to 2-ppm range, which is far below the 5% or 50,000 ppm needed to achieve the LEL. The class reviews important case histories of gas leaks gone bad, the specific strengths and weaknesses of common air monitoring sensors, new laser-based remote gas detection instruments, tabletop training methods using gas instruments and explosion chambers, and SOPs based on gas industry best practices.

Big Box Fires = Big Problems

Captain Clark Lamping, Clark County (NV) Fire Department

There are very few things on the fireground will kill you faster than underestimating the potential danger and arriving unprepared to a large commercial structure fire. History has repeatedly shown us that taking residential tactics and strategies into a commercial structure is extremely dangerous. Overaggressive tactics, improper hoseline selection, lack of SOPs, lack of understanding of the dangers of large buildings, overestimating the capabilities of the fire protection systems, not monitoring air supply, not knowing the fire load, and committing too deeply into warehouses with high rack storage are all common mistakes at big box fires. This class will take an in-depth look at the building construction features of modern, large commercial (big box) buildings including walls, roofs, mansards, and doors; the strengths and weaknesses of fire protection systems, what to expect from them, and how to use them to our advantage; every strategic, tactical, and command level fireground assignment and draw comparisons between residential and commercial fires; the different storage configurations that are commonly found in big box stores and how they affect our tactical decision making; and multiple significant fatal

and near-miss fires that occurred across the country and evaluate what happened and how we can prevent it from reoccurring.

Challenges of the Modern Fire Environment

Chief of Safety-Deputy Assistant Chief Frank Leeb, Fire Department of New York

During the past several decades, the fire service has experienced critical changes that have significantly altered the fireground. This has had a profound impact on the fire environment and our tactics and strategies. It has also led to an increase in occupational illness for firefighters, which has similarly impacted how we operate. Combining research with real-world operational and leadership experience, this class will offer best practices while discussing the interrelationship between fire dynamics and the increase in occupational illness. Firefighters will gain a greater understanding of the concerns of occupational exposure as well as learn the key fire dynamics concepts to maintain an aggressive and safe mindset for fire attack and search and rescue.

Fire Stream Design, Development, and Application

Captain (Ret.) Dennis LeGear, Oakland (CA) Fire Department

This class will cover discussions points on handlines, single inlet mini monitor fire streams, and master stream development/application, with these three key areas brought into sharper focus, volume, placement, and velocity. Critical knowledge/understanding points will be addressed, in handline attack package design from small to large. This will include the selection and implications of these key points: target flows handline to master stream, nozzle pressures, reaction force, backpressure, hose construction/design, pump plumbing/psi pickups, panel gauge design, applying suppression water from exterior positions vs. interior positions, on plane vs. off a plane, wind impacts, and hidden fire.

Crisis Management: When Bad Things Happen to Good Fire Departments

Assistant Chief Robert Leonard, Syosset (NY) Fire Department

Unfortunately, bad things happen to even the best fire departments. We are great at responding to other people's emergencies, but are we prepared to respond when tragedy strikes our department or we have become the focus of negative attention? Discuss various crisis situations confronting large and small fire departments. Participants will be shown the common threads of response to all fire department crises—a focus on maintaining clear communications with our members and the communities we serve and taking definitive actions to maintain the public's trust. Attendees will walk away with a better sense of how to prepare their fire department to weather a potential crisis situation.

Reading the Fireground

Assistant Chief Walter Lewis, Orlando (FL) Fire Department

Like a quarterback having to read the field when a play is called that doesn't go as expected, the same is with the fireground and fire officers. Regardless of how many units your department responds to a fire, only one will be first to arrive at the scene. That officer, using training, experience, department policies, SOPs, and the resources at hand, will be able to engage in whatever tactics are possible for the situation while giving direction to personnel and providing radio transmissions to incoming units. Certainly, there is a lot going on for that first-in officer to handle, and it is well-known "How goes the first line goes the fire." However, there are plenty of

situations when Plan A doesn't go as expected and a shift in tactics is necessary. To comprehend when and why, that first officer or subsequent fire officers need to be able to read the fireground.

Rescue Task Force: Care in the Warm Zone Through an Integrated Response Framework

Captain Mark Litwinko, Fort Wayne (IN) Fire Department

Over the past 20 years, the public safety approach to high-threat mass casualty incidents such as an active shooter event has undergone significant changes. The initial change was with law enforcement; they no longer wait at the perimeter for specialized units to arrive on the scene and manage these high-threat incidents, instead shifting to a very aggressive initial response, which has resulted in a significant decrease in the amount of time until these situations are brought under control. This change was necessary to "stop the killing." The next very important paradigm change rests in the hands of fire and EMS personnel to "stop the dying." From this need, the Rescue Task Force concept was born with the framework of risk/benefit analyses and combat-proven evidence-based medicine, allowing for point of wounding care to occur. This saves the crucial seconds and can extend the life clock of the injured until further definitive care is available. The Rescue Task Force is about integrating tactics, allowing for a cohesive response. This class will look at lessons learned from past incidents to establish an understanding of the methods and tactics involved for a successful Rescue Task Force integration. Further discussion involves patient care considerations when operating in a high-threat environment, how traditional medical protocols often fail to allow for the aggressive care required for optimal patient survivability, and how adopting Tactical Emergency Casualty Care (TECC) guidelines will help overcome this obstacle.

FSRI Fire Dynamics Boot Camp: Overview, Resources, and Implementation

Senior Director of Research Daniel Madrzykowski, UL Fire Safety Research Institute, Gaithersburg, MD

This presentation is about what is taught in an FSRI Fire Dynamics Boot Camp, the online resources to enable you to teach the materials, and the tips for implementing evidence-based firefighting tactics in your department. The UL Fire Safety Research Institute (FSRI) Fire Dynamics Boot Camp is a train-the-trainer course designed to enable fire service leaders and instructors to incorporate the most current research findings about fire behavior and firefighting tactics into their organization's training program. The boot camp focuses on the "how" and "why" of fire dynamics. The boot camp uses hands-on tabletop fire experiments, reduced-scale flow path models, the hose stream mechanics prop, and full-scale fire demonstrations to reinforce the fire dynamics-based tactics. Classroom segments combined with the hands-on activities enable attendees to understand how to apply fire dynamics information in the street. The FSRI Fire Safety Academy is a free, online learning management system equipped with numerous firefighting training courses designed for real-world application. Now instructor resources and micro lessons have been added to the Fire Safety Academy to provide fire dynamics basics in a way that they can be incorporated into firefighter academy classes, in-service training, or company drills. Using these resources provides a means to implementing changes in SOGs or training to enhance the firefighting tactics used in your department. Other sources of information such as NFPA 1700 will also be discussed in terms of helping to adjust practices on the fireground.

The Ins and Outs of Forcible Entry

Lieutenant Clay Magee, Birmingham (AL) Fire and Rescue Service

Forcible entry is one of the most common jobs for a truck company. Every day, firefighters go to jobs with the first priority being to gain access. Many fire departments fail during recruit school to adequately prepare their firefighters when it comes to forcible entry. It is essential that truck company firefighters, as well as engine company firefighters in many departments, be proficient at forcible entry. Delayed forcible entry causes many problems including our two most important priorities: water on the seat of the fire and search. This class will cover the history of the halligan and where our present day halligans have come from, comparison of different brands of halligans, mechanical advantages, striking tips and body positioning, inward and outward swinging doors, drop bars, basic thru the lock techniques and uses, saw work, the 10% Search, and door size-up.

Probationary Firefighter Training Programs: Setting and Raising the Bar

Training Chief Jesse Marcotte, Northville Township (MI) Fire Department

Probationary firefighter training programs set the bar for what is expected of our newest members. These members represent not only the present but also the future. If we seek to continuously “raise the bar” within our respective organizations, we must learn how to best prepare, engage, and inform our probationary firefighters. Their initiative, attitude, and performance (IAP) set the stage for what will ultimately become their legacy. How we decide to accept and shape their values, beliefs, and skill sets will become our legacy. This class provides a start-to-finish framework that is compliant with the requirements and standards referenced in NFPA 1001. Topics include developing the probationary firefighter training manual, building organizational culture, succession planning, implementing a coaching and mentoring system, reverse mentoring, performance appraisals, and building operational readiness.

Power and Pitfalls of Fire and EMS Leadership

Battalion Chief Stephen Marsar, Fire Department of New York

This class is for all current and future fire and EMS leaders interested in improving their communication skills to connect with their membership and fellow emergency services providers. Using an interactive exploration of the commonalities and differences between management and leadership ideals, the participants will be able to apply what they've learned. This is also a must for women interested in moving up in the officer ranks as well. Additionally, it will provide those already in leadership positions the opportunity to hone their skills and improve their effectiveness both on and off the emergency scene.

Intoxicated Leadership: Thinking Strategically vs. Reacting Emotionally

Captain Benjamin Martin, Henrico County (VA) Division of Fire

The chance to lead and create opportunities for others can be incredibly rewarding. But let's be honest, it can also be tremendously frustrating, especially when leaders face supervising unengaged, negative, or even toxic people. While the fire service continues to do a great job of preparing people to lead on the fireground, it struggles to provide strategies and tactics for navigating the larger frequency and challenge of addressing personnel issues back at the firehouse. Students will understand the role emotions play in aiding or undermining their leadership efforts in the firehouse and on the fireground. This class illustrates why the body responds to conflict the way it does and what steps we can take to build credibility as leaders capable of answering these challenges.

Aggressive Command Supports Aggressive Firefighting: The Top 5 COMMANDments for a Safe and Effective Fireground

Division Chief-Operations Nick Martin, Salisbury (NC) Fire Department

Incident command failures are consistently part of the "NIOSH top 5" factors that contribute to line-of-duty deaths. This class will discuss the top 5 actions that an incident commander must take at each incident to ensure safe and effective operations. In the most successful operations, the skills of talented firefighters are enabled, supported, and best deployed by talented chief officers who run a well-organized and well-managed incident. These are ICs who understand what firefighters can and should do, understand tactics, and know how to build an incident that puts things together the right way to crush the problem. This class will cover concepts that are practical and can be easily implemented to make being in command less stressful and to ensure effective operations and the safety of your firefighters.

Do You Have What It Take To Be a Training Officer?

Assistant Chief David McGlynn, Letterkenny (PA) Fire Department

This training officer development course was created through lessons learned while dealing with a diverse group of training officers and leaders. It is designed for training officers, leaders, and aspiring training officers in emergency services. The main objective is to motivate training officers to incorporate passion into their program development while inspiring their people to love the job as much as them. There are departments with training officers who have never driven an engine, pulled a line, or sat in the front seat as a company officer; the programs that are under their development often fail or are brought into question by the members themselves due to its lack of true substance. Simply "faking it 'til you make it" will never work when designing and developing a successful training program. This course is designed to teach us how to value the culture, gain respect through credibility, and instill passion in training.

Multigenerational Collaboration: Bridging the Generational Gap Through Leadership

Firefighter Kelly McGowan, Raleigh (NC) Fire Department

This class discusses the topics, traits, and values that it takes to successfully bridge the gap in the generational culture in today's fire service. To be an effective leader, you must be able to manage a diverse age group, each of which has its own skill set and learning style. You do not need a title to be a leader. This class will build onto any level of fire service experience from the newbie up to the fire chief and help mold quality leaders from all ranges. We will cover how to lead from the top, middle, and bottom and how to effect change in building a more healthy fire service for us and the future. By understanding various learning styles and different generations, we can create a culture that implements effective leadership through accountability, motivation, communication, and trust.

Enhancing Fire-Rescue and EMS Operations with SMART Systems

Captain (Ret.) Kirk McKinzie, Cosumnes (CA) Fire Department

As a society, we face the sobering reality of more than 700,000 emergency 911 calls daily in the United States alone, resulting in the tragic loss of more than 7,000 lives, which rises to 150,000 globally. In light of these statistics, there's an urgent call for us to transition from traditional two-way voice, land mobile radio communications to a modern, SMART, visually-enhanced approach. Harnessing the power of SMART technologies, we have seen groundbreaking

advancements in operational use cases in recent years. Cyber-physical systems, integral to this evolution, have the potential to deliver crucial, real-time information during emergency interventions, increasing the effectiveness and efficiency of response efforts. In this course, participants will delve into a comprehensive overview of intelligent, practical solution sets specifically tailored for novice firefighters and seasoned officers. We'll explore how these advanced tools can revolutionize the services they provide to their communities. From digitally-enhanced, immersive education platforms to the application of virtual reality for studying live fire scenarios, ventilation, fuel packages, heat release rates, and survivability profiles, this course equips attendees with a solid understanding of the next-gen training methods. In addition, we'll delve into cutting-edge topics such as machine learning, artificial intelligence, biotelemetry, building information modeling, digital terrain maps, smart city integration, the Internet of Things (IoT), mixed reality, and augmented reality. This multisensory fusion-focused course is meticulously designed with one overarching goal: to significantly enhance the lifesaving capabilities of first responders, thereby safeguarding the lives of both operators and the citizens they serve. By the end of this course, participants will be empowered with actionable insights to lead their departments into the future of fire and rescue.

Case-Based Review and Updates in Pulmonary Disease and Chest Trauma

Chief Resident Christopher McLaughlin, Department of Surgery, Penn State Health

In this interactive, case-based discussion, common respiratory complaints and chest injury presentations will be reviewed. Pulmonary pathology can be intimidating and treatments are often time-sensitive. Participants will review basic chest anatomy and physiology, understand common respiratory chief complaints by exploring pathophysiology, and be better able to describe treatment indications and effectiveness. Special emphasis will be placed on chest injuries, both penetrating and blunt, and how to best prepare patients for transition of care at the trauma center. Current literature surrounding pre-hospital intubation, needle decompression, and ventilatory support will also be explored. This session will have something for everyone who attends, from first responders to experienced critical care clinicians.

Structure Triage: Making Rapid Decisions in the WUI

Chief Todd McNeal, Dixon (CA) Fire Department

This class will be delivered in three basic parts: First will be a review of the current conditions and threats facing all personnel operating in the WUI. Next will be a detailed review of the triage categories, the criteria by which an individual places each structure in a category and a discussion/review of the tactical actions required to operate. The final segment will be an application of the reviewed and discussed information by showing pictures and videos; the entire class will discuss the conditions and triage the structures displayed.

C.O. Equals HR x SV: The Important Formula for EMS

FireFighter/Critical Care Paramedic Jeff McPhearson, Prince George (VA) Fire and EMS

Students will understand the importance of this formula in a medical and trauma patient scenario, will gain a good understanding of obtaining the numbers of the formula, and will gain a knowledge of cardiac output for the patient. They will also gain an understanding of how cardiac output is used in another formula such as blood pressure. We will also highlight some of the cardiac diseases that affect a patient's cardiac output and ejection fraction.

Fire for Effect: The Lost Art of Realistic Training

Assistant Chief David Mellen, Leavenworth County (KS) Fire District #2

In today's fire service training, we are often faced with having to choose between realism and safety. You will learn how to incorporate both and why it is vital that trainees be exposed to situations as close to real life as possible. Through lecture, case studies, and research, students will learn the mental and physical benefits of using high-fidelity training programs and how to incorporate realism in a safe and effective manner. Whether you are a new firefighter or the chief, you will learn from this class and will walk away with information that will make you better prepared and better trained.

Swiftwater Rescue Rules of Engagement

Battalion Chief Greg Merrell, Oklahoma City (OK) Fire Department

This class is designed for nonwater rescue trained members and experienced water rescue team members to prepare them to arrive first on scene at water rescue incidents. Lessons learned provide a foundation to perform scene size-up, scene safety, assessing the victims, hydrology, allocation of resources, and rescue decision making. Students will learn proper PPE and water rescue equipment necessary. Proven and progressive rescue techniques will be discussed to enhance response safety and skills. Attendees will improve decision making capabilities and identify rescue priorities and use these priorities to ensure a safe and successful rescue.

Future Ready Fire: Get in Gear

Firefighter Amanda Miller, Red Bank City (TN) Fire Department

Recruiting, retention, readiness. Mentorship, succession, promotion, mental health, and mutual-aid relationships. These all seem like separate issues but they can all be addressed, in part, through a zero-cost set of initiatives summed up by the Future Ready Fire program.

This program, and its individual tenants, are not proprietary or business-oriented. This initiative does not involve money changing hands. It's only a cohesive set of ideas that can be implemented at any level and can be tailored to meet the needs of the individuals and agencies involved. No rank is required. This is all voluntary. The only thing required is a set of gear and the empowerment of the passionate, servant-leaders already among us. Our mission is to normalize training in gear and build brotherhood. We aim to encourage department members to hold regular, open-invitation gearwork events to improve fireground performance, provide organic mentorship and organic skills training, and help in recruiting efforts while improving mental health and morale.

The Northeast Two and a Half: Operations for Fire on All Floors

Firefighter Josh Miller, New Haven (CT) Fire Department

The northeast area of the United States is still heavily saturated with balloon-frame and post and beam construction. These “old” methods of construction provide multiple areas and avenues for fire spread. Like the name of the program suggests, many of these buildings are large two-story buildings with peaked roofs; the top floor is storage or living space. Sometimes the fire is just in one room, but sometimes the fire is from the basement to the roof. This program will discuss fires in these types of structures in terms of building construction and floor plan layout, unique hazards, line placement, and search priorities. There are many factors that will affect your fireground tactics—front stairs as opposed to rear? Which front door? Is it in the attic, the

basement, or both? What handlines and hand tools? By attending this class, you will gain a strong understanding of these buildings, how to read them, and how to fight fires in them.

"First-Due!" Residential Fire Concepts for the Engine, Truck, and Chief

Captain Douglas Mitchell, Jr., Fire Department of New York; and Assistant Chief of Operations Dan Shaw, Fairfax County (VA) Fire & Rescue Department

This program discusses the mission-critical incident actions for engine, truck, and first-arriving chief officers at residential fires, highlighting the must-have roles and responsibilities for each and honing those elements that are imperative to employ an efficient and effective fire attack. Successful fire attack dictates a deliberate balance of coordination and communication between all members. This class discusses preincident readiness, radio reports, and tactical resource deployments for "both sides of the floor" and our incident commanders. While we all know that the application of water still extinguishes fire and searches still locate trapped civilians, the art and science behind "how, when, and why" to mount the attack is being questioned. The initial company-level actions can make or break the operation. Are you and your team best prepared to operate mentally, physically, and tactically in our residential environment? Don't think so; know so.

Down and Dirty Fireground Decision Making

Battalion Chief Corley Moore, Moore (OK) Fire Department

This class is designed to turn people into "awe-inspiring, command-presence-having, cool-as-a-cucumber, fireground decision makers." Of course, no short class can turn someone into the ultimate fireground commander. This provides the tools and a framework to begin the journey to be that kind of commander, starting on the premise that making decisions is simple when you understand your priorities and then expanding from there. Just remember that simple does not mean easy!

The Crossroads of EMS and Public Health

Bureau Director David Nitsch, Pennsylvania Emergency Management Agency

EMS is a system that delivers individual-based health care. Public health is a system that provides population-based services. Traditionally, these systems are worlds apart. How do we look at these seemingly disparate systems through a common lens? This session will examine the overlaps and gaps of EMS and public health and begin the discussion of the benefits of bringing these systems together.

Fire Dynamics and Your Fireground

Director of Training P.J. Norwood, Connecticut Fire Academy

This class will show the symbiotic mutualistic relationship between fire dynamics and the fireground. It's a detailed approach of how fireground tactics and tasks affect fire dynamics. Attendees will be shown the relationship between fire dynamics and the fireground tactics through an interactive video-based discussion. The goal of firefighter safety research is to allow firefighters to become smarter, safer, and more efficient on the fireground. The goal of this class is to bridge the gap between the science and the streets.

What's Your Problem?

President/CEO John Oates, International Public Safety Data Institute, McLean, VA

The fire service has no shortage of problems and challenges to address. Trying to find the root of that issue and then solving it can be quite complex. Using data and information, coupled with department knowledge and doctrine, can lead to better problem identification and solutions.

Street-Smart Extrication

Firefighter/EMT Tim O'Connor, Port Penn (DE) Fire Company

Vehicle extrication is a puzzle with constantly changing rules. Manufacturers strive to make the best vehicle on the market so they can make the most sales. They design their vehicles to perform safely when involved in an accident. What they don't care about is the fire service's ability to extricate someone from a vehicle. Extrication challenges facing today's crews have grown exponentially with new vehicle components and construction practices. This class will help dismantle those practices and show real-world ways to beat them, sometimes by using them to your advantage. Learn maneuvers that can be used to extricate trapped civilians in a tested, timely way.

Leadership Lessons Learned on the Line

Deputy U.S. Fire Administrator (Ret.) Denis Onieal

There are as many leadership theories as there are authors and books. This class is a practical exercise designed for fire officers or those who aspire to be. Discussed are leadership tenets that the instructor found useful as a company officer, chief officer, NFA superintendent, and deputy fire administrator. Participants will identify the leadership traits they most admire and abhor as well as those leadership traits that they most want to develop in themselves.

Taking Action Against Cancer in the Fire Service (Train the Trainer)

Chief Russell Osgood, Ogunquit (ME) Fire Department; VP Education, Firefighter Cancer Support Network

The Firefighter Cancer Support Network (FCSN) education team focuses on the health of firefighters by providing cancer awareness and prevention programs nationwide. This program is designed to educate firefighters about the increased risk of developing cancer, encourages actions and behaviors that reduce or prevent exposure to cancer hazards, encourages healthy lifestyle choices, and provides information about resources available to firefighter should cancer take hold. It provides students with all the background knowledge and materials needed to bring the program back to their departments.

Coordinating Ventilation: Supporting Extinguishment and Survivability

Captain Nicholas Papa, New Britain (CT) Fire Department

Ventilation can make or break the outcome of a fire. Successful execution requires the comprehension of how it works and the precautions to take to ensure your actions are well coordinated and achieve their intended outcome. This program examines ventilation and its relationship with fire dynamics, firefighting operations, and victim survivability to identify how the tactic impacts the fireground. By coupling past experience with the latest research and rescue data, the common pitfalls and misconceptions are addressed to reduce potential errors and avoidable losses. A set of guiding principles and practices is provided to establish an operational baseline. The framework is universal and can be applied to any environment--from rural to urban

communities. With a functional understanding of ventilation and the methodology for its execution, participants can more consistently make the right call for their fireground.

Palliative Medicine and EMS: A Primer for the Community Paramedic

Deputy Chief Maurice Paquette, Allentown (NH) Fire Department

This class introduces EMS providers to the concept of palliative medicine--what it is, how it is different than hospice medicine, clinical pearls, medications for symptom management, and tools and techniques for having difficult end-of-life/goals of care conversations.

Heavy Rescue: Initial Size-Up

Lieutenant Josh Percy, Oklahoma City (OK) Fire Department

This class will present a process for sizing up incidents involving over the road trucks (big rigs) involved in accidents. It will address common scenarios like rear underrides, side underrides, rollovers, pin-ins, and overrides. The goal is to build knowledge on when and how to lift, stabilize, and extricate in these situations.

Take My Breath Away: Patient-Centered Rapid Sequence Induction Pharmacology

Clinical Instructor Aaron Peth, Creighton University, Papillion, NE

"20 Etomidate, 100 of Succ." We hear it again and again on popular dramatic television shows and many paramedics get drawn into Rapid Sequence Induction with a sense of simplicity. However, the reality is much more complex and every patient should have a tailor-made approach for this procedure. This class will provide an overview of a patient-centered approach to RSI medication selection in an effort to optimize hemodynamics and subsequently patient outcomes.

Your PPE: What You Should Know

Past Chief Tim Pillsworth, Orange Lake (NY) Fire District

Our most used piece of equipment in the fire service is our personal protective equipment. It is the only equipment that is used at every alarm. Far too many firefighters do not have the proper knowledge of their PPE. Topics include the importance of PPE with case histories of what our PPE cannot do; a simplified review of the NFPA standards of PPE garments with a concentration on NFPA 1970; a step-by-step method on how to specify, bid, and place PPE in service; and the proper cleaning and care of PPE. The fire service has realized that fire is not the only danger on the fire scene—the carcinogens present on the fireground and their levels have increased over the years. Accept that “salty” gear needs to be a thing of the past. If we can reduce our exposure, we can start to reduce the ravages caused by cancer in the fire service.

Must-Have Policies for Fire Departments

Chief (Ret.) Bradley Pinsky, Manlius (NY) Fire Department; Attorney

This class reviews the top administrative policies every fire department (United States and Canada) must have to prevent liability, huge jury verdicts, firefighter injuries, and public embarrassment and to increase proficiency on the fireground.

Mobile Homes: Small House, Big Challenge

Battalion Chief Joseph Polenzani, Franklin (TN) Fire Department

Manufactured housing accounts for about 10% of the new homes built each year. Learn what

makes trailers different from “regular” wood-frame structures and how to safely operate within this challenging environment. Tactics for suppression and ventilation as well as strategies for operating in high-density mobile home communities are also presented. Although often overshadowed by larger residences, mobile homes are found in communities of all sizes. In fact, 24% of all mobile homes are located in cities with a population of more than 2,000,000. In rural areas with long response times, a trailer fire is often a defensive operation. However, in urban or suburban communities, interior fire attacks are feasible, especially in larger double- and triple-wide homes. In these structures, ultra-lightweight construction, tight hallways, and unusual floor plans all combine to make an unfamiliar and potentially dangerous environment for firefighters accustomed to operating in site-built houses.

The Passionate Pursuit: The 7 P's to Perfection

Major/Chief Over Fire, EMS, and Special Operations David Pruitt, Hillsboro (TX) Department of Public Safety

Whether it is the next meal, the call you wish would or would not ring in, or what you are doing on your day off, planning for the event is a lost art. In today's fast-paced, immediate-gratification-driven society, properly planning for events gets pushed out of the way. Our stage that we are performing on has no room for error. Too many firefighters at every experience and age level often rely on their improv abilities to accomplish the task at hand. Our citizens, peers, and families deserve better than that. We have to practice, be polished, and be professional for the one performance that many of them will see.

Mastering Social Media and Your Department's Image

Chief of Department Robert Reardon, Duxbury (MA) Fire Department

Learn how your organization can actively engage your audience using social media during emergency and nonemergency situations. Discussion points will include the most effective social media tools and when to use them. The instructor's experience working in the media for 10 years before entering the fire service gives him a unique perspective and as a seasoned public information officer and chief, he will share how his department uses social media to transform the public image of his organization and how to communicate with your communities. Anyone responsible for social media, including PIOs, should take this workshop.

Recruiting for All the Right Reasons

Captain Terri Reid, Baltimore County (MD) Fire Department

Public service is one of the most sought-after professions, yet the fire service continues to struggle in the recruitment and retention arena. This program will review the most current statistics of fire and emergency services compared to data over the past several years. We will discuss public perception as it relates to why some people don't believe they have what it takes to be in the fire and EMS service. The class will introduce proven strategies to recruit and retain a more diverse fire service.

PFAS and Our Bunker Gear

Owner Jim Reidy, Firefighter Consulting LLC

The emotion and rhetoric regarding PFAS in our bunker gear, how it gets there, and what it does to the firefighter have been in the news, in publications, and all over social media. Following a single initial study, information was spread far and wide, sometimes misleading and false. Since

then, more work and research have been done. Studies have been completed and the science will negate any more fear mongering and misinformation. While this information is "public," the word is not reaching the rank-and-file or decision makers.

Fireground Communications and the NIOSH 5: Effective Strategies for Operational Success

Assistant Chief-Operations Jaime Reyes, Plano (TX) Fire-Rescue

Having reliable communications on the fireground is critical to the safety of all firefighters and is listed as one of the "NIOSH 5" (the top 5 causal factors in LODD reports). Dependable communications start way before your shift starts. They begin with the fostering of relationships. This is especially true for officers and chief officers. Have you invested in your crew? Have you earned their trust? The daily deposits we make to build relationships will pay dividends on the emergency scene. This class will address all aspects of fireground communications--everything from knowing the capabilities and limitations of your department's radio system to understanding each person's role in achieving reliable fireground communications and getting dispatch involved in your training. This class will introduce skills that can immediately improve communications as well as provide a plan for developing and implementing a communications model for your department.

Aggressive Search: It's Still About the Victim

Battalion Chief (Ret.) Frank Ricci, New Haven (CT) Fire Department

Every day in America someone is rescued from the horrible fate of perishing in a fire. This program will enhance your skills by focusing on aggressive tactics and training tips while covering command strategy. This program is fast moving, informative, and entertaining. Based on real-life experiences, fire science, and proven tactics, we can all do a little better on the fireground and in training to increase our skills.

NIOSH Fire Fighter Fatality Investigation and Prevention Program: Life Saving Lessons Learned

Lead Investigator Mike Richardson, NIOSH Fire Fighter Fatality Investigation and Prevention Program, Louisville, KY

This class will provide a brief overview of the NIOSH Fire Fighter Fatality Investigation and Prevention Program. It will highlight the scope and objectives of the program and discuss the numerous fire service resources developed from the program's LODD investigations. These resources include LODD reports, safety advisories, and workplace solutions. The class will also highlight critical information discovered in recent NIOSH LODD investigations. This information will go beyond the five most frequently cited LODD contributing factors of accountability, communications, incident management, risk assessment, and SOPs/SOGs. It will cover trending and prevalent contributing factors to include professional development, situational awareness, equipment application, structural collapse, and Mayday response. Recommendations on how to address each of those contributing factors will also be discussed.

Building Apparatus to Do Work

President Richard Riley, Traditions Training LLC

This class will look at the process, challenges, and options related to the purchase of fire apparatus. Buying fire apparatus is a large investment of money and trust by your community or

city. The process must be led by the purchasing committee to ensure that the rig designed will meet your budget and operational needs and also make the mechanics happy who have to fix it. The class will look at the specification process, purchasing requirements, engineering conference, and final delivery--all very important steps to ensure the department gets what it paid for from the chosen manufacturer. Learn options for your apparatus that can make it work better on your fireground and so it is easier to repair and operate.

Engine Company Tactical Traps

Lieutenant Steve Robertson, Columbus (OH) Division of Fire

We have all been there: the fire that goes sideways and we struggle to get it back on track. When tactical mistakes happen early in a fire, things continue down that path. These fires happen all too often, yet we fail to address the real issue: bad tactical decisions. Tactical traps are all over the place on fire scenes and are often overlooked. This class will discuss several common ones in discount auto part stores, dollar stores, and all type 2 construction buildings. We will discuss fortified rear doors, partition walls, heavy fire loads, access to balloon frame void fires and cockloft and attic fires, basement fires, electric cars, hoarders conditions, and vertical stretches. Your initial tactical considerations will dictate the outcome of the fire. It's not that we make mistakes; it's how we recover from those mistakes. Experience matters! We only get one chance to set the tone for the entire fire.

Beds to Bundles: The Flexibility of Stretching Hoselines

Captain Anthony Rowett Jr., Mobile (AL) Fire Rescue Department

The initial attack line is the backbone of every fireground operation and will have a greater impact on the outcome of a fire than any other fireground operation. "As the first line goes so does the fire," so we must get it right. This class focuses on multiple aspects of the hoseline operations including hoseline selection, apparatus positioning, and estimating the stretch. Will the second line be a backup line or a second attack line? What about the third line? What about alternate stretches like rope stretches, well hole stretches, and stretching lines off of standpipe systems? This class will address all of these topics.

It's Always About Leadership!

Chief Dennis Rubin, Kansas City (KS) Fire Department

This class will discuss the 13 mission-critical rules of being a good leader at the company and command levels. Learn how these 13 rules can be adopted and implemented into your own leadership style, how to apply them in real-life situations at the firehouse and away from the firehouse, why mission-critical core values are so important, and how to apply the rules to a case study.

Is Your Department Ready for a Pregnant Firefighter/Medic?

Director John Rukavina, Public Fire Safety Services, Asheville, NC

Firefighter pregnancy—and the first months after the birth of a firefighter's baby—can be one of the most complex personnel issues your fire department will confront. To top off the challenge, a new law—the Pregnant Workers Fairness Act--went into effect in June 2023 [and the Providing Urgent Maternal Protections (PUMP) for Nursing Mothers Act in December 2022]. Is your department ready? This class will help you create a firefighter pregnancy policy, educate you on firefighter reproduction issues in the firefighting environment, guide you through the

complexities of how the law shapes your department's pregnant-firefighter policy options, and share a few fire department misadventures with firefighter pregnancies that you can learn from.

The First Five Minutes: Size-Up, Initial Incident Action Planning, and Effective Communications

Chief Chuck Ryan, Tucson (AZ) Fire Department

This class offers a practical approach to the time-honored elements of scene size-up. We then move into a real-world, first-in approach to incident action planning and conclude with tips for effective fireground communications--all in the name of effective scene management and crew safety.

The Three Degrees of Mayday

Battalion Chief (Ret.) John Salka, Fire Department of New York; and Chief (Ret.) Rick Lasky, Lewisville (TX) Fire Department

This program is a discussion about three categories or situations that firefighters can find themselves in that could result in a Mayday operation. Not every Mayday is the same and, as a result, not every RIT operation will be the same. RITs need to prepare for various urgent and dangerous situations of increasing difficulty. A single firefighter lost in a house fire may be handled adequately by a four-person RIT with little other assistance. A three-person engine company crew that experiences a loss of water or sudden flashover will require a larger and more robust RIT operation along with additional logistical support. The collapse of a burning building that traps six firefighters in a two-story burning pile of debris will require an even more complex response. Learn how you can prepare your firefighters to handle any Mayday situation with confidence.

Buddy to Boss

Division Chief/Paramedic (Ret.) Chase Sargent, Virginia Beach (VA) Fire and Rescue

This class provides current and aspiring officers with leadership and decision making must-haves to survive and even thrive as officers. Understand what you are supposed to do every day you go to work based on the organizational goals. Use decision-making skills that you may not even realize you have and overcome decisions that result in bad outcomes. Discussed are critical officer responsibilities, including safety and survival, policy enforcement and understanding, and mentoring and storytelling along with the new pitfalls such as social media, tribal mentalities, and massive amounts of data thrown at you every day. The fire service will spend 28 weeks and a year probation on a new firefighter, but when we promote, we often pin a gold badge on an officer and say, "Now go do good things." We leave our new and current officers adrift in a lifeboat without guidance, training, or a good understanding of the critical human resources problems they are going to confront. They run pretty good operations on the scene, but 90 percent of everything an officer does has to do with people! Let's teach them how to do that and meet the organizational requirements and strategic plan objectives at the same time.

Residential Primary Search: Establishing an Aggressive Search Culture

Division Chief of Operations Grant Schwalbe, Estero (FL) Fire Rescue

Many fire departments are plagued with a passive search culture. This class makes a case that

our goal should be to complete a primary search within the first 10 minutes of arrival. We must increase awareness, have a framework for our search techniques skills, and support those with good SOGs and training. Topics include search-the big picture; best practice search skills; executing the search (hasty search, oriented search, and VES); victim removal including drags, window lifts, and upper-floor removal; and putting it all together with SOGs and training.

Aerial Apparatus: Tactical/Strategic Use and Training Drills for the Truck Crew

Instructor Lou Sclafani, St. Petersburg College

This class will review the types of aerials available today--ladders, platforms, tractor-drawn aerials, water towers, rear mounts, and mid mounts--including the pros and cons. Not all types of aerials operate the same and we will discuss these operational differences. The class will review some of the important concepts of aerial operations including positioning for rescue or fire attack, stabilization issues, and understanding your load capacities. Although not nearly as common as in years past, we will look at and discuss a number of recent aerial device failures. Students can take home a series of training drills that emphasize teamwork and operator skills to practice with their crews and truck.

Communication at Basement Fires

Lieutenant (Ret.) Michael Scotto, Fire Department of New York

Communication is vital at all operations. At basement fires, there are several issues we don't deal with at other fires. Since we are below ground, our escape methods are limited. Ladders, ropes, and PSS are rendered futile. Training on communication where tight spaces combined with high heat and zero visibility is the norm is absolutely necessary. ICs must give clear information to members inside, who must be clear in their transmissions too. These are vital communications on conditions, air management, and what we are encountering (clutter, etc.). In below grade operations, egress will likely be difficult, so time is valuable. If we do not train on these unusual operations and have a preexisting plan, something will be missed, which can lead to a domino effect that may endanger operating forces inside and below grade. We will look at fires in private dwellings and commercial structures; the strategies and tactics are based on construction type along with occupancy type. The class will address some solutions to some training shortfalls with regard to communications at these operations.

Company Operations in Garden Apartment Fires

Captain Jarrod Sergi, Norfolk (VA) Fire Rescue

Garden apartments are present in just about every part of the country. These occupancies provide a unique set of challenges both from the company and command level. There will be a heavy emphasis on operations at the company level. As goes the actions of those first-arriving companies goes the incident. This class provides sound tactical decision making that will not only support the command officers in the street but ultimately lead to a successful outcome for the occupants. Topics include construction, access problems, life safety concerns, fire attack considerations, water supply issues, ventilation, and more.

Critical Thinking for Fire Officer Development

Deputy Chief/Senior Tour Commander Leigh H. Shapiro, Hartford (CT) Fire Department

Officer development programs primarily focus on operational and administrative aspects, while little attention is given to the human dynamic element and critical thinking skills. Leadership can

be taught, but effectiveness comes from experience. This interactive class is designed to enlighten and prepare aspiring and present officers by employing tried and true techniques and skills garnered through actual incidents. First-hand accounts demonstrate how to recognize and process information both on and off the fireground to proactively address situations with confidence and resolve. Simplified and practical leadership tactics are demonstrated for incident commanders to provide an uncomplicated approach to fireground accountability from scene setup to follow-through. With a roadmap of how to implement effective leadership and management strategies, students will possess skillsets to effectively perform in any capacity to achieve the desired outcome.

Leading Through Training: The Crucial Role of the Fire Service Instructor

Assistant Chief Stephen Shaw, Fort Lauderdale (FL) Fire Rescue

The opportunity to model effective leadership through training is within our grasp every single day! Training provides an angle, a conduit, a platform. It is a gift! It provides a window to engage with every member of your agency, across all ranks and generations. This class focuses on maximizing the opportunities to lead and influence that come with training our personnel. At the heart of the presentation is the tenet that the ability to practice leadership traits transcends the content being presented. From humility, consistency, and integrity to empowerment, trust, and team building, this presentation covers the gambit on the leadership traits that every person who trains their own can demonstrate. It provides a reminder of the immense impact those who train and pass on knowledge have in our fire service as LEADERS while providing proven tools and techniques to attendees for success.

First-Due Battalion Chief

Battalion Chief Daniel Sheridan, Fire Department of New York

This is an overview for the important steps for a battalion chief to think about in the first few critical moments of a working fire. The class will cover the steps in doing a proper size-up, implementing a solid strategy, proper communications, sectoring, managing resources, and exposures.

Lithium-Ion Battery Fires

Firefighter Paramedic Paul Shoemaker, Aurora (CO) Fire Department

Students will learn the causes, risks, and tactics when dealing with lithium-ion battery fires. This includes the causes of thermal runaway from lithium-ion battery fires and the fire behavior and potential risks associated with these fires to include electric vehicles on the road and inside the garage, interior structure fires with e-bikes and scooters, and other lithium products. They will gain a better understanding of the proper steps to take when dealing with these fires to prevent injuries or additional extension. They will also learn the concerns with after-fire investigation and potential changes to policies within their organization.

Shock Delivered: Rethinking "Public Access Defibrillation" to Make Devices Publicly Accessible

Firefighter/Paramedic Richard Shok, Read Mountain (VA) Fire Department

Public Access Defibrillation programs have been used throughout the United States for more than two decades; however, in many cases devices are not truly accessible to the public when they are needed in an emergency. This class will use evidence to support the placement of AED

units in outdoor spaces using systems that allow for 24 hour a day access to emergency equipment. Public access to defibrillation, which, when successfully implemented, nearly doubles the rate of survival when compared to waiting for EMS, needs an overhaul to ensure that AED units are available and ready for use in an emergency. Through interactive lecture, we will discuss the need for public hands-only CPR training and strategies for bringing public accessible AED units into open spaces so that they may be used to improve survival from cardiac arrest. Participants will be encouraged to share strategies that they have used in their own outdoor spaces, compare these with proven practices, and be an advocate to enact change at home.

Conflagrations in Very Large Apartment Complexes

Chief Drew Smith, Prospect Heights (IL) Fire Protection District

Fires in very large apartment complexes represent extraordinary challenges for fire departments. The typical suburban fire department first-alarm resources and house fire tactics place the fight in a losing position from the start. Early recognition of fire potential and aggressive strategy supported by a well-structured ICS is key to a successful outcome. These fires are low-frequency/high-risk events that many firefighters may not experience in a career. When they do, implications are profound. Attendees will examine incidents involving large complex fires that required a significant mutual-aid response.

Engine Company Operations in Multiple Dwellings

Battalion Chief Jonah Smith, Charlotte (SC) Fire Department

This class will address the challenges and tactics for an engine company to be successful for fires in multiple dwellings. It will present proven methods to combat and simplify the multiple-dwelling fire. Topics include tactics, challenges, tactical priorities to ensure fireground success, and the tactical triage of ensuring search and fire attack work together for successful citizen outcomes.

A Comprehensive Framework for Firefighter Health and Safety

Professor Denise Smith, Skidmore College and Illinois Fire Service Institute

Most firefighters agree with the priority of improving firefighter health and safety, and certainly the vast majority of officers and chiefs have made the assertion that health and safety are one of their top priorities. But, defining what precisely is meant by firefighter health and safety and how they overlap and intersect can be a challenge. One of the greatest challenges to improving firefighter health and safety is creating an evidence-based, comprehensive framework of the myriad risks that firefighters face and developing a strategic plan to mitigate these risks. This class will propose a comprehensive framework for firefighter health and safety based on a synthesis of data from the fire service and scientific research. It will include data on safety and health risks from national reporting systems and qualitative data from safety officers, company officers, and chiefs. Safety risks and programs to reduce those risks will be reviewed, and the latest evidence regarding major health issues in the fire service including a consideration of cardiovascular disease, cancer, behavioral health, heat stress/dehydration/rhabdomyolysis, and more will be presented. Finally, health and safety issues will be considered in the context of the oath that firefighters take to protect their communities.

Advanced Drafting Operations: Getting Greedy with Your Water in the Rural Environment

Owner and Instructor Andy Soccodato, The Water Thieves, LLC, McMinnville, TN

In today's fire service, it is common to see fire departments that purchase pumping apparatus with 1,500- to 2,000-gpm rated pumps. NFPA 1901 states that apparatus with pump capacities greater than 1,500 gpm must be capable of doing so using no more than two separate suction lines. This may seem like a trivial piece of information; however, it is often overlooked and results in less-than-ideal flow rates in the real world. This course is designed to teach students fireground proven methods for maximizing their flow capability while operating from a static source. Students will be introduced to several alternative drafting techniques that don't require the use of a primer. Methods for expanding the initial system to incorporate multiple intakes will then be discussed. This setup will yield higher fire flows and reduce the amount of work required by the pumper during rural water supply operations. The instructor will also discuss options and methods for accessing water from challenging water sources. The class will conclude with a discussion on tactics for maximizing the efficiency of both the dump and fill sites during rural water shuttle operations.

Pediatric Drowning

Professor of Paramedicine Bryan Spangler, Valencia College, Orlando, FL

Drownings represent a major cause of death and injury in the pediatric population. While drowning can occur to all ages, and treatment is similar, this presentation will explore all aspects of drowning with a focus on pediatric statistics, prevention, and medical care that first responders should be aware of for the drowning victim.

Real Patient Cases: Pediatric Video Visual Diagnosis

Physician David Spiro, Little Rock, AR

Learn from seeing real patient cases from the field from this former paramedic and pediatric emergency physician.

The Grab Analysis

Battalion Chief David Stone, Fort Walton Beach (FL) Fire Department

This class focuses on four separate documented/video-recorded rescues, two of which the instructor has been directly involved with. Learn what worked and what did not work, tactics and strategies for success, command lessons that are applicable to any battalion level commander, as well as how our firehouse culture and preparation play into a successful outcome in emergencies. Success in these incidents was not because of luck but rather because of a cultures of proactive training and preparation. This class will improve your performance on the fireground and leadership in the firehouse. This is a unique view of operations, leadership, and experience from a suburban, minimum-staffed fire department perspective.

Roadway Operations for Firefighters and EMTs

Director of Training Jack Sullivan, Emergency Responder Safety Institute

Distracted, drowsy, drunk, drugged, and disgruntled drivers are striking firefighters, EMTs, and emergency vehicles at roadway incidents with increasing frequency. Fire and EMS personnel must train and operate in a preplanned and professional manner during all roadway incidents. The roadway is one of the most dangerous areas of operation for firefighters and EMTs, and it is critical that personnel establish and maintain a solid defensive strategy during all highway operations. This class will review specific case studies, describe successful strategies and tactics

for roadway operations, and highlight emerging technologies that may present additional hazards as well as some potential solutions for crew safety and survival. Participants will walk away with the essential steps and actions every fire department should be taking to protect their personnel from being struck by vehicles while operating at road and highway incidents.

High-Rise Challenges and Solutions

Battalion Chief (Ret.) Gerald Tracy, Fire Department of New York; and Fire Marshal (Ret.)/Fmr. Deputy Chief Jack J. Murphy, Leonia (NJ) Fire Department

This class looks at the challenges and solutions to high-rise operations in all types of occupancies. The disciplines and aspects of smoke management and control will be emphasized for ensuring the life safety of building occupants and firefighters. Archetypes new to the fire service will be revealed that revolutionize fire operations and preparedness. A restructuring of the incident command system will be illustrated and explained for its efficiency in high-rise operations. Learn what is on the horizon with modernizations in building design, materials, and new technologies--technologies that must be embraced by the fire service to keep pace with advancements in data gathering, building systems, and aspects of fire command and control.

Learning from Others' Experiences

Chief (Ret.) David Traiforos, Fire Training Instructor, McHenry County College Fire Academy, Illinois

This class focuses on videos and photos depicting moments captured on the fireground that illustrate how firefighters' aggressive actions can lead to danger and interfere with the tasks at hand, leaving firefighters at risk for injury or death. It discusses such topics as fire scene incident command, safety and accountability, vehicle placement and operations, hoseline placement, use of portable ladders, building construction, water supply, search and rescue, officer development covering strategy and tactics, radio communication and fire department policies and procedures, and SOPs and best practices.

Adding the "E" Back into EMS: Using Nurse Navigation for Low Acuity 911 Calls

EMS Medical Director Gerad Troutman, Global Medical Response, Lubbock, Texas

911 Nurse Navigation is a program that can intertwine seamlessly with any PSAP from private EMS to large urban fire-based EMS systems for right sizing low acuity calls and keeping unit hours available for REAL emergencies. Presented is actual data from 30-plus sites coast to coast and over 110,000-plus patients safely navigated to non-ER care sites. The class also will show data with reduced dry runs and adding high acuity unit hours back into an EMS system.

Step Up and Lead: Leadership Skills

Deputy Chief (Ret.) Frank Viscuso, Kearny (NJ) Fire Department

This class will introduce officers and aspiring fire service leaders to some of the most important skills they will need to become more effective leaders in today's fire service. Those skills include goal setting, mentoring and influencing, critiquing others, delegating, preventing freelancing, tackling administrative tasks, dealing with subordinate issues, conducting a post incident analysis, building morale, and the reasons it's important to step up and lead and be a problem solver in today's world, which is full of problem finders. The class will end with a discussion on creating the right culture within your organization with emphasis on the importance of customer service.

The Deliberate Leader

Captain Mark vonAppen, Palo Alto (CA) Fire Department

This is geared toward professionals who wish to expand their abilities in leadership. It is aimed at anyone who wishes to lead at any level. It is rooted in improving team performance and has application in both the public and private sectors. It has worked for more than 40 years in professional football.

Construction Site Response and Tactics for Success

Captain Mike Wallingford, Jeffersontown (KY) Fire Protection District

No matter the size of your organization, there is always construction being performed. The work being performed within these sites is inherently dangerous and risky by nature. This is where the problems start for our organizations. How prepared are you to respond? What type of limitations does your organization have? We will discuss four hazards that is present in almost every construction site and ways to build relationships now before the need exists.

Fireground Pump Operations: Mastering the Role of the Pump Operator

Battalion Chief of Training Paul Watlington, Burlington (NC) Fire Department

The pump operator may sometimes wear multiple hats (helmets) on an incident and serves as the connecting link in operations between the suppression decision making and the implementation of those decisions. The operator's preparation for the job extends well beyond standing at the panel and balancing pressures. This class is designed to reach deep into the overall roles and responsibilities of a driver/operator. Preplanning, positioning, safety, pumping, equipment, the apparatus, water supplies, and adversity are just some aspects of the job that need more attention. Whether you are in a volunteer or career department, you may see the position of driver/ operator as a destination position. This class is designed to offer more information outside of certification material.

Fighting Fires in Large Parking Garages

Captain of Training Mark Watters, Plantation (FL) Fire Department

Parking garages are common in many communities. New apartment complexes, multipurpose office buildings, and big venues are incorporated parking garages into their plans to maximize space. NFPA 1 Chapter 29 addresses protections requirements for new and existing parking garages, but what does this mean to the line firefighters, drivers, and officers? How do we treat this type of fire—such as a high-rise vehicle fire with possible flammable liquid spill? EVs now present an even bigger risk with charging stations and the intensity of the fire when they occur. The occupancy will dictate the protection system required. Dealing with protection systems and making a plan for the worst-case scenario are needed in this scenario. Are your high-rise procedures enough for this type of fire?

Imposter Syndrome: Will the Real YOU Please Stand Up?

Deputy Chief Tiffanye Wesley, Arlington County (VA) Fire Department

Have you ever doubted your career choice, position, status, or promotion, or have you doubted if you are showing up as your authentic self? If you answered yes to any of these questions, this class is for you! In this session, you will learn what Imposter Syndrome is, the most common identifiers of Imposter Syndrome, how it shows up in your life, and useful strategies and tips to

combat Imposter Syndrome. You will also learn how prevalent the issue of Imposter Syndrome is in society. This session will include class discussion and tangible tools you can implement immediately to cultivate a sense of self-worth and authenticity.

Large Truck Extrication

Battalion Chief Steve White, Fishers (IN) Fire Department

Rescuers should not take a passenger vehicle approach to a large truck extrication. Students will gain working knowledge of large truck and trailer construction including air, electrical, and suspension systems. Learn options for use of electric, pneumatic, and hydraulic tools to stabilize, gain access, and perform disentanglement from semi tractors, large straight trucks, and cars trapped under trailers. Working with heavy wreckers will be covered and case studies will be reviewed.

Developing a Long-Term Fleet Replacement Plan

Lieutenant (Ret.) Michael Wilbur, Fire Department of New York

Developing a long-term fleet replacement plan requires a complete and thorough fire apparatus fleet evaluation. Class participants armed with factual information will be able to determine what, when, and why apparatus needs to be replaced. Evaluating apparatus requires the evaluator to crawl over, under, and through each vehicle. Each vehicle needs to be weighed in accordance with NFPA 1911 and all information needs to be recorded for later review. The evaluator needs to drive the first due and adjoining response areas, taking note of the conditions found that would impact the fleet and the equipment carried on each vehicle. Do the fire stations housing apparatus meet the current and future needs of the fleet and the fire department? Learn how to evaluate the stations and what information is relevant in the ISO report as it relates to current and future size of the fire apparatus fleet. All available maintenance records are reviewed for all the vehicles in the fleet, with the associated costs noted. It is important to calculate the cost of ownership of each fire apparatus and then the fleet in its entirety. Is the ownership of a particular piece of apparatus cost prohibitive and no longer a viable option to retain in the fleet regardless of the vehicle's age? Once all the data is gathered, participants will then be ready for data analysis techniques that will lead to establishing a long-term fleet replacement plan that will act as a blueprint for future apparatus acquisitions. This blueprint can be used to establish a long-term funding mechanism.

The Empowered Aerial Operator: Mastering Truck Specifications and Operations

Captain Nick Wilbur, College Park (MD) Volunteer Fire Department

Do you want to gain a comprehensive understanding of ladder trucks' abilities and learn how to optimize their positioning on the fireground? This must-take course will leave you with valuable knowledge to maximize the use of your aerial device and make informed decisions for future specifications. First, students will examine the specification process. Discover what to ask for in a ladder truck and how to influence decision makers. This insight into aerial operations will be further clarified by a careful look at vehicles' specifications and operators' manuals. Attendees will then put their understanding to the test through dozens of interactive scenarios focused on practical skills and aerial and tower ladder positioning. Prepare to take a deep dive into ladder truck functions such as aerial overrides and emergency backup procedures. Topics covered include vehicle operation, safety systems, new technology, and options that impact vehicle abilities.

Aggressive EMS Treatment for the Fire Victim

Paramedic Stephen Wilcox, The Colony (TX) Fire Department

Does your agency's EMS treatment match your aggressive search culture? The truth is, fire departments can make grabs all day long, but if we aren't aggressive with our EMS treatments, survivability remains low. This class will give you the knowledge and tools to make sure that you and your agency are well prepared to treat and resuscitate fire victims.

Flashover Life and Death Decisions on the Fireground

Lieutenant Bryan Winzer, Fire Department of New York

Flashover can and will be devastating, causing injuries and deaths of firefighters. The devastating physical and mental scars left behind after a flashover occurs will last a lifetime. This class will discuss two case studies of incidents where flashover occurred. In one incident, a firefighter was severely burned while battling a private-dwelling fire. In the other incident, one firefighter was severely burned and his partner succumbed to his injuries while fighting a fire in a garden apartment. The class will provide and in depth look at both of the incidents, the firefighting operations at the incidents, and the outcomes. Learning objectives include the importance of size-up, communications, the early warning signs of flashover, ways to prevent flashover, building construction, rapid intervention teams, and the importance of wearing and maintaining personal protective equipment.

Expect the Unexpected: Fire and EMS Guide to Violent Calls

Major Dane Yaw, Oklahoma City (OK) Fire Department

The fire and EMS service is seeing an ever-increasing occurrence of violent events secondary to our EMS/first responder roles. This class will help you identify potential hostile situations before the tones drop to your return to service. Topics include interior size-up, understanding body language, how to successfully use deescalation techniques, and what to do if you are involved in a hostage situation or violent event.

Mobile Integrated Health as a Vehicle for Addressing Healthcare Disparities and Overdose Response

Indiana State EMS Medical Director Eric Yazel, Indiana Department of Homeland Security

As we have gained a greater understanding of the healthcare disparities that exist in our communities across the country, there has been an increased focus on addressing these conditions. As 911 calls continues to rise, fire-based EMS services and first responders are struggling to manage increased run volumes while experiencing the fallout of hospital crowding. The national public health system is working to address the opioid epidemic with numerous initiatives but is not traditionally a direct healthcare provider. At the intersection of this is Mobile Integrated Health (MIH). This class will discuss how implementing a MIH program can positively impact a fire service, decrease 911 calls, improve healthcare efficiency, boost morale, and further ingrain the fire service into the healthcare environment of the community. We will discuss the basics of program implementation, how to integrate with your overdose response plan and recovery organizations, programming and partners to enlist to improve health equity and eliminate disparities. We will also discuss the challenges of MIH programs and directions for the future.

“Just a Song Before I Go ... A Lesson To Be Learned”

Professor Bill Young, Eastern Kentucky University

Think you know all you need to know about shock? This class will look at the diagnosis and treatment of shock from the pathophysiological perspective. Attendees will learn the “why” of how shock occurs as well as “why” what we do during the treatment of shock has an impact on the patient’s survival. (“Just A Song Before I Go”--Crosby, Stills, Nash and Young)

Trauma for Two ... No Waiting!

Professor Bill Young, Eastern Kentucky University

One of the most stressful calls an EMS provider can respond to is the late-term pregnant patient. This class reviews the pathophysiology and care of the traumatic pregnant victim.

