

2019 Health & Safety Conference

Speaker Bios & Topics

- **“When Buildings Change The Rules Of The Game”**

The focus of the workshop is on fires in structures and occupancies that created situations where firefighters have been killed in the line of duty when “routine dwelling fire” strategies and tactics were used. The consequences of the “one-size-fits-all” fire operation, the absolute requirements for prefire planning, routine building familiarization, proper size-up when preparing for and responding to these incidents, and the consequences of the failure of the first-arriving company to recognize the nonroutine manner in which the fire must be approached and fought are discussed. In addition, operations in different types of lightweight structures, large-area structures, vacant and renovated structures, and the structural carcass operation are covered. Come away with a better awareness of the need to operate as the building dictates.

- **Anthony Avillo** – Retired Deputy Chief, North Hudson (NJ) Regional Fire and Rescue, Assistant Professor, Department Chairperson Of Fire Science at NJ City University. Author of Fireground Strategies; FDIC Instructor; Monmouth County Fire Instructor; Executive Advisory Board and Editorial Advisor for Fire Engineering Magazine.

- **“Survivability Profiling 2019”**

The content of this class is based on a decade of focusing on the disparity between firefighter and civilian deaths in the same fires and the “educated art of examining a situation and making an informed, intelligent decision of whether to commit firefighters to life-saving or interior operations. “The analysis differs from the basic risk vs. reward evaluation and goes beyond the tendency to justify risk whenever we respond to occupied buildings. Chief and company officers give live/video commentary on why and how they applied the concept to save their firefighter. Size-up, situational awareness, and calculating if civilians are savable before committing firefighters to an interior attack are discussed. Students apply appropriate firefighting strategies to scenarios and are encouraged to participate in an open discussion on where/when interior fire operations should focus on firefighting first and rescue/recovery operations second.

- **Stephen Marsar** MA, EFO, CIC – is a 29-year veteran of the Fire Department of New York (FDNY), where he is a battalion chief. His certifications include National Incident Safety Officer; FDNY incident management team–Type 1 Unit Leader; national and N.Y. State Fire Instructor level II; NY State Department of Health regional faculty member; and certified instructor coordinator. He is an adjunct professor at

the Nassau (NY) Community College and a chief instructor for the FDNY and Nassau County Fire Service and EMS academies. He has a master's degree in homeland security and defense from the Naval Post Graduate School, Monterey, CA, and a bachelor's degree in fire science and emergency services administration from Empire State College. Marsar is also a graduate, with honor, of the Executive Fire Officer Program from the National Fire Academy. He is a two-time winner of the FEMA's National Outstanding Research Award. He wrote the Company Officer Development column for FireRescue Magazine and firefighternation.com, and is an advisory board member of Fire Engineering magazine.

- **“Update on the Fire Fighter’s Work Environment: Energy Storage Systems/Tall Timber Buildings/Combustible Facades and Flammable Refrigerants”**

The fire fighter’s work environment continues to evolve. This session will include discussions on the proper testing of Energy Storage Systems involving lithium-ion technology, response considerations regarding ESS and an update on the recent testing and code provision modifications involving efforts to construct buildings using mass timber panels.

The presenters will also provide updates on issues that continue to involve fire fighter response including combustible facades and changes to refrigerants used in common household products. We will further discuss how fire fighters can become involved in the development of their work environment.

- **Sean DeCrane** – retired as a 25+ year veteran of the Cleveland Division of Fire. He served in various roles including the Director of Training and Chief of Operations. He retired as a Battalion Chief covering Cleveland’s Westside. Sean is currently the Manager of Industry Relations for the Underwriters Laboratories Building Life Safety, Security and Technologies Division.

Sean has been very involved in the research at Underwriters Laboratories and the National Institute of Standards and Technology. He serves on the UL Fire Council and is a member of the UL Fire Fighter Safety Research Institute’s Advisory Board.

Chief DeCrane also represented the International Association of Fire Fighters in the International Code Council process and has served on the 2009, 2012, 2015 and 2018 Fire Code Developing Committee and as Chair for 2015 and 2018. Sean served on the NFPA 1 Technical Advisory Panel, NFPA Research Foundation on Tall Wood Buildings and is serving as the Chair of the Fire Test Work Group for the ICC Tall Wood Building Ad Hoc Committee.

- **Paul Rogers** – is a retired lieutenant from FDNY after serving the City of New York for 32 years. Upon retirement, Rogers started PGR Group LLC, which is a consultant company that works with Lithium Ion battery safety. Mr. Rogers has been deeply intricate with standards and code that is directly involved with Energy Storage Safety. He has advised Sustainable CUNY and NYSERDA on code development for safe and proper Lithium Ion installations in the state and city of New York. He is also consulting and advising the Surprise Arizona fire department after the APS energy storage explosion and has been asked to help with the investigation of this event.

While with the FDNY, Lt Rogers worked the Fire Prevention as a Subject Matter Expert (SME) on Energy Storage Systems. Lt Rogers was FDNY representative for the Office of Technical Certifications and Review for Energy Storage Systems installations (ESS) within the New York City Department of Buildings and wrote ESS operational guidelines for the FDNY. He had taught all FDNY Staff Chiefs and Incident Commanders about Lithium battery failure hazards and their role in responding to ESS. Lt. Rogers has also participated in numerous projects for National Grid, Consolidated Edison, AT&T, Kinder Morgan and many others within the renewable energy sector.

He currently is a voting member representing IAFF, for National Fire Protection Association (NFPA) 855, UL 9540A and participates with the International Fire Code Action Committee for Energy Storage systems. Rogers helped developed a national online training course dealing with ESS and first responder operations for the NFPA. He has written several articles on renewable energy and first responder/safety issues including “Responses to Energy Storage Systems,” published in the June 2015 issue of Fire Engineering. Since retiring from FDNY Mr. Rogers consults with clients on the safe installations of Energy storage Systems in the built environment. Rogers served on the FEMA New York Urban Search and Rescue Task Force (USAR) 1 as a Hazardous Materials Manager, and previously has deployed with FEMA USAR 1 to Haiti shortly following the devastating earthquake. He also served as an FDNY liaison to the U.S. Marine Corps Chemical Biological Incident Response Force (CBIRF)

- **“FDNY's Best Practices for Reducing Exposure to Fireground Contaminants”**

For decades, the Fire Department of New York (FDNY) has been working to reduce firefighter occupational exposure to fireground contaminants. This class examines the studies and scientific research that have led to many of the best practices of contamination reduction in the FDNY and elsewhere. Highlighted are

the FDNY's most recent aggressive implementations specifically on-scene and fire station contamination reduction efforts to minimize cross-contamination, policy, and educational and cultural change.

Cancer has been recognized as one of the most dangerous threats to firefighters. The toxins and carcinogens firefighters are exposed to on the scene and through residual effects of firefighting are better understood now than ever before. This retrospective and prospective look at the FDNY and best practices provides examples and simple steps attendees can take today to better protect against and reduce firefighters' exposure to fireground contamination.

- **Frank Leeb** – has served the FDNY since 1992, currently serving in the rank of Deputy Chief. Frank is the current chair of the FDNY's Contamination Reduction Workgroup. He holds a BS degree in Fire Service Administration from SUNY and a Master's degree in Security Studies from the Naval Postgraduate School, Center for Homeland Defense and Security (CHDS). He serves as an advisory panel member for the UL Firefighter Safety Research Institute's (FSRI) "Study of Coordinated Attack in Acquired Structures" and is a principal on the NFPA Technical Committee Fire and Emergency Service Organization and Deployment-Career (NFPA 1710).
- **"Tactical Thermal Imaging: Enhancing Fireground Strategies & Tactics"**
This class will enhance fireground commanders and the fire officer's perspective on how to be more efficient, prevent rapid growth, direct their streams, and improve search and rescue efforts. The thermal imaging camera in the hands of a properly trained and fundamentally sound firefighter equates to seeing the fireground and the changing environment in a new perspective. In the course, firefighters will learn to properly understand thermal severity, the key attributes of thermal imaging and its limitations, and then how to apply this knowledge on the fireground.
- **Andy Starnes** – Andy is a lifelong student of the fire service and has been involved with the fire service as a volunteer since 1992 and as a career firefighter since 1998. He is a fire service website contributor on the topics of thermal imaging, fire behavior, leadership, behavioral health, and faith-based devotions. He also is the founder of www.bringingbackbrotherhood.org, a nonprofit organization designed to encourage and provides guidance for firefighters in the area of behavioral health, counseling, and more. He serves on the CISM team, peer support team, and assists members within his own department in the area of behavioral health. He has been featured on numerous podcasts, taught internationally, developed an internationally recognized

thermography-based fire service curriculum credentialed through Infrared Training Centers. His work and curriculum are now in use in the From Knowledge To Practice program in Ottawa Canada and has written in the subject of Thermal Imaging in Euro Firefighter 2, and numerous fire service publications such as Fire Engineering, Fire House, Fire Apparatus Magazine, & International Firefighter Magazine. He currently serves as a Battalion Chief in a large career department in NC and is the founder of Insight Training LLC which is internationally recognized for thermal imaging training and education. He also serves as the Deputy Chief for KTF Burns Division, and holds a Level II Thermography Certification, consults & teaches in the areas of Tactical Thermal Imaging. He is a certified NC Fire Officer III and has a Bachelor's Degree in Fire Science Administration.

- **“Overhaul to Fireball”**

This class was developed, with the assistance of the City of St. Charles Missouri Fire Department, to share lessons learned from a residential fire that nearly cost the lives of four veteran firefighters. Mistakes were made, and conditions were such that some would call it the “perfect storm”. Weather conditions, radio communications, and many other complications including fire location are referred to as the “dominos” that began to stack up against the crews on the scene. Wind driven fire conditions were encountered and maydays were called nearly thirty minutes into the offensive fire attack. All four firefighters were able to self-rescue as the air horns sounded for an evacuation. The two firefighters who were trapped in the stairwell were able to crawl through the flames on the first floor, following the hose line, out the front door. The other two firefighters became lost during their escape through the flames and eventually, after nearly two minutes of searching in heavy smoke and heat conditions, were able to bail out after finding a window on the front side of the building.

The significance of this class is that it involves four firefighters with an experience level from ten years to twenty-five years. Without this level of experience these firefighters may not have made it out alive. Because of this experience level, these firefighters were interviewed only days after the fire, and asked some tough questions about their escape and their thought processes during their escape. The results of those videotaped interviews were powerful. Portions of these tapes, with the addition of cell phone and helmet camera video taken from three separate cameras on the scene, combined with radio communications, provide students with an intimate sense of what these firefighters experienced. It also brings home the idea of how serious this job is, and how in a moment's notice things can go bad.

Lessons learned involve: size-up, radio communications, ventilation, “truck-work”, incident command structure, wind driven fire tactics and strategy, RIT or RIC, Mayday procedures, and post incident responsibility.

This class provides an information, videos and great discussions about Flow Path, Wind Driven Fire tactics. It also shows the importance of being on top of your game, and how much situational awareness matters, especially when it comes to how fire conditions can change rapidly.

- **Captain Chip Ashford** – Chip has 25 years of experience in the fire service and currently works for the St. Charles City Fire Dept. in St. Charles, Mo. He is currently assigned to Engine House 1 in the city’s Mid-Towne historic district, on the City’s busiest Ladder Company. He had also, for several years, served as one of the 4 Training Officers with the department. Chip’s combined experience also includes 10 years with the St. Louis Fire Department, where he was assigned to Engine house 26 on a Quint company in the Penrose neighborhood on the city’s north side. Chip is a certified fire service instructor and has served as an adjunct instructor in emergency services for 15 years in the St. Louis area. He is also an instructor with the St. Charles County Fire Academy. He brings a wide variety of experience and professionalism in emergency services to his programs. Chip is also an active member of the IAFF Local 757.
- **Fire Chief Dan Casey** – Dan has 30 plus years of experience in the fire service and recently became the Fire Chief for the Lincoln County Fire Protection District. For 25 years prior he served with the St. Charles City Fire Dept. in St. Charles, Mo. And recently just retired as the A shift Battalion Chief overseeing all 5 Engine Houses for the City. Dan also has served as a member of Missouri Task Force 1 for the last 10 years. Dan’s combined experience also includes 10 years serving as a Volunteer Firefighter with the St. Charles County Fire Protection District and 13 years as a Fire Captain with the City of St. Charles. Dan is a certified fire service instructor and has served as an adjunct instructor in emergency services for 15 years in the St. Louis area. He is also a lead instructor with the St. Charles County Fire Academy. He brings a wide variety of experience and professionalism in emergency services to his programs.