



SOCIETY of FIRE PROTECTION ENGINEERS
Southern California Chapter

www.sfpeSoCal.org

2022 FIRE PROTECTION ENGINEERING SYMPOSIUM

A LIVE IN-PERSON EVENT

October 25, 2022, 7:00am – 4:00pm

The Grand Conference Center
4101 E Willow St
Long Beach, CA 90815

The Southern California Chapter of SFPE is hosting the 7th Annual 2022 Fire Protection Engineering Symposium. The 2022 Symposium will be a live, in-person event at The Grand Conference Center (Long Beach) on October 25, 2022. Proceeds benefit the Chapter Scholarship Fund for Cal Poly San Luis Obispo fire protection engineering students.

AGENDA

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| 7:00 – 8:00 | Registration / Continental Breakfast |
| 8:00 – 8:15 | Welcome Remarks |
| 8:15 – 9:45 | Flammable Liquids Storage and AFFF – What Do We Do Now?
<i>Doug Fisher, Fisher Engineering</i> |
| 9:45 – 10:00 | Break with Exhibitors / Refreshments |
| 10:00 – 11:30 | Understanding Commissioning & System Acceptance Testing
<i>Jack Poole, Poole Fire Protection, Inc.</i> |
| 11:30 – 12:30 | Break with Exhibitors / Lunch |
| 12:30 – 2:00 | Bridging the Gap Between Fire Service & Design/Construction Communities
<i>Mark Chase, Los Angeles City Fire Department</i> |
| 2:00 – 2:15 | Break with Exhibitors / Refreshments |
| 2:15 – 3:45 | Challenges and Advances in Suppression
<i>Noah Ryder, Fire & Risk Alliance, LLC</i> |
| 3:45 – 3:50 | Final Thoughts |
| 3:50 – 4:00 | Last Chance with Exhibitors |

PRESENTATION DESCRIPTIONS AND PRESENTERS' BIOGRAPHIES

Flammable Liquids Storage and AFFF – What Do We Do Now?

Doug Fisher

In the early 1960's the US Navy, along with 3M, developed a unique firefighting additive that was extremely effective in suppressing ignitable liquids fires. This additive was called Aqueous Film Forming Foam (AFFF) due to its ability to develop a "film" on top of the ignitable liquid that could even reseal itself if broken. AFFF was heralded as game changer in fire fighting, particularly for the Navy aboard ships. In the following years, questions arose related to the health effects of some of AFFF's ingredients. In the early 2000's, 3M ended its entire line of AFFF products and the US Air Force switched from AFFF to high-expansion foam in their aircraft hangars. Fast forward to today and the US EPA has determined that ingredients in AFFF, commonly referred to as PFAS, can cause health effects to humans. States have responded by prohibiting the use or sale of AFFF. Foam manufacturers have been shuffling to develop "safe" low-expansion products as a replacement for AFFF. This presentation will dive deeper into the history of AFFF, current regulation/legislation related to AFFF, replacement options and the fire protection concerns/issues related to those replacement products.

Douglas W. Fisher, PE, FSFPE, LEED® AP BD+C

Fisher Engineering

Mr. Fisher is a licensed fire protection engineer, a Fellow in the Society of Fire Protection Engineers and LEED® Accredited Professional in Building Design and Construction with over 30 years of experience in the field. He is a professional fire protection engineer, by exam, and currently licensed in 29 states. Doug is a principal member of the NFPA Technical Committees on Space Ports, Commissioning and Integrated Testing, and Flammable and Combustible Liquids (Correlating Committee and Operations) as well as the Chair of the NFPA Technical Committee on Water Tanks. He is an active member of the Society of Fire Protection Engineers (SFPE) and the Chair of the SFPE Committee on Professional Qualifications. He is also a Past President of the SFPE Greater Atlanta Chapter and Governor of the SFPE Greater Atlanta Chapter Foundation.



He is currently a Principal Fire Protection Engineer in the Georgia office of Fisher Engineering, Inc. His experience includes design, review, commissioning and retro-commissioning of active and passive fire protection systems, fire protection system failure analysis, life safety/building code review and analysis, fire hazard analysis and fire modeling. He holds a Bachelor of Science degree in Fire Protection Engineering from the University of Maryland and Master of Business Administration degree from Emory University.

PRESENTATION DESCRIPTIONS AND PRESENTERS' BIOGRAPHIES

Understanding Commissioning & System Acceptance Testing

Jack Poole

The presentation will clarify the difference between system acceptance testing, integrated fire protection system testing and commissioning. The presentation will go in-depth to provide analysis and understanding on NFPA 3 & 4, cover the industry's most-effective testing methods and the importance of testing and commissioning fire protection systems to ensure they operate as designed, when needed. It's something that everyone in fire protection needs to be comfortably familiar with to save lives and reduce property loss.

John W. Poole, III, PE, FSFPE (aka - "Jack")

Poole Fire Protection, Inc.

Jack Poole is a Principal and Founder of Poole Fire Protection, Inc., a family-owned code consulting and fire protection engineering firm located in the Greater Kansas City area. In 2021, the company celebrated its 30th anniversary. Mr. Poole graduated from the University of Maryland in 1986 with a Bachelor of Science Degree in Fire Protection Engineering and is a registered Professional Engineer in Fire Protection, licensed in 49 states, Washington, DC and one territory.



He is a member of the NFPA Standards Council, Chairs NFPA 72 SIG-PRO and NFPA 520, and serves on many other NFPA Technical Committees, including NFPA 3, 5, 72-NAS, 75, 99, 101, 303, 409, 415, 418, 423, 720, 801, 804, 805, 806, 5000). Mr. Poole is also an SFPE Fellow and was the SFPE International President in 2021. Mr. Poole serves as the Chair of the University of Maryland Fire Protection Engineering Board of Visitors, is a member of the University of Maryland A. James Clark School of Engineering Board of Visitors, served on the AFAA Board of Directors, and is a past Chair of the OSU FPST Industrial Advisory Board. Mr. Poole was appointed to and presently serves as a member of the Kansas State Board of Technical Professions. He is also the proud Dad of two University of Maryland Fire Protection Engineers – Drew and Stephanie, whom are part of the family-owned business, Poole Fire Protection.

PRESENTATION DESCRIPTIONS AND PRESENTERS' BIOGRAPHIES

Bridging the Gap Between Fire Service & Design/Construction Communities

Mark Chase

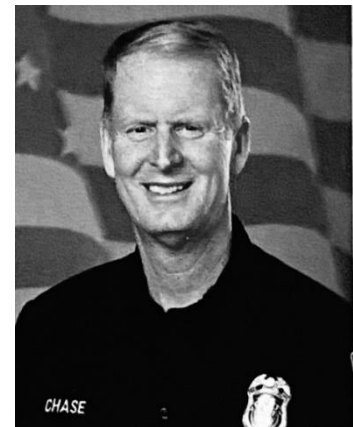
This presentation will include more than 50 of the most common issues that delay a tenant's occupancy or a fire/life safety system final inspection approval. Mark shares these common errors and oversights by designers and contractors. While some of the points are unique to Los Angeles City, many are not. Topics covered will include:

- Tenant improvement (TI) new construction, such as
 - the ever popular unenclosed stairs
 - elevator lobby locking systems
 - de-rating corridors
- Systems replacements
 - Fire alarm
 - Fire pump
 - Emergency generator
 - Smoke control
 - Elevator modernization
- Miscellaneous topics including
 - Penetrations of fire pump rooms, fire control rooms, stairwells, generator rooms
 - Subducts used in various HVAC systems
 - Special requirements for emergency power systems

Mark Chase

Los Angeles City Fire Department

Mark Chase has been a member of the Los Angeles City Fire Department for 33 years. For the past 22 years, he has been assigned to the Fire Prevention Bureau's Fire Development Services Section. Mark is a Fire Inspector II responsible for inspections of new construction, primarily high-rises and their life/safety systems, including landmark projects. Prior to being promoted to Fire Inspector II Mark served as a firefighter and paramedic. Mark earned an A.S degree in Fire Technology and various certifications including Building Plans Examiner from ICC and Fire Prevention Officer III from the California State Fire Marshal.



PRESENTATION DESCRIPTIONS AND PRESENTERS' BIOGRAPHIES

Challenges and Advances in Suppression

Noah Ryder

Environments are becoming more challenging to provide protection for as storage heights and densities increase, new construction materials are introduced, and unique and out of the box architectural designs are envisioned. Developing protection schemes for these can be complex right from the start, with something as "simple" as choosing the right sprinkler all the way through to requiring testing and modeling. This presentation will highlight some of today's most challenging problems, identify what makes them so difficult, and cover some advances in equipment, analysis, and tools that can help solve these challenges.

Noah L. Ryder, PhD, PE, MBA

Fire & Risk Alliance, LLC

For over 20 years Noah has focused on understanding fire and explosion's interaction with both built and natural environments. He presently serves as a Principal Engineer and Managing Partner at Fire & Risk Alliance, LLC. where he leads the Risk, Modeling, Applied Research, and Forensics group. He is a licensed professional fire protection engineer in numerous states and focuses on how safety can be improved through the use of quantitative risk assessments, computer modeling, applied research, and performance-based design. Noah teaches FPE courses in the FPE department at University of Maryland, the University of Waterloo, and is co-teaching a course at Stellenbosch University. Additionally, Dr. Ryder serves as the Technical Committee Chair for the SFPE Foundation, serves on multiple NFPA technical committees, and frequently publishes and presents his work.

