



Flashpoint

Phila - Delaware Valley SFPE



January Meeting Information

Date: Tuesday January 13, 2015

Place: Jacobs Engineering Group Three Tower Bridge Suite 3000 Conshohocken, PA

See Page 6 for directions

5:30 PM: Fellowship Time

6:00 PM: Dinner

Dinner Program:

The program this month is presented by Jack Fairchild, a member of our chapter. This presentation will review a re-creation of Russ Fleming's 1985 Analysis of Potential Fire Sprinkler Performance for the 1984 Great Adventure Fire. This re-creation uses modern computer modeling to analyze fire growth rate, sprinkler response times, water delivery times, maximum heat release rates, and tenability criteria. Exhibits will consist of pre and post fire photographs of the facility, plans of the facility, re-creation of the sprinkler plan used in the trial, excel charts and

graphs, and finally a Smokeview movie of the fire timeline. Jack Fairchild is a Senior Associate in charge of Fire Protection and Life Safety with Ballinger A/E. He is a NFPA Certified Fire Protection Specialist and holds an AAS in Fire Protection Engineering Technology from Delaware Technical Community College. He has held numerous NICET certifications, is a current member of the Technical Committee on Fire Protection Features for NFPA 101 and 5000 and is a current SFPE member.

Don't forget to make your reservation by Friday January 9, 2015; and bring an associate from your company!

Cost: \$25.00 for dinner & program

Reservations: By 12 noon, Friday, January 9, 2015

Reserve with:

Jeff LaSalle by E-mail:

jlasalle@lasalleeng.com

or Fax: (215) 658-1772❖

Future Cities Competition

The competition is close! The date is Saturday January 24, 2015 at Archbishop Carroll High School 211 Matson Ford Road, Wayne, PA 19087. The need at this point is people on the day of the event to help setup, judge and help with what ever needs to be done that day. If you want to help, please go to www.futurecityphilly.org and click on the volunteer opportunity button.



Our chapter sponsors an award for fire protection along with John Kampmeyer and Triad Fire Protection Engineering. For more information, contact John Kampmeyer, Phil Gaughan or Rick Coppola.

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Special points of interest:

- If you have not paid your 2014-2015 dues, please go to our website to download the dues application and mail it to John Spitz.



FLASHPOINT

"The purpose of FLASHPOINT is to provide a forum for the transfer of information between members of the Philadelphia-Delaware Valley Chapter of the Society of Fire Protection Engineers (SFPE) and to give the Chapter visibility."

Newsletter/Publicity Committee:

Jay Stough
Information for publication can be submitted to: **Jay Stough**
Email: jays@tilleyfire.com

This Newsletter is published 9 or 10 times/year (September through June) and received as part of membership of the Chapter. Membership Dues are \$30.00 collected annually in the Fall of the Year. For an Application of Membership contact: **Jeff LaSalle**
Email: jlasalle@lasalleeng.com

Visit our web site at:
www.sfpephiladelphia.org

Articles written are the views of the Author and not necessarily those of the Philadelphia-Delaware Valley Chapter of SFPE. ❖

"A true friend is someone who is there for you when he'd rather be anywhere else."

Len Wein

President's Spark by Mike Venneri

Well looks like we made it through another calendar year! Yeah!!!! 2015 is coming fast and by the time we have our meeting we may all actually be writing 2015 and not 2014 still. This year, like last, should be exciting for the Chapter. We have the annual SFPE Conference in our back yard. There is a call for papers and I encourage all members to consider submitting a paper for presentation at the annual conference. As always looking for help with committees. See all of you next year. Happy New Years.

Mike

SFPE Seeks Presenters for 2015 Conference

SFPE is now accepting educational presentation abstracts for its two-day North America Conference & Expo: Freedom to Design. The conference will showcase advanced and cutting-edge practices in fire protection engineering that are used to protect people, property and the environment from fire.

We invite you to share your knowledge with your peers on the advances in fire protection engineering as a presenter, November 9 – 11, 2015 at the Loews Hotel, Philadelphia, PA . Presentations must be noncommercial in nature with no specific brand names mentioned. The 2015 Conference Program Committee, co-chaired by Michael Madden & Michael Venneri, will review all abstracts and make final speaker selections based on level of innovation, quality, relevance, focus, practical application, and timeliness.

Deadline for abstract submission is March 13, 2015. For more information and guidelines, please click [here](#). Completed abstracts should be sent to Melissa Franco and include "2015 SFPE Conference & Expo " in the subject line of the email.

If you have any further questions, please feel free to contact Melissa Franco, Marketing & Meetings Manager, at mfranco@sfpe.org or 301-915-9724.

Membership Notes by Jeff LaSalle

At the December meeting, we welcomed two new members into the Chapter.

Matt Lauver is a Fire Protection Engineer with NAVFAC. Matt has a BA in Engineering from Elizabethtown College and a BS in Fire Protection Engineering from the University of Maryland. Dave Klepitch has a BS in Physics as well as BS and MS degrees in Fire Protection Engineering from Maryland. Dave joined LaSalle Engineering in September. Welcome to the Philadelphia Delaware Valley Chapter!

In other news, it was mentioned at the December meeting that the Board is seeking members who are interested in assisting Jim Davidson in organizing program, speakers, and coordination with our affiliated societies for the annual event to be held April 14th. Please reach out to Jim at 302-994-9500 or at jdavidson@davidsonassociates.com if you can help.

Finally, I'd like to start acknowledging milestones for our members in this portion of the newsletter. These could be new jobs, awards from other organizations, or other worthwhile accomplishments you'd like to share with your colleagues. If you have any such news please email me at jlasalle@LaSalleEng.com .

Warm wishes for a healthy, safe 2015

Jeff LaSalle

Is Your Fire Door Still Rated?

Fire rated doors are a crucial component of the life safety design in buildings the world over. From high rises to office buildings and college dormitories to correctional facilities, fire doors protect stair towers, equipment rooms, and emergency exits from the propagation of fire. National fire codes are complex, and it can be very difficult to decipher the codes, requirements, best practices, and maintenance obligations of these assemblies. Fire door assemblies that are not properly inspected and maintained will inevitably lose their rating--the ability to protect.

It is not common knowledge that the fire stopping ability does not come from the door alone, but an assembly consisting of most if not all of the following: door(s), frame, glazing, gasket, sweep, threshold, hinges, closer, hold open, coordinator, astragals and operator. All true fire door assemblies are tested by an independent testing firm such as Underwriters Laboratory (UL), and upon successful completion of the many tests with satisfactory results, the assembly receives a "Listed" status. Being listed means that the assembly will perform to UL standards and is a testament to the quality, but there's one caveat. The assembly must be installed and remain in the configuration and condition in which it was originally tested and listed.

To ensure that fire door assemblies are being maintained, NFPA 80 (the national fire code regarding "Fire Doors and Other Opening Protectives") requires an annual inspection by "[...]a qualified person with knowledge and understanding of the operating components of the type of assembly being subject to testing." Per the same code, a qualified person is outlined as someone with a recognized degree, a professional Standing, knowledge, experience, and has demonstrated the ability to properly perform the work such as a Professional Engineer.

Maintenance of fire door assemblies is straightforward, and a maintenance schedule can easily be developed with the help of a fire protection and life safety professional. Some examples of preventative maintenance are inspecting the gasketing and replacing any torn or damaged pieces, ensuring the door can close fully on its own, and checking that all hardware is present and secure. When considering making modifications like swapping out the handle or push bar or modifying the closer, first contact a qualified fire protection professional to see if there are tested solutions and directions to follow that maintain the rating of the assembly.

A building's most important assets are the customers, workers, residents, and tenants. When considering the safety of the occupants, ask yourself this question: "Is my fire door still rated?"

Dan Broughton, EIT, Systems Design Engineer with PSE, is a mechanical engineer.

Annual Scholarship Applications Available

The Scholarship Committee is pleased to announce its offering of scholarships for the 2014-2015 academic year. We are seeking candidates for consideration to receive awards from the John D. Cook III Scholarship Fund, for demonstrated academic achievement. In the past, scholarship awards ranging from \$500.00 to \$1,500.00 have been awarded. More than one scholarship may be awarded, depending on the number and quality of applications received.

Candidates must be full-time students, and have attained at least sophomore class standing or have completed at least one semester of study in a two-year program as of the end of the fall semester, 2014 and demonstrate a serious interest in a career in fire protection, and shall be a resident of one of the areas described in the Criteria and Information Sheet attached to the scholarship application.

Please contact **Mr. Dave Kriebel, Scholarship Committee Chair** at 215-446-4610 during normal business hours if there are any questions concerning completion of the applications. He may also be reached via email at dave.kriebel@gsa.gov. The application is on our website, www.sfp Philadelphia.org.

"Miracles happen everyday,
change your perception of
what a miracle is and you'll
see them all around you."

Jon Bon Jovi



There are 2 new sprinklers for combustible concealed spaces. Check them out at Reliable's website: www.reliablesprinkler.com and Tyco's website: www.tycofire.com.



Intelligibility Requirements of NFPA 72 – Dispelling the Myths By: Ray Grill, P.E., FSFPE, Principal, ARUP

Intelligibility of voice alarm systems became a regular topic of discussion and debate in the industry after the development of quantifiable testing equipment in the late 1990's. The debate calmed until NFPA 72 began incorporating criteria allowing the use of a fire alarm system to provide warning of other than fire emergencies. The incorporation of mass notification and the creation of a new Chapter 24 in the 2010 Edition of NFPA 72 also reinvigorated the debate. This article reviews some of the history of the requirement for intelligible voice communication and tries to clarify some of the misconceptions that the author often hears expressed by engineers, contractors and authorities having jurisdiction. To read the rest of the article, [click here](#).

Today in fire history: an early morning fire in a dormitory resulted in the deaths of ten female students

In the early morning hours of December 13, 1977, a fire occurred at Aquinas Hall, a dormitory at Providence College in Providence, Rhode Island. This fire resulted in the deaths of ten female students who were residents of the fourth floor. The primary fuel for the fire was highly combustible Christmas decorations that had been put up in the corridors. Physical evidence indicates that the fire started near a fourth floor sleeping room.

Aquinas Hall was of mixed construction with a majority of the building being protected by non-combustible construction. It's a four story building with the first floor being used for class rooms and a chapel, and the second, third, and fourth floors occupied as girl's dormitory space. Interior finish was primarily non-combustible with exception of the concealed fiber board ceiling above the suspended non-combustible mineral tile. Fire alarm system which consisted of manual pull stations and three combination rate-of-rise, fixed temperature heat detectors. The heat detectors were located at the top of each stairway.

The most significant factors which led to the multiple life loss in this fire were the presence of highly combustible Christmas decorations, and the long dead end corridor near the room of fire origin. Contributing factors were the absence of an early warning fire detection system, no automatic suppression system and poor compartmentation of the room of origin, as indicated by the fire spread even though the door was closed.

For the full [NFPA Fire Journal article](#).

From the NFPA today blog. Copyright NFPA

View of dead-end corridor on second floor.



JANUARY 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Happy New year!	2	3
4	5	6	7 ASCET SJ chapter Mtg	8	9	10
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Calendar Events for January

- Jan 7: NJ ASCET Meeting @ the Collins House in Collingswood, NJ
- Jan 13: SFPE meeting @ Jacobs Engineering. Don't forget to make your reservation by Friday Sept. 5th.
- Jan 14: Delaware ASCET Chapter Meeting @ Charcoal Pit on Kirkwood Highway in Wilmington
- Jan 20: Berks County ASCET Chapter Meeting @ Valentino's in Kutztown 6PM
- Jan 24: Future Cities Competition: Archbishop Carroll High School 211 Matson Ford Road Wayne, PA
- Jan 27: Phila. ASCET Chapter Meeting @ Michael's Dinner in Bensalem





Phila-Delaware Valley
SFPE

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WE'RE ON THE WEB:

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Mission Statement

The Philadelphia/Delaware Valley Chapter purpose is to advance the art and science of fire protection engineering and its allied fields, for the reduction of life and property losses from fire, to maintain high ethical standards on engineering among its members and to foster fire protection education.

Recognition of fire protection engineering as a discrete engineering discipline is a prime goal. Engineering disciplines exist because there is a special body of knowledge based on the fundamentals of mathematics, physics, chemistry, engineering science and economics.

The chapter strives to facilitate sharing of sound engineering experiences and knowledge between its members and the fire protection community in general with an active program of education and scholarship activities.

LASALLE ENGINEERING, LLC

FIRE PROTECTION AND LIFE SAFETY ENGINEERING

Celebrating 10 Years of Service to Our Valued Clients

Our performance philosophy is based on the following principles:

- ◆ *Understanding our clients' problems, goals, and expectations.*
- ◆ *Developing solutions that achieve these goals in a cost-effective way.*
- ◆ *Creating an atmosphere of cooperation and respect with all team members.*
- ◆ *Focusing on practicality, maintainability, and reliability of systems and solutions.*
- ◆ *Recognizing the unique roles individuals play in fire and life safety activities.*
- ◆ *Integrating engineering principles into a largely code-driven field of practice.*

"Appropriate, cost-effective building fire safety requires an understanding of goals, the reliability of fire safety systems, and the roles of individuals in fire safety practice".

Our services include:

- Fire Safety Strategic Planning
- Fire Suppression Systems Analysis & Design
- Fire Alarm Systems Analysis & Design
- Smoke Control Systems Analysis & Design
- Life Safety/ Egress Analysis & Design
- Building & Fire Code Consulting
- Life Safety Code Consulting
- Building Code Compliance & Fire Safety Audits
- Firestopping Systems Engineering Judgments
- Structural Fireresistance Analysis
- Hydraulic Modeling & Water Supply Analysis
- Fire Modeling
- Fire Alarm System Audibility Studies
- SOC Life Safety Assessments
- Project Management
- Fire Safety Systems Commissioning
- Fire Hazard Analysis
- Fire Risk Management
- Systems Failure Analysis
- Litigation Support