



# Flashpoint

Philadelphia-Delaware Valley Chapter  
Society of Fire Protection Engineers

Phila-Delaware Valley  
SFPE

### Special points of interest:

- > If you have not paid your dues, please use the form on page 6 and mail them to John Spitz.
- > Looking for some formulas you cannot remember? Check out the [Engineer's Tool Box](#).

## November Meeting Information

**Date:** Tuesday Nov13, 2012

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

See Page 6 for directions

**5:30 PM:** Fellowship Time

**6:30 PM:** Dinner

### Dinner Program:

Brian Berkley of Viking Sprinkler Corporation will be our speaker this month. Brian will be discussing pre-action systems primarily with the incorporation of air sampling detection in the same systems.

So come out and learn something new, meet with old friends and make some new friends in the industry!

**Cost:** \$25.00 for dinner & program

**Reservations:** By 12 noon, Friday, November 9th, 2012

### Reserve with:

Shawn Sullivan of Jacobs Engineering by E-mail:  
[Shawn.Sullivan@jacobs.com](mailto:Shawn.Sullivan@jacobs.com)

Or

Bob Moser of Jacobs Engineering by email:  
[bob.moser@jacobs.com](mailto:bob.moser@jacobs.com)  
or Fax: (610) 238-1100

## Chapter receives Gold Award!

At the annual meeting of SFPE, our chapter was awarded the Gold Chapter Excellence Award. The SFPE Board of Directors established Chapter Excellence Awards in 2005 to recognize SFPE Chapters that demonstrated excellence in contributing to the needs of their members and the Society. Three levels of recognition are awarded -- Gold, Silver and Bronze.

Our chapter has earned 4 Gold level and 3 silver level awards. This has been due in most part to the good leadership and wide range of topics that have been made available to our members each month.



### Inside this issue:

President's Spark	2
Future Cities News	3
Bill Saunder	3
New NFPA 13	4
Calendar	5
Dues Form	6
Directions to Jacob's	7

## President's Spark by Jim Davidson PE

**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](mailto: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 \$20.00 collected annually in the Fall of the Year. For an Application of Membership contact: **Bob Moser**  
Email: [Bob.Moser@jacobs.com](mailto:Bob.Moser@jacobs.com)

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

I would like to thank Bob Moser and the team at Jacob's Engineering, Shawn Sullivan and crew for hosting October's very informational presentation about NIST's Fire Dynamic Simulator (FDS) and Smokeview, a Computational Fluid Dynamics software program using Large Eddy Simulation to solve fluid flow and heat transfer equations. Bob's presentation was on "How to Assure High Integrity Output" when using this very complex program. This was the Chapter's first remote location presentation since Bob was in Puerto Rico at the time of the presentation. From my point of view this was a very successful presentation.

I was fortunate to attend the 2012 SFPE Annual Meeting, which ran from the SFPE Senate Meeting on October 13<sup>th</sup>, the SFPE Annual Meeting October 14<sup>th</sup> and 15<sup>th</sup>, and the Professional Development Week Seminars October 16<sup>th</sup> through 19<sup>th</sup>, 2012. At the SFPE Senate Meeting on Sunday I had the honor to receive the SFPE Chapter Excellence Award – Gold Level for 2012 the highest level of the award and I would like to thank the Chapter's Board of Directors and Officers who worked extremely hard in filling out the qualification evaluation material and forms. Our chapter was one of seven receiving the Gold award out of 75 chapters worldwide. As President of the Chapter, it was my honored to present the Chapter's contribution to the SFPE's Educational & Scientific Foundation. One of our local SFPE Chapter members L Jeffery Mattern, PE, FSPE sits on the SFPE's Educational & Scientific Foundation Board of Governors and is leading the Foundation's fund raising campaign. At the Awards and Honors Luncheon Jeff Mattern was presented with the National SFPE's Hat's Off Award. **Congratulations**



### Jeff from all of us.

It is with great sadness that two persons who have worked in the fire protection engineering community have passed away in the last two weeks; William "Bill" C. Sanders on Wednesday, October 11, 2012 and Joseph P. Manning Sr. on October 19, 2012. I first met Bill in the early 1980's while working on various hospital construction projects in the Mid Atlantic Region, sometimes on the opposite sides of the table. Bill always kept his client's fire protection interest as a priority, representing his clients with a high level of fire protection engineering skill, competence, and character.

I met Joe Manning when he was teaching me how to do sprinkler system hydraulic calculations on a TI hand held calculator over twenty five years ago, and again using "Hypercalc" sprinkler hydraulic calculation software. I continued to work with Joe on various sprinkler design projects over the years. Joe knew many of us in the fire protection engineering community, especially in the early days of computer based hydraulic software. Stopping by Joe's office for coffee usually resulted in meeting with someone of interest in the fire protection engineering community such as Senior Engineering Representatives of Factory Mutual Engineering Corp., Owners of sprinkler construction companies and salesman from sprinkler and device manufacturers, along with enjoying Joe's razor sharp wit.

Both Bill and Joe were an influence in the fire protection engineering community and will be deeply missed. We should honor them in our professional life by going about our everyday business with the honor and integrity they both displayed in their work.

Respectfully submitted,

*Jim*

***Fire, water, and government know nothing of mercy. ~Proverb***

## Future Cities Mentors Needed!

Mentors are needed to work with middle school teams for the Philadelphia Regional Future City Competition, an educational outreach program of National Engineers Week. It is one of 40 Regional programs conducted throughout the country with the goal to introduce middle school students to the engineering profession. Students in middle schools in the Delaware Valley form teams who work with a teacher and an engineer mentor from September to January to design and lay out a city of the future using Sim4 computer software; build a table-top model using recycled materials illustrating one section of the city; write an essay on a specific topic; present the city model to teams of judges at an all-day competition on January 26 at the Philadelphia Sheet Metal Workers Facility on Delaware Avenue. Special Awards, made possible by our sponsors, provide the students the opportunity to present their cities to more than just the competition judges and provide them with a feeling of accomplishment even if they were not a finalist in the competition. Check out [www.futurecityphilly.org](http://www.futurecityphilly.org) for more information, including volunteer and sponsorship opportunities.

## Call for Seaperch Mentors

SeaPerch is one of the STEM outreach programs sponsored by the US Navy to address the national crisis of decreasing college enrollments and careers in science and engineering. SeaPerch inspires middle and high school students through an innovative underwater robotics program that equips teachers and students with the resources they need to build and compete with an underwater Remotely Operated Vehicle (ROV). The program is an exciting hands-on, mentor-based program that builds science, engineering and technology skills. This year over 2,000 students from 100 regional middle and high schools will participate in the 8th Annual Greater Philadelphia SeaPerch Challenge held at Drexel University. We are looking for engineering professionals interested in rewarding, hand-on mentorship opportunities. By volunteering as little as four hours of your time between January and April you could make a difference with the next generation of great engineers and scientists. Want to find out how? Contact Jeffrey Merlino at 215.897.7289 or email [jeffrey.merlino@navy.mil](mailto:jeffrey.merlino@navy.mil). For more information, visit, [www.seaperch.org](http://www.seaperch.org) and [www.phillyseaperch.org](http://www.phillyseaperch.org).

**“The best portion of a good man's life is his little nameless, unencumbered acts of kindness and of love. “**

**Wordsworth**

## Bill Saunder's Obituary

William C. Saunders 72, of Glenside, PA formerly of Clarks Summit, Pa died Wednesday at home. He is survived by wife, the former Donna E. Warne. The couple celebrated their 51<sup>st</sup> wedding anniversary August 26, 2012.

He was born on April 23, 1940 in Philadelphia, and was the son of the late Charles George and Eleanor May (Kennedy) Saunders.

Bill was a 1958 graduate of Abington Heights and continued his education at Penn State University's Worthington Scranton campus.

His career was dedicated to the engineering profession having worked most recently as a fire protection and life safety engineer for Ballinger, Philadelphia, PA.

He was a dedicated member of the Clarks Summit Fire Company where he served in various positions including for many years as chief. He was instrumental in the development of the fire training school in Newton, PA and belonged to several fire protection associations. Bill supported the development of many communities in Northeastern PA serving on several planning commissions and zoning boards. He was a founding member of the Summit Wrestling Club. Bill was also a member of Ducks Unlimited, The Wetlands Institute, Stone Harbor, NJ, The Philadelphia Orchestra Association, The County Side Conservancy, La Plume, PA, and the Pinelands Preservation Alliance, NJ.

Also surviving is his daughter Rebecca and her husband Alan Scranton, a daughter Jennifer, Jessup, a son Atty. William C. Saunders Jr., Chadds Ford, grandchildren, Sarah Aleksandrowicz (Mike), Courtney Lance, Kegan Lance, Lindsey Saunders, Chelfon Saunders, Nate Williams, Bradley Saunders, Wesley Saunders, great grandchild Micayla Aleksandrowicz, aunts, nephews, and nieces. He is also survived by his brother Robert Saunders and his wife Debbie, Clarks Summit.

In lieu of flowers please send donations to the Clarks Summit Fire Company c/o the Clarks Summit Fire Company No. 1, Inc., PO Box M, Clarks Summit, PA 18411.

## Turkey Fryers



NFPA discourages the use of outdoor gas-fueled turkey fryers that immerse the turkey in hot oil. These turkey fryers use a substantial quantity of cooking oil at high temperatures, and units currently available for home use pose a significant danger that hot oil will be released at some point during the cooking process. The use of turkey fryers by consumers can lead to devastating burns, other injuries and the destruction of property. NFPA urges those who prefer fried turkey to seek out professional establishments, such as grocery stores, specialty food retailers, and restaurants for the preparation of the dish, or consider a new type of "oil-less" turkey fryer."

**"The best kind of friend is the one you could sit on a porch with, never saying a word, and walk away feeling like that was the best conversation you've had."**

*Unknown*

- Hot oil may splash or spill at any point during the cooking process, when the fryer is jarred or tipped over, the turkey is placed in the fryer or removed, or the turkey is moved from the fryer to the table. Any contact between hot oil and skin could result in serious injury. Any contact between hot oil and nonmetallic materials could lead to serious damage.
- A major spill of hot oil can occur with fryers designed for outdoor use and using a stand. These units are particularly vulnerable to upset or collapse, followed by a major spill of hot oil. Newer countertop units using a solid base appear to reduce this particular risk. NFPA does not believe that consumer education alone can make the risks of either type of turkey fryer acceptably low because of the large quantities of hot oil involved and the speed and severity of burn likely to occur with contact.
- In deep frying, oil is heated to temperatures of 350 degrees Fahrenheit or more. Cooking oil is combustible, and if it is heated beyond its cooking temperature, its vapors can ignite. This is a fire danger separate from the burn danger inherent in the hot oil. Overheating can occur if temperature controls, which are designed to shut off the fryer if the oil overheats, are defective, or if the appliance has no temperature controls.
- Propane-fired turkey fryers are designed for outdoor use, particularly for Thanksgiving, by which time both rain and snow are common in many parts of the country. If rain or snow strikes exposed hot cooking oil, the result can be a splattering of the hot oil or a conversion of the rain or snow to steam, either of which can lead to burns. Use of propane-fired turkey fryers indoors to avoid bad weather is contrary to their design and dangerous in its own right. Also, moving an operating turkey fryer indoors to escape bad weather is extremely risky. Fires have occurred when turkey fryers were used in a garage or barn or under eaves to keep the appliance out of the rain.
- The approximately 5 gallons of oil in these devices introduce an additional level of hazard to deep fryer cooking, as does the size and weight of the turkey, which must be safely lowered into and raised out of the large quantity of hot oil. Many turkeys are purchased frozen, and they may not be fully thawed when cooking begins. As with a rainy day, a defrosting turkey creates the risk of contact between hot cooking oil.
- There is a new outdoor turkey cooking appliance that does not use oil. NFPA believes these should be considered as an alternative. NFPA understands that this appliance will be listed by a recognized testing laboratory.

NFPA continues to believe that turkey fryers that use oil, as currently designed, are not suitable for acceptably safe use by even a well-informed and careful consumer. Consumers may find packaging of turkey fryers displaying independent product safety testing labels. NFPA is familiar with the details of these test standards and does not believe that they are sufficiently comprehensive regarding the different ways in which serious harm can occur, and, in some cases, regarding the different parts of the turkey fryer that need to be tested.



## NFPA 13 2013 Edition now available

The new edition of NFPA 13 is available. The changes include:

- Modified Chapter 16 and Chapter 17 combine in-rack and ceiling sprinkler requirements in the same section to streamline referencing and help you maximize your time.
- New Chapter 21 on alternative storage approaches facilitates use of performance-based design -- especially for sprinkler systems designed around a specific commodity or storage arrangement.
- New requirements concerning nonmetallic piping help contractors, owners, and manufacturers recognize and address material compatibility issues, before oversights occur.
- New provisions allowing the backflow preventer to serve as a system control valve
- Updated requirements for elevators
- The latest coverage on antifreeze, heat tracing and heat loss calculations

# November 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	ASCET Nat. Convention 8	9	10
11	12	SFPE Business Mtg 13	14	15	16	17
18	19	ASCET Berks chapter 20	ASCET Delaware chapter 21	Happy Thanks- giving 22	23	24
25	26	ASCET Phila chapter 27	28	29	30	

## Calendar Events

- Nov 8: ASCET Convention Valley Forge, PA
- Nov 13 SFPE meeting @ Jacobs Engineering. Don't forget to make your reservation by Friday Nov. 9th
- Nov 20: Berks County ASCET Chapter Meeting @ Valentino's in Kutztown 6PM
- Nov 21: Delaware ASCET Chapter Meeting @ Charcoal Pit on Kirkwood Highway in Wilmington
- Nov 22: Happy Thanksgiving
- Nov 27 Phila. ASCET Chapter Meeting @ Michael's Dinner in Bensalem

Society of Fire Protection Engineers  
Philadelphia – Delaware Valley Chapter  
**2012-2013 Dues Notice Form**

Your Name: \_\_\_\_\_

Please indicate **by an arrow** where you prefer to receive your meeting notices. It is to our advantage to use Email, if possible.

Business Name and Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Business Phone Number: \_\_\_\_\_ Business Fax Number: \_\_\_\_\_

Business Email Address: \_\_\_\_\_

Type of experience/expertise in the Industry \_\_\_\_\_

Home Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Home Phone Number: \_\_\_\_\_

Home Email Address: \_\_\_\_\_

Please indicate which Committees you would be interested in participating:

- Program       Membership       Coop. with other Societies  
 Scholarship       Education       Awards       Historian  
 Liaison with Fire Service       Constitution & By Laws  
 Nominations       Newsletter/Publicity       Finance & Budget

**SFPE National Member:** Yes or No IF yes, Membership Number & level \_\_\_\_\_

Annual Dues: \$20.00 \$15.00, if paid by October 9, 2012

(Please make your check payable to SFPE Philadelphia-Delaware Valley)

c/o Oliver Sprinkler Co.  
501 Fehleley Drive  
King of Prussia, PA 19406  
jspitz@oliversprinkler.com

## 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 pro-

Phila-Delaware Valley  
SFPE



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## Directions to Jacobs Engineering

### From Central Philadelphia:

Follow the Schuylkill Expressway (I-76) west to Exit 29 (Conshohocken). Stay in the center lane. At the traffic light, go straight and cross the Fayette Street Bridge. **At the next traffic light, turn right onto Elm Street. Go two blocks and turn right onto Ash Street. Three Tower Bridge is 1/8 mile on your right at the end of the street.**

### From Philadelphia International Airport and points south:

North on I-95 to Exit 7. Follow I-476 North (toward Plymouth Meeting) to Exit 16. Follow signs for Route 23 Conshohocken. At the traffic light at the end of the off-ramp, turn right. Continue down road merging into the center lane. At the traffic light, go straight and cross the Fayette Street Bridge. Continue from bold text above.

### From Allentown and points north:

Take the Northeast Extension of the PA Turnpike south to Exit 25A (Mid-County Interchange). Follow signs to I-476 South. Continue to Exit 16 (Valley Forge). On the off-ramp, follow signs to Route 23 Conshohocken. At the traffic light at the end of the off-ramp, turn right. Continue down road merging into the center lane. At the traffic light, go straight and cross the Fayette Street Bridge. Continue from bold text above.

### From New York and Northern New Jersey:

Take the New Jersey Turnpike south to exit 6 (PA Turnpike). Take PA Turnpike west to exit 25A (Mid-County Interchange). Follow signs to I-476 South. Continue to Exit 16 (Valley Forge). On the off-ramp, follow signs to Route 23 Conshohocken. At the traffic light at the end of the off-ramp, turn right. Continue down road merging into the center lane. Continue from bold text above.

### From points west:

On the PA Turnpike, Take exit 24 (King of Prussia). Follow signs for I-76 east (toward Philadelphia). Take exit 28B (Plymouth Meeting). Follow signs for Route 23 Conshohocken. Continue from bold text above.

### Jacobs Engineering Group, Inc.

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