

# Flashpoint

Philadelphia-Delaware Valley Chapter  
Society of Fire Protection Engineers

VOLUME 16 ISSUE 7

February 2013

## Phila-Delaware Valley SFPE

### February Meeting Information

**Date:** Tuesday February 12, 2013

**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:**

Brandon Telford of Tyco Fire & Building Products will do a presentation on Alternate Storage Protection.

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

**Reservations:** By 12 noon, Friday, February 8, 2013

**Reserve with:** Shawn Sullivan of Jacobs Engineering by E-mail:  
Shawn.Sullivan@jacobs.com  
Or Bob Moser of Jacobs Engineering by email:  
Bob.moser@jacobs.com

#### Special points of interest:

- Our website, [www.sfpephiladelphia.org](http://www.sfpephiladelphia.org) is linked at the SFPE national website.
- Check out the history article on page 4.
- See the picture on page 5 and tell us what's wrong.

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### SFPE Alliance of Young Engineers

The Society of Fire Protection Engineers Alliance of Young Engineers is pleased to announce a new tiered mentoring program. The goal of this program is to give young engineers a one-on-one relationship with another member of the SFPE community who can offer some insight. Mentors and mentees will be matched based on experience level, geographic location, and each other's goals for the program. The subjects discussed are up to the match, but can range from technical subjects to overall career advice. This program is a great opportunity to give back to the industry. AYE is currently accepting applications for both mentors and mentees, [click here](#) or visit our webpage to download an application.

The SFPE Alliance of Young Engineers was established to provide Fire Protection Engineers under the age of 35 a forum to seek information, share experiences, and further their professional development. AYE is open to young engineers throughout the world who are in the early stages of their career or considering a career in fire protection engineering. Even in its early stages, AYE consists of members working in various types of positions within the industry, located throughout the country. As the organization grows, this reach will extend, offering members additional resources.

Visit <http://www.SFPE.org/AYE> or contact Jonathan Levin at [Jonathan.Levin@LibertyMutual.com](mailto:Jonathan.Levin@LibertyMutual.com) for more information.

## President's Spark by Jim Davidson P.E.

A belated Season's Greetings and a Happy New Year to all.

Well the brutal 2012 is history and we look forward toward 2013. It has been a challenging past three years for our industry and most of the ancillary industries that support us.

I would like to thank our chapter's Mike Venneri of M. C. Dean, Inc. for the good January program on Mass Notification Systems.

I would like for everyone to take a moment to reflect on those who are important to us and offer our prayers, condolence and sympathy to our past chapter President, Bob Foraker on his family's sudden loss.

At this time I would like to wish everyone and their families a safe, healthy and prosperous 2013 New Year.

On January 18, 2013 I attended the Delaware Technical Community College's Fire Protection Engineering Technology Advisory Committee Mtg., Our Chapter of the SFPE was well represented, and approximately half of the advisory committee members are members of our local SFPE chapter. The fire protection engineering technology has been moved into the Public Safety Department Curriculum for administrative purposes. The advisory committee is looking at ways to increase enrollment in the FPE Tech program. If any one would like to assist please contact myself ([jdavidson@davidsonassociates.net](mailto:jdavidson@davidsonassociates.net)) or Phil Sconyo ([phiscon@snip.net](mailto:phiscon@snip.net)).

I hope to see you all at our February 12, 2012 mtg at Jacobs Engineering office.

Have a fire safe New Year!!

A house is not a home unless it contains food and fire for the mind as well as the body.

[Benjamin Franklin](#)

Respectfully,  
Jim

## Future Cities Competition

The winner of the SFPE award at the competition this year is the Saint Ignatius School from Yardley, PA. The Triad award was given to the Upper Merion Middle School of King of Prussia, PA. The NFSA award was given to the G.A. Stetson Middle School of West Chester, PA. The John & Sally Kampmeyer Award was given to the Pottsgrove Middle School of Pottstown, PA. The winning school was Queen of Angels Regional Catholic School of Willow grove, PA.

A big thank you to Phil Gaughan and Rick Coppola from SFPE and Rob Spitz and Steve Coulton from the Phila Chapter of ASCET; for judging the Fire Protection Awards.



St. Ignatius School team

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)

Visit our web site at: [www.sfpephiladelphia.org](http://www.sfpephiladelphia.org)

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

"Kind words can be short and easy to speak, but their echoes are truly endless."

Mother Teresa

## Engineer's Club Of Philadelphia Spring Education Courses

The Engineer's Club has issued the list of courses available this spring. Check out this list:

Click the section heading or course title for more course and registration information.

Please note that the Geology courses begin January 23, with advance reservations ending Wednesday, January 16.

### Construction

**CO-1: 2009 International Building Code** (25 PDH)

**Class Dates:** Starts **Tuesday, March 19**, 10 weeks (ending Tuesday, May 21), 6:00 pm - 8:30 pm

**CO-2: Construction Cost Estimating** (10 PDH)

**Class Dates:** Starts **Tuesday, April 16**, 4 weeks (ending Tuesday, May 7), 6:00 pm - 8:30 pm

**CO-3: Construction Project Management** (16 PDH)

**Class Dates:** Starts **Wednesday, March 20**, 8 weeks (ending Wednesday, May 8), 6:00 pm - 8:00 pm

### Electrical

**EL-4: Photovoltaic Systems Installation** (16 PDH)

**Class Dates:** Starts **Thursday, March 21**, 8 weeks (ending Thursday, May 9), 6:30 pm - 8:30 pm

### Fire Protection

**FP-1: Sprinkler Systems Basics** (25 PDH)

**Class Dates:** Starts **Wednesday, March 20**, 10 weeks (ending Wednesday, May 22), 7:00 pm - 9:00 pm

### Geology

**GEO1: Geology in Pennsylvania - Basic Concepts and Terminology with a Geologic Perspective on Sustainability** (3 PDH)

**Class Dates:** Starts **Wednesday, January 23**, 8:30 am to 11:30 am

**GEO2: Applied Geology and Earth Science** (3 PDH)

**Class Dates:** Starts **Wednesday, January 30**, 8:30 am to 11:30 am

**GEO3: Applied Soil Science** (3 PDH)

**Class Dates:** Starts **Wednesday, February 6**, 8:30 am to 11:30 am

### Mechanical

**ME-2: Heating and Ventilation** (20 PDH)

**Class Dates:** Starts **Thursday, March 7**, 10 weeks (ending Thursday, May 9), 6:00 pm - 8:00 pm

**ME-3 Air Conditioning for Designers**

**Class Dates:** Starts **Tuesday, March 18**, 10 weeks (ending Tuesday, May 20), 7:00 pm - 9:00 pm

*"Success consists of going from failure to failure without loss of enthusiasm."*  
**Winston Churchill**

## SFPE Educational and Scientific Foundation Message

Here we are in 2013! As for the Education and Scientific Foundation funding raising effort, we are better off than we were in 2012. We have secured the Guylene Proulx Scholarship Fund though we are still working to grow it. We have also embarked on our first capital funds campaign with reasonably good success.

These campaigns take time to develop but only you can make them successful. There are several ways you can help:

1. When you renew your membership add in on the donation line your personal preference dollar amount - may I suggest \$25. If every member did this we would have an immediate general fund growth of \$10,000.
2. Check with your employer to see if they will match your donation giving the Foundation twice the bang for the buck.

3. Create a legacy clause in your estate plan that includes the Foundation as recipient of the charitable portion of your charitable giving.
4. For corporate members, establish a fund within the Foundation to promote a special interest such as a scholarship, special interest research or other areas which interest you or benefit your segment or the fire protection community.

I will be talking with you in the upcoming month about the Foundation and what we all can do to benefit the profession. If you have suggestions or comments please feel free to contact me at <mailto:ljslm221@hotmail.com>. Thanks for taking the time to read my thoughts on fund raising!

Jeff Mattern

## Water Main In-Line Strainers

Where fire protection systems such as sprinklers or water spray take their supplies from static or otherwise open sources (such as penstocks, flumes, rivers, lakes or reservoirs), the intake should be protected by some sort of filtration system. Filtering means can be provided with an approved, double, removable screen or an approved strainer, as shown in the illustration, known as a “Y” strainer. The strainer is the large “can-like” assembly at the left of the picture.

Like many attachments, strainers can affect the incoming water pressure, and their influence should be considered in the fire protection systems’ hydraulic calculations. The amount of pressure lost is determined by the size of the strainer; the values can be obtained from the product manufacturer. One manufacturer’s product includes the following pressure-drop values for its various size strainer assemblies.

Strainer Size		Pressure Drop	
Inches	mm	Psi	Bar
3	76.2	3.27	0.225
4	102	3.18	0.219
6	152	3.59	0.246
8	203	3.08	0.212
10	254	3.29	0.226
12	305	2.79	0.192



\*Based on flow rates of 15 feet (5m) per second.

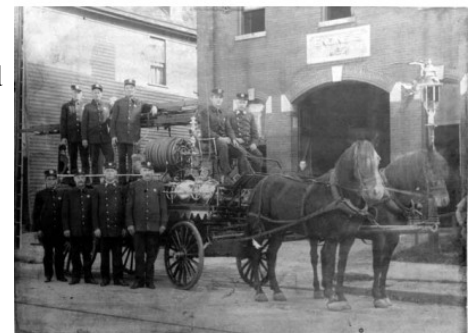
Another important consideration is the proper installation of the strainer assembly. In the illustration, the strainer orientation is correct (removable cover at the bottom). The ductile iron pipe at the lower right of the picture is the intake from a storage pond, and water is drawn from the pond through the strainer before reaching the fire pump assembly. A review of the manufacturer’s installation instructions show that the flow direction should be from the top through the strainer intake in this orientation. The manufacturer also permits a horizontal installation with the removable cover nearest the floor. The strainer housing is marked with an arrow to show the correct direction of flow. (See Coffee Break Training FP2012-33 for a discussion on directional arrows for valves and 2007-17 for the importance of straight pipe installations upstream of a pump intake.)

From Coffee breaks at the United States Fire Administration website: [www.usfa.fema.gov/nfa/coffee-break/](http://www.usfa.fema.gov/nfa/coffee-break/)

## Firefighting History

In the days of horse drawn fire apparatus it was necessary to wipe, dry or wash the horses after a “Run”. They also needed to be watered, fed, their stalls cleaned and they needed constant exercise. Firefighters who took care of the horses were distinguishable by their odor. “Run” is a term that is still used by the fire service to describe their response to a fire.

“On returning from an alarm, horses' mouths and nostrils must be sponged out, and may be given a few swallows of water, and, if warm, must be scraped, rubbed dry, and blanketed. Sweat should be removed from around the eyes and under the tail with a damp sponge. Horses must never be given grain while hot after a run or exercise.” LA Fire Dept. Rule book.



# February 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6 ASCET SJ chapter Mtg	7	8	9
10	11	12 SFPE Mtg.6 PM	13 ASCET Delaware chapter Mtg	14 <b>Happy Valentines Day!</b>	15	16
17	18	19	20 ASCET Berks chap- ter Mtg	21	22	23
24	25	26 ASCET Phila chapter	27	28		

## February Meetings and Events

- February 6: New Jersey ASCET Chapter at the Collins House in Collingswood, NJ
- February 12: SFPE @ Jacobs Engineering
- February 13: Delaware ASCET Chapter @ Charcoal Pit on Kirkwood Highway in Wilmington
- February 20: Berks ASCET Mtg. Kutztown, PA
- February 26: Phila. ASCET Chapter @ Michael's restaurant Bensalem, PA



### ***What's wrong with this picture?***

If you have a picture that you would like to share, send it to [info@sfpephiladelphia.org](mailto:info@sfpephiladelphia.org) and we will try to publish them from time to time.

## Free Webinar on Designing and Deploying ASD

A free webcast presented by *The Society of Fire Protection Engineers*

**Wednesday, February 27 @ 2:00 PM, U.S. Eastern Time**

This one hour webinar will provide design and installation recommendations for the deployment of Aspirated Smoke Detection (ASD) systems in harsh environments. A description of the required testing and maintenance to ensure successful long-term operation will also be discussed. The Society of Fire Protection Engineers will provide attendees 0.1 CEUs for participating in the entire LIVE webinar. Current SFPE members will receive CEUs free of charge. Non-members will have the opportunity to purchase the CEUs for \$25.00 following the live event. For more information or to register, see [Free Webinar](#).





## Phila-Delaware Valley SFPE

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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.

## 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.

**Three Tower Bridge, Two Ash Street – Suite 3000  
Conshohocken, PA 19482-2074**