President’s Message...

I think our January meeting was great and look forward to this coming February's meeting. Everywhere I look I see Solar Cells, on building roof tops, in fields and on my train commute I see a gigantic array on a land fill. It appears that they are harvesting solar energy as well as methane gas. Some wonderful combination, two renewable energy sources! At our February meeting the discussion will be on the ‘Hazards of Solar Panels’. As engineers it appears our part in this may only be code compliant installations and roof / wind loading, however, many of our members are first responders and there is a great danger to their safety. This year NJ is the leading state in the amount of Solar Panel installations.

Rich Reitberger and I have lined up a great team of presenters to get everyone caught up on a new NFPA Guide and Standards that have been modified. Our speakers come from as far away as Carmel by the Sea, CA, Boston and Florida. All are experts in their fields. There is a registration form in our newsletter or you can get one from our website. I hope we get a good turnout for the Symposium this year, it seems to be growing by leaps and bounds each year and we hope to possibly make it two days in the future. This year we have a great selection of vendors who will be on hand to show their new innovations in detection, notification and suppression as well as related industries such as fire stopping. Our vendors help keep the cost of attendee registration down. We have kept the same rate for the past three years.

Our Sister Chapter in NY City is having their Technical Seminar on Tuesday February 28th in Brooklyn at the FDNY Headquarters Metro Tech Center. They have an excellent list of speakers for the day. Members in good standing of the NJSFPE will be given member rates for the NY Metro seminar, a nice savings that makes the day affordable. Paying by February 17th saves you a surcharge as well. See enclosed registration flyer.

In February the NY Metro SFPE holds their seminar day, April we hold our joint NJSFPE/AFAANJ Symposium, June is the NFPA Conference & Expo, March NFPA will be hosting The Fire Protection Research Foundation's 'SUPDET 2012' suppression and detection conference, our Sister Chapter in Atlanta will be hosting their two day event in March as well. March also brings NFPA®’s 2012 National Trends in the Delivery of Health and Long-Term Care: Implications for Safety Codes and Standards Summit! At the 2012 SFPE Annual Meeting: The Professional Development Conference and Exposition will be later in the year in October.

There are numerous ways to keep yourself on top of industry changes and trends as well as code and standard updates. As Engineers it is our duty to never stop learning. I hope to see a great turnout for the February 6th Meeting.

See you there,

Ed Armm
Chapter President
President Armm convened the meeting at 6:00 PM with a salute to the flag and customary introductions.

Treasurer’s report for December 5, 2011 and January 9, 2012 meetings were read and accepted.

The Secretary’s report for the December 5, 2011 meeting was discussed and accepted by the members.

Ed Armm thanked Paul McGrath for sponsoring the recent Fire Facts Seminar at Seton Hall and Princeton Universities.

SFPE International has put out an on line PE test course for this summer with a cost of $1,300 for members and $1,500 for non-members. Rich Reitberger to see if we can get a group rate and if members want to participate. The classes can be taken at FM Global.

The Golf Outing will be June 18, 2012 at West Point with the proceeds to benefit the scholarship fund. Our annual seminar is in process of being developed and will be held on April 20, 2012.

Our May 7 speaker will be Todd Shearer from Simplex Grinnell regarding mass notification.

The NY Metropolitan Chapter is holding a technical seminar on February 28 titled “New Technology in Fire Protection.” The cost is $100 for NY and NJ Chapter members.

Our technical presentation was titled, “Building a Standard to Protect Liquids That Burn.” Our speaker was John LeBlanc from FM Global. His program included the following subjects:

- The scope of his presentation was to discuss the thought process to building the new FM standards, what is a flammable liquid, the hazards associated with them, big picture protection and specific protection programs.
- There are many different definition of a flammable liquid. The new standards are based on the premise that ignitable liquids = liquids that burn.
- The primary characteristics used for the new standards are liquids that have a flash point less than 200°F, have a flash point greater than 200°F, are water miscible and have a specific gravity greater than one.
- Various fire tests were show demonstrating that the hazards associated with ignitable liquids including a pool potential, spill potential and jet potential.
- No more gaseous systems will be recommended for ignitable liquid protection and dry chemical systems are not recommended.
- Even though sprinklers and special protection systems may provide cooling and extinguishment the key component is to shut off the flow of the liquid.
- New data sheets are expected to be released to the public the second week in February.

The meeting was adjourned at 8:30 PM.

The Passing of a Long Time SFPE Chapter Member - Bob Parvin

We just learned that Bob Parvin died on October 24, 2011 Bob was a long time employee of Philadelphia Manufacturer’s Insurance Company, one of the precursor insurance companies of what is now FM Global. He was a long time member, if not one of the founding members, of the NJ Chapter. Up until a couple of years ago even though retired, he still attended a number of our Chapter monthly meetings. He helped train many of us, both current and former FM’ers. The following is part of his obituary

Robert G. Parvin, 80, passed away on Oct. 24, 2011, at the Center for Hope Hospice, Scotch Plains, N.J. Funeral services will be held at Temple of Israel Mausoleum at Beth Israel Cemetery, Route 1 North, Woodbridge, N.J., on Thursday, Oct. 27, 2011, at 11 a.m. Funeral arrangements have been entrusted to the Goldstein Funeral Chapel, Inc., Edison, N.J. Mr. Parvin was born in Orange, N.J., and lived in East Orange, N.J., and Union, N.J. and before moving to Edison, N.J. He graduated from Upsala College and served in the Air Force in the Korean War. After 42 years of service, he retired from FM Global, where he was employed as a fire protection engineer. Mr. Parvin is survived by his loving wife of 55 years, Carol (nee Jaffe); their daughters, Lisa Parvin, and Cheryl Ciccone and her husband, Nick, and their son, Steve Parvin and his wife, Susan. He also leaves behind to cherish his memory three grandchildren, Carly, Eric and Jack. In lieu of flowers, memorial contributions may be made to a charity of your choice.

A.L.L:

It is time for our Annual Spring Technical Seminar. Your Seminar Committee (SFPE/AFAA) has put together a great technical program this year which will help you keep current and updated on select code and standard changes. To do this, we have gathered a knowledgeable group of subject matter experts that will present on the topics you need to know. In addition, at our vendor show, you can view many of the latest products in the fire detection and protection fields. You do not want to miss out on this timely and informative event.

JMCC

John M. Cholin P.E., FSFPE, M.E.E.

J.M. Cholin Consultants, Inc.
Fire Protection Engineering and Consulting Services
101 Roosevelt Drive, Oakland NJ 07436 USA
Telephone: 201-337-8621  Fax: 201-337-5603
jmc@jmccholinconsultants.com ♦ www.jmccholinconsultants.com
NJSFPE & AFAANJ Spring Seminar
Ramada Plaza (formally the Holiday Inn)
160 Frontage Road
Newark, NJ 07114
973-589-1000

Fire Safety in the New Decade and Beyond
Friday April 20, 2012

Continental Breakfast sponsored by the Vendors 7:30 – 8:30am

NFPA 3 the New Guide to Commissioning 8:30 – 10:00am
Rodger Reiwsig, SET of SimplexGrinnell

Coffee Break sponsored by the Vendors 10:00 – 10:30am

New Challenges in Fire Alarm Communications 10:30 –12:00
Art Black, Principal Carmel Fire Protection Associates

Lunch with the Vendors 12:00 – 1:30pm

<table>
<thead>
<tr>
<th>Afternoon A-1 1:30-3:00pm</th>
<th>Afternoon B-1 1:30-3:00pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>An update of NFPA 30 and the FM Data Sheet Flammable/Ignitable liquids</td>
<td>NFPA 99/101 Health Care Occupancies</td>
</tr>
<tr>
<td>John LeBlanc, P.E., FSFPE FM Global</td>
<td>Mike Crowley, P.E., FSFPE Rolf Jensen &amp; Associates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Afternoon A-2 3:00- 4:30pm</th>
<th>Afternoon B-2 3:00-4:30pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection/Life Safety Code Compliance for Laboratory Facilities</td>
<td>Meeting the Voice Intelligibility Requirements of NFPA 72</td>
</tr>
<tr>
<td>Jonathan M. Eisenberg, P.E. Rolf Jensen &amp; Associates</td>
<td>Ray Grill, P.E., FSFPE Principal Arup Fire</td>
</tr>
</tbody>
</table>

Note: YOU CAN ATTEND EITHER “A” or “B” SESSIONS IN THE AFTERNOON
REGISTRATION FORM

NJSFPE & AFAANJ Spring Seminar
Ramada Plaza (formally the Holiday Inn)
160 Frontage Road
Newark, NJ 07114
973-589-1000

Fire Safety in the New Decade and Beyond
Friday April 20, 2012

Price for the Seminar is $100
(Make checks payable to “NJ Chapter SFPE”)

Name__________________________________________________________

Company____________________________________________________________________________________

Address _________________________________________Phone No._____________________________________

City____________________________________________State__________Zip_____________________________

E-mail address________________________________________________________________________________

Amount Enclosed $_______________________________

Mail to: NJSFPE Spring Seminar 2012
c/o Vicki Serafin
P.O. Box 8268
Parsippany, NJ 07054

Also you can register on-line at: www.NJSFPE.org
Questions or to reserve your seat in advance, please call Vicki Serafin at 973-541-6771
Directions to the Ramada Plaza, Newark Liberty Airport are attached.
Course CEUs will be awarded for those who attend (0.6 CEU/6.0 contact hours).
Directions

From North
Take Route 1 or 9 South and watch for Airport sign. Take Frontage Road at immediate right.
From New Jersey Turnpike take Exit 14. After the toll plaza make the 2nd right - see sign marked Frontage Road.

From West
From I-78 East, take Exit 58-B Frontage Road Exit. Stay on Frontage Road, and the hotel will be on the right.

From South
From Route 1 or 9 North, exit Frontage Road and follow ramp to hotel.

Ramada Plaza (formally the Holiday Inn)
Newark Liberty Airport
160 Frontage Road
Newark, NJ 07114
973-589-1000
2012 NYC SFPE TECHNICAL SEMINAR

Presented by the NY Metropolitan Chapter of the SFPE


SPEAKERS

Milosh Puchovsky, PE, FSFPE
Professor of Practice, Fire Protection Engineering- Worcester Polytechnic Institute
Kevin McGrattan, Ph.D.
National Institute of Standards and Technology
James A. Milke, PE, FSFPE, Ph.D.
Professor and Chair, Fire Protection Engineering - University of Maryland
Gary Wiederhorn
ISP Fuel Systems
Thomas Fletcher
Hilti Corporation
# 2012 NYC SFPE Technical Seminar

## Agenda

- **Continental Breakfast & On Site Registration** – 8:00 AM  
- **Welcome & Introduction** – 8:30 AM  

<table>
<thead>
<tr>
<th>Morning Session 1 – 8:45 AM</th>
<th>Afternoon Session 1 – 1:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Options for Fire Pump Installations</td>
<td>Fuel Storage Requirements</td>
</tr>
<tr>
<td>Milosh Puchovsky, PE, FSFPE</td>
<td>Gary Wiederhorn</td>
</tr>
<tr>
<td>Morning Session 2 – 10:00 AM</td>
<td>Afternoon Session 2 – 2:15 PM</td>
</tr>
<tr>
<td>Current Activities in Fire Modeling</td>
<td>Building Firestopping Options</td>
</tr>
<tr>
<td>Kevin McGrattan, Ph.D</td>
<td>Thomas Fletcher</td>
</tr>
<tr>
<td>Morning Session 3 – 11:15 AM</td>
<td>Afternoon Session 3 – 3:30 PM</td>
</tr>
<tr>
<td>Smoke Control: Recent Progress and Areas for Improvements</td>
<td>Additional speaker to be confirmed.</td>
</tr>
<tr>
<td>James Milke PE, Ph.D</td>
<td></td>
</tr>
<tr>
<td>Lunch - 12:15 AM – 1:00 PM</td>
<td>Conclusion - 4:30 PM</td>
</tr>
</tbody>
</table>

**IMPORTANT:** Seminar attendees will be eligible for up to Six (6) continuing education PDH hours toward New York and New Jersey Professional Engineering licensure for those present during all presentations.  
**NOTE:** All proceeds will go to a charity involved in work supporting the Fire Protection Community.

SFPE - NY Metropolitan Chapter
2012 NYC SFPE TECHNICAL SEMINAR

Cost: $100 for Members $175 for Non-Members
$25 cost increase after February 17, 2012

Location: FDNY Campus 1st Floor Auditorium
9 Metro Tech Center, Brooklyn, NY 11201

Date: February 28, 2012

Time: 8:00 AM – 4:30 PM

REGISTRATION FORM

Name: ________________________________
Address: ______________________________
City: ____________ State: _______ Zip: ________
Email Address: __________________________
Amount Enclosed $________

Note: Limited Seating Available.

MAIL FORM INCLUDING PAYMENT TO:
Victoria Valentine
National Fire Sprinkler Association
40 Jon Barrett Road
Patterson, NY 12563

Questions? Email Us.
sfpenymetro@gmail.com
www.sfpemetrony.org

SFPE - NY Metropolitan Chapter
When fire sprinkler systems are designed for storage applications, details on the eventual storage configuration are significant. Is the commodity stored on pallets, shelves, or racks? Is it banded or encapsulated? What is the commodity classification? (See Coffee Break Training 2010-6 for a description of encapsulation and 2009-33 for a description of commodities.)

Despite the fact that most people use the terms “storage racks” and “storage shelves” interchangeably, in fire protection there is a significant difference.

Accurate definitions are important because they provide the guidance for how sprinkler protection is provided. The descriptions affect such design details as sprinkler spacing, placement, and application densities.

The following table provides “shelf” definitions from National Fire Protection Association (NFPA) 13, Standard for the Installation of Sprinkler Systems:

<table>
<thead>
<tr>
<th>Shelf Storage</th>
<th>Storage on structures up to and including 30-inches (0.76 m) deep and separated by aisles at least 30-inches wide.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back-to-Back</td>
<td>Two solid or perforated shelves up to 30 inches in depth each, not exceeding a total depth of 60 inches (1.52 m), separated by a longitudinal vertical barrier such as plywood, particleboard, sheet metal, or equivalent, with a maximum 0.25-inch (6.4 mm) diameter penetrations and no longitudinal flue space, and a maximum storage height of 15 ft (4.57 m).</td>
</tr>
</tbody>
</table>

Storage on structures that exceed these dimensions and descriptions is generally considered to be on “racks,” which will be covered in next week’s Coffee Break Training.
MEETING NOTICE

Date: February 6, 2012

Place: Hanover Manor
16 Eagle Rock Avenue
East Hanover, NJ 07936

Price: $30.00

Dinner: 5:00-6:00 (Cash bar for mixed drinks)
Dinner at 6 PM


Speaker: Bob Murray, Associated Consulting Engineers

Please note for this meeting:
All officers, directors and committee chairman are requested to attend a meeting at 4:00 p.m. at the Hanover Manor.

PLEASE COMPLETE AND RETURN WITH YOUR CHECK PAYABLE TO “SFPE NJ CHAPTER” TO:

Vicki Serafin
Affiliated FM
400 Interpace Parkway, Bldg C - 3rd Floor
Parsippany, NJ 07054-1196
vicki.serafin@affiliatedfm.com

OR PAY AT THE DOOR

NAME: ________________________________________________

COMPANY: __________________________ TELEPHONE: ____________________
Dust Hazards and Explosions

Based on the excellent synopsis that John Cholin gave during the technical session of our December meeting on Dust, The CSB (Chemical Safety Board) has developed an excellent 14-minute video that both simulates the three separate explosions at the Hoehanaes plant as well as the recent history of revising standards relative to dust. This video is a must see. It’s hard to believe that there is this type of facility operating in this country. It is enlightening viewing to say the least. I viewed the YouTube link that worked great.

CSB Releases New Safety Video on Three Accidents that Occurred in the Past Year Involving Flash Fires at Hoeganaes Corp. in Gallatin, Tennessee, Killing Five

“Iron in the Fire” Features Animations, Key Findings, and CSB Recommendations Aimed at Dust Hazards

Washington DC, January 5, 2012 – The U.S. Chemical Safety Board (CSB) today released a new safety video depicting three accidents involving combustible iron dust at the Hoeganaes Corporation in Gallatin, Tennessee. The video, entitled “Iron in the Fire,” features three computer animations showing how fine metal particles were lofted and ignited in two incidents, and how a hydrogen explosion and subsequent flash fires caused by lofted metal dust killed a total of five workers and injured three others.

In the video, CSB Chairperson Rafael Moure-Eraso notes that “Combustible dust is a serious workplace hazard across the country. Since the Chemical Safety Board was established in 1998, three of the deadliest accidents we have investigated have been combustible dust explosions.” The chairman said he hopes the video will drive home the point that dust fires and explosions continue to claim lives and destroy property in many industries. “More must be done to control this hazard,” Dr. Moure-Eraso says, adding “No more lives should be lost from these preventable accidents.”

“Iron in the Fire” begins with a poignant remark by Christina Sherburne, wife of one of the workers killed at Hoeganaes, who spoke at a CSB public meeting on the investigation. Referring to her son and the aftermath of the accident that fatally injured her husband, Wiley Sherburne, she says, “Everything was changed that morning. And when Cody and I got to the hospital the first thing the doctors told us walking in the door was he was burned 95% of his body, and ‘we don’t think he’s going to make it.’ There’s nothing you can say to that.”

The 14-minute video shows that after the first flash fire on January 31, 2011, which killed two workers, the CSB launched an investigation, discovering large quantities of the combustible metal dust on elevated surfaces, equipment, and floors in many working areas of the plant. Then on March 29, another flash fire occurred, seriously injuring a worker. Investigators then collected iron dust samples and had them tested.

At a news conference in Tennessee on May 11, the CSB released laboratory test results demonstrating the combustibility of even small amounts of the iron dust when dispersed in air in the presence of an ignition source. But as the video notes, despite the CSB evidence, and the company’s own test results done previously, the company did not institute adequate dust control measures or after-the-fact housekeeping cleanup measures.

The video depicts the scene just sixteen days after the CSB released its test results – on May 27th — when a hydrogen explosion erupted in the plant, after the gas began leaking from a corroded furnace pipe. The blast shook loose iron dust accumulations from the upper reaches of the building which ignited and rained down on workers. The explosion and ensuing fire killed three and injured two others. The video reports that the CSB investigators found the company did not require atmospheric testing for hydrogen or other explosive gases.

CSB Lead Investigator Johnnie Banks says in the video, “It is a tragedy that five lives were lost at Hoeganaes from these accidents. The CSB believes that adhering to recommended industry practices will greatly reduce the potential of a future dust fire or explosion.”

The video is available to stream or download on CSB.gov and may be viewed on the CSB’s YouTube channel, USCSB (www.youtube.com/uscsb).

“Iron in the Fire” is the 28th safety video produced by the CSB. All are based on actual CSB investigation findings, determinations of root causes, and safety recommendations. The CSB has distributed free of charge to stakeholders over 100,000 DVD’s, and online downloads and streams of the videos on CSB.gov and on YouTube.com/USCSB total well over one million.
# Meeting Dates/Programs 2011-2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 6</td>
<td>Hazards of Solar Panel Installations—Fire, Wind, Live Loading, Personnel—Bob Murray, Associated Consulting Engineers</td>
</tr>
<tr>
<td>March 5</td>
<td>A Forensic Review of Sprinkler System Failures—Top Myers of RelMark Group</td>
</tr>
<tr>
<td>April 20</td>
<td>3rd Annual NJSFPE/AFAANJ Symposium and Trade Show a full day of presentations and vendors. CEU's to be had.</td>
</tr>
<tr>
<td>May 7</td>
<td>Mass Notification—Todd Shearer, Simplex Grinnell</td>
</tr>
<tr>
<td>June 4</td>
<td>Annual Meeting/Tyco trailer/Preaction Testing</td>
</tr>
<tr>
<td>June 18</td>
<td>Golf Outing—West Point  Big fund raiser for the joint NY &amp; NJ Scholarship.</td>
</tr>
</tbody>
</table>
HELPFUL LINKS

ADAAG http://www.access-board.gov/adaag/about/index.htm
AFAA National http://www.affiliated.org/
AFSA http://www.firesprinkler.org/
ANSI http://web.ansi.org/
ASHRAE http://www.ashrae.org/
Campus-Firewatch http://www.campus-firewatch.com/
Coffee Break Training http://www.usfa.dhs.gov/nfa/coffee-break/
CPSC http://www.cpsc.gov/
CSAA http://www.csaa.org/

Municipal Codes (E Codes) http://www.generalcode.com/Webcode2.html
FM Global http://www.fmglobal.com/
FSDANY http://www.fsdany.org/regs.htm
FSI http://www.firesprinklerinitiative.org/
FSSA http://www.fssa.net/
Fire Tech Productions—Nicet Training (FTP) http://www.firetech.com/
Home Fire Sprklr Coalition http://www.homefiresprinkler.com/
AFAA-NJ http://www.afaanj.org/
National of Fire Equipment Distributors (NAFED) - http://www.nafed.org/index.cfm

ADVERTISE IN THE FUSIBLE LINK

Do you want your business to be known by over 125 professionals in the local Fire Protection industry? Advertise in the Fusible Link. $100 per chapter fiscal year. Contact Vicki Serafin for more info: Vicki.serafin@affiliated.fm.com