Society of Fire Protection Engineers
New Jersey Chapter

**Fusible Link**

**December 2014**

**President’s Message...**

Thanks to Jeremy Lebowitz, P.E. at Rolf Jensen & Associates who spoke to us on Nov 3 about Fire Protection/Life Safety Approaches for Laboratories facilities. There is a lot to be considered in keeping these complex occupancies protected.

With the new session of the legislature in Trenton there is renewed effort on the residential sprinkler bill. Keep an eye out and please help support it however you can.

Fire protection week has passed us by. If you haven’t yet, remember to change the batteries on your smoke and CO detectors and clean the lint out of your dryer vents.

Our speaker on December 8 (the SECOND Monday in December because of Thanksgiving) has an important discussion following the 30th anniversary of the haunted castle fire, one of the first of too many multiple loss of life fires influenced by plastics in construction. As fire protection advocates we should all be aware of this historic tragedy which happened in our own state and during the lifetimes of some of us.

Have a safe and happy Thanksgiving. I hope to see you on December 8th for our holiday dinner meeting.

*Joe Janiga*

President, NJ Chapter SFPE
President Joe Janiga convened the meeting at 6:03 PM at the Hanover Manor, E. Hanover, NJ with a salute to the flag and the customary introductions. There were 25 attendees including the speaker.

The minutes from the September 8, 2014 meeting were approved as read by Michael Newman, Chapter Secretary.

The Revised Treasurer’s Report for August, 2014 (dated 11/3/14) was approved as presented by Chris Vitale, Assistant Treasurer. The Treasurer’s Report for Sept/Oct, 2014 (dated 11/3/14) was approved as presented by Chris Vitale.

Joe Janiga gave an update on NJ activities at the SFPE Annual Meeting:

- The NJ Chapter donated $1,000 to the Educational and Scientific Foundation.
- SFPE National is changing the society name, goals and vision to more closely reflect the fact that the society includes many protection professionals and not just fire protection.
- A Silver Chapter Excellence Award was presented to the NJ Chapter.
- Workshops are planned for chapter officers at the 2015 Annual Meeting in Philadelphia.

Dave Kurasz updated the Board on upcoming legislation in the NJ Legislature.

The speaker at this meeting was Jeremy Lebowitz of Rolf Jensen & Associates who spoke on Fire Protection/Life Safety Approaches for Laboratory Facilities.

The meeting was adjourned at 7:35 PM.

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**Large Water Mist Installation - HI-FOG Selected to Safeguard Europe’s Largest Wooden Apartment Building**

HI-FOG by Marioff has been selected by Rakennusliike Reponen to protect Europe’s largest, multi-story wooden residential building, which is being built for the 2015 Vantaa Housing Fair. Marioff, the world’s largest supplier of water mist fire protection technology and supplier of system solutions worldwide under the brand HI-FOG, is a part of UTC Building & Industrial Systems, a unit of United Technologies Corp.

HI-FOG will protect the seven-story, energy-neutral wooden residential building, including 186 apartments totaling more than 10,000 square meters, and an underground parking area for 80 cars. The combustibility of wood limits its use as a construction material, according to building regulations in most countries. Finland’s national building regulations permit the construction of three- to eight-story wood-frame residential buildings as long as an automatic sprinkler system is installed throughout.
Thailand: Fire destroys electronics factory, damage pegged at $15.2 million

A fire broke out at an electronics factory in Thailand's Pathum Thani province, prompting more than 300 workers to evacuate the site, the Bangkok Post reports.

According to early estimates the plant suffered damage of more 500 million Thai baht ($15.2 million). The factory belongs to SVI Public Co. Ltd. and the fire originated at one of the company's warehouses, the police said. More than 30 fire trucks were dispatched to contain the fire. The building was not sprinklered.

Chapter Items of Interest

Joe Janiga our Chapter President attended the SFPE National Meeting. There are three items of note that our chapter members should find of interest:

- The NJ Chapter donated $1,000 to the Educational and Scientific Foundation.

- SFPE National is changing the society name, goals and vision to more closely reflect the fact that the society includes many protection professionals and not just fire protection.

- A Silver Chapter Excellence Award was presented to the NJ Chapter.


The CSB’s newly released 14-minute safety video entitled “Behind the Curve” includes a 3D animation of the events that led up to this tragic accident as well as interviews with the CSB’s investigators and chairperson.

CSB Chairperson Dr. Rafael Moure-Eraso said, “The CSB is seriously concerned by the number of deadly refinery accidents in recent years. We have concluded that extensive improvements must be made in how refineries are regulated at the state and federal level.

The CSB’s investigation found an immediate cause of the tragedy to be long-term, undetected High Temperature Hydrogen Attack (HTHA) of the steel equipment, which led to the vessel rupture on the day of the accident. The CSB found the industry’s standard for determining vulnerability of equipment to HTHA, to be inadequate.

In the video Investigator Lauren Grim discusses HTHA, stating: “High temperature hydrogen attack, or HTHA, – is a common hazard that has long been known within the petrochemical industry. However, Tesoro engineers and corrosion experts did not believe it could occur within the heat exchanger that ultimately failed.”

The CSB’s investigation report, approved in May 2014, is one of the most extensive and complex refinery explosion investigations. The investigators also reported their findings of a substandard safety culture at Tesoro, which led to a complacent attitude toward flammable leaks and occasional fires over the years. And the CSB found that the complexity of the startup procedure typically required more than just the one outside operator. Yet operating procedures were not updated to account for the role of additional personnel during the hazardous non-routine work.

The CSB made recommendations in these areas to both the industry group, which issues guidance on HTHA, the American Petroleum Institute, as well as to Tesoro.

Investigator Dan Tillema says, “The CSB found that if Tesoro had a strong safety culture, it would have addressed the ongoing leaks and defined a reasonable number of essential personnel for the startup activity. Had Tesoro done these things, we concluded that fewer workers would have been present on the night of the accident, and lives would have been spared.”

The CSB’s final report also recommended that the governor and legislature of the State of Washington significantly strengthen the oversight of refineries. Specifically, the Board called on the state to require refineries to:

- conduct more comprehensive hazard analyses and damage mechanism reviews;
- document the effectiveness of process safeguards;
- increase the role for worker representatives in process safety management
- have company safety reviews examined by technically competent regulators

Chairperson Rafael Moure-Eraso said, “Seven lives were lost at Tesoro. It should not have happened. Companies, workers, and communities would all benefit from a more rigorous regulatory system that is focused on continuously lowering risks.”

The CSB is an independent federal agency charged with investigating industrial chemical accidents. The agency’s board members are appointed by the president and confirmed by the Senate. CSB investigations look into all aspects of chemical accidents, including physical causes such as equipment failure as well as inadequacies in regulations, industry standards, and safety management systems.
A summary of our December Technical Meeting Topic

The 1984 Great Adventure - Haunted Castle fire revisited and remodeled—Would sprinklers have prevented loss of Life” – by Jack Fairchild of Ballinger Consulting

This presentation will review a re-creation of Russ Fleming’s 1985 Analysis of Potential Fire Sprinkler Performance at the Great Adventure Haunted Castle. The re-creation uses modern computer modeling to analyze fire growth rate, sprinkler response times, water delivery times, maximum heat release rates, and tenability criteria. Computer models included in the presentation are NIST’s Fire Dynamics Simulator and DETACT, VTT’s FDS + Evac, Tyco’s SprinkFDT and Hydratec’s HydraCALC. A history of the fire including construction details, interior finish, travel distance and available exits will be included. 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. Some trial testimony will also be discussed.

Interior of Strobe room and point of ignition. Char pattern on the right image shows where the foam pad was located. The pad was tattered from being bumped so many times and had frayed cloth hanging down from the upper right hand side.
Dear Member,

The NJSFPE Holiday party was a great success last year. Once again for this year all NJSFPE members as well as members of the AFAANJ and their guests are invited. We are holding our party at the Hanover Manor which is located on Eagle Rock Avenue just below Ridgewood Road in East Hanover.

December 8, 2014

The 1984 Great Adventure - Haunted Castle fire revisited and remodeled. "Would sprinklers have prevented loss of Life" - Jack Fairchild, Ballinger Consulting

Santa can't make it this year, however, our elf will be back providing us with a wine tasting. There will be wine and beer as part of our meal. We will be having a buffet including turkey. Presents have been ordered for all of our guests.

Unless you are an NJSFPE member that prepaid for the years meals dinner will be $30 per member of NJSFPE or AFAANJ. If you bring a guest the cost per person is the same.

Sincerely,

Ed Armm
Immediate Past President AFAANJ & NJSFPE
If you wish to attend the Gala Holiday meeting you must pre-register with Vicki Serafin by phone 973-541-6771 or by clicking the below link. Thank you.

Click here to RSVP

Happy Holidays!

From your friends at the Society of Fire Protection Engineers

Please join us on December 8th from 5:00 p.m. to 6:00 p.m. for a “Wine Tasting” by Justine at the Hanover Manor, followed by Turkey Dinner Buffet with all the trimmings and Guest Speaker Jack Fairchild

Topic: The 1984 Great Adventure Haunted Castle Fire

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MEETING NOTICE

Date: December 8, 2014

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

Topic: The 1984 Great Adventure - Haunted Castle fire revisited and remodeled - Would sprinklers have prevented loss of Life”

Speaker: Jack Fairchild, Ballinger Consulting

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

Vicki Lynn Serafin
Affiliated FM Insurance
300 Kimball Drive
Suite 200
Parsippany, NJ 07054
Phone: 973-541-6771 / Fax: 973-541-6909

OR PAY AT THE DOOR

NAME: ________________________________________________________________

COMPANY: ______________________ TELEPHONE: ____________________
# Meeting Dates/Programs 2014-2015

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<td>Current Fire Protection Technologies—Frank Savino, United Fire</td>
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<td>Foam Systems Design &amp; Acceptance Testing’ Gary Ryman FM Global &amp; Fay Purvis Vector Fire</td>
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<td>June 8</td>
<td>Comparison of UL 286 and ASTM E84’ JC Harrington FM Global &amp; ‘SFPE Update’ Julie Gordon SFPE</td>
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**JMCC**

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

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CPSC http://www.cpsc.gov/
CSAA http://www.csaa1.org/
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FM Global http://www.fmglobal.com/
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