President’s Message…

Spring is right around the corner! Which means our annual Technical Seminar is too. This year's program, jointly organized with AFAA -NJ, will feature our Trade Show and great speakers and topics. Mark May 18th on your calendars. Our February speaker Bob Benedetti, PE of NFPA presented a thorough update on NFPA 13 and 30 and how the standards handle flammable and combustible liquid storage. He also provided insight on how the standards developed over the years. For our March meeting Tim Costello of Jensen Hughes, Inc will present a new NFPA standard - Building Fire and Life Safety Directors. Stay current and be active in our profession. See you all March 6th.

Rich Reitberger
Chapter President
8th Annual Symposium

Thursday May 18, 2017

Come join us for a full day of Speakers, Vendor Trade Show and Door Prizes

Registration for vendors, sponsorship opportunities and individual participants will be announced shortly.

This year's event will be held:

16 Eagle Rock Ave
East Hanover, NJ 07936
President Rich Reitberger convened the meeting at 6:02 PM at the Hanover Manor in East Hanover, NJ with the customary salute to the flag and attendee introduction.

The meeting minutes for January were reviewed and accepted.

The December and January Treasurer Reports were not voted on since they were not approved during the Executive meeting.

Dave Kurasz gave an update on Trenton and legislative. It is a challenging time since all the seats are up in November. A new bill introduced a tax credit for the installation of a residential sprinkler system. In addition a new bill was introduced to address the conditional veto on the town home sprinkler bill.

Lightweight construction is a hot topic after the second Avalon fire. Laminated beams are stronger than wood however when exposed to fire it fails quicker.

There is a county in southern NJ where a county wide building department has been established. This is being carefully watched to see how it works and if it will be rolled out throughout the state. Bob Benedetti, Principal Flammable Liquids Engineer at NFPA, presented Flammable and Combustible liquid Storage – NFPA 13 and NFPA 30. The amendments to NFPA 30 to the 2018 addition.

The heart of NFPA 30 is chapter 6 which is the protection for liquids that burn in warehouses. Bob discussed the rack section and the protection guidelines that try to prevent the fire jumping the aisle to the neighboring rack.

Bob gave some insight into the standard changes as well as some definitions such as “protected” per NFPA 30 (chapter 12, 16 and 1) means the appropriate provisions of chapter 16 have been used to design and control the fire until the fire can be manually extinguished. Anything less than chapter 16 design is considered unprotected.

Acceptable containers per NFPA 30 9.4.1(8) other nonmetallic IBC’s must comply with 9.4.1.1. For protected storage the non-metallic IBC’s need to be listed in table 9.4.3 in accordance with UL 2368 or FM 6020.

Flammable liquid cabinets – now have to be in accordance with FM, UL or equivalent listed and labeled cabinet.

He also described in detail Maximum allowable quantities as described in NFPA chapter 9.

Bob also went through the ways we all can be “Participating in the system”

There is an online system to allow participation in the suggested change to the codes or standard.

When on the NFPA website you can select any code/standard. By selecting the tab for next edition you can go into the Terra system and provide suggestions to add a section, suggest a change or a global revision etc.

About the Presenter

Robert P. Benedetti is NFPA’s Principal Flammable Liquids Engineer. He is staff liaison to NFPA’s Flammable and Combustible Liquids Project, which deals with the safe handling and use of flammable and combustible liquids in a variety of arenas. He is NFPA’s liaison to the American Petroleum Institute’s Safety and Fire Protection Group and represents NFPA on several Standards Technical Panels of Underwriters Laboratories, Inc. Mr. Benedetti graduated in 1972 from Northeastern University, Boston MA, with a Bachelors Degree in Chemical Engineering. He was employed by the Factory Insurance Association from 1972 until 1974 as a Field Engineer. In June, 1974, he accepted a position with the National Fire Protection Association as Staff Chemical Specialist. He assumed his current position in April, 1986. Mr. Benedetti is a Certified Safety Professional and a registered Professional Engineer and a member of the Society of Fire Protection Engineers.

Rich Reitberger called the meeting to a close at 8:10 PM.

Marvin Maradiaga of the NJ Chapter met with NJ Senator Brian Stack on Feb 17th at Union City’s City Hall to present him with the John Kelly award. He indicated his interest in working with our Chapter to promote legislation that fits the principles outlined in the award letter. He put Marvin Maradiaga in direct contact with his Legislative Aide handling the agenda for new and existing proposals. Overall, it was a very good meeting and an opportunity to network with Senator Stack and his staff.
Dubai Developer to get $332 Million Insurance for New Year’s Eve Tower Fire

By AP, Dubai, UAE Monday, 6 February 2017

The developer of the world’s tallest building says it will collect $332.4 million from its insurer to cover damage sustained during a dramatic New Year’s Eve fire at one of its Dubai hotels.

Emaar Properties said in a filing to the Dubai Financial Market that it has agreed with Orient Insurance to recover the 1.22 billion dirham claim related to the Dec. 31, 2015 blaze.

Dubai police have blamed faulty wiring for sparking the fire at the 63-story tower at The Address Downtown. The hotel sits near the mammoth Dubai Mall and the Burj Khalifa, the world’s tallest tower.

Outside experts say the type of cladding used on the hotel’s exterior and that of many other buildings in the Emirates likely helped fuel the fire.

In this Friday, Jan. 1, 2016 photo, the fire continues to burn in the Address Downtown skyscraper in Dubai, United Arab Emirates (Photo: AP/Sunday Alamba)
Technical guides by SFPE available through IEEE

SFPE has created detailed guides on many specific topics related to fire protection. See below or go to the following link for ordering:


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SFPE Engineering Guide: Assessing Flame Radiation to External Targets from Pool Fires

This engineering guide provides methods for assessing the impact of radiation from pool fire sources to potential targets. The goal of this guide is to provide methods for calculating safe separation distances between fire sources and potential targets that would be damaged or adversely affected by radiation from the fire.

BUY NOW

SFPE Engineering Guide: Piloted Ignition of Solid Materials Under Radiant Exposure

This engineering guide provides methods for predicting piloted ignition of solid materials from thermal radiation. It is intended to be used in conjunction with the Engineering Guide: Assessing Flame Radiation to External Targets from Pool Fires or other methods capable of predicting thermal radiation. The guide reviews the concept of minimum ignition level and reviews five methods to calculate the time to ignition under constant radiant heat flux.

BUY NOW

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Technical guides by SFPE available through IEEE

SFPE Engineering Guide: Predicting Room of Origin Fire Hazards

This SFPE engineering guide provides a methodology to define and quantify the fire development and ensuing conditions within the room of fire origin from the fire's incipient stage through its full development. The approach presented in this guide was developed using the framework set forth in the SFPE Engineering Guide to Performance-Based Fire Protection. It consists of three distinct parts: (1) Approach selection, (2) Input definition and data collection, (3) Results computation.

BUY NOW

SFPE Engineering Guide: Predicting 1st and 2nd Degree Skin Burns from Thermal Radiation

This engineering guide provides methods for predicting thermal injury to humans from thermal radiation. It is intended to be used in conjunction with the SFPE Engineering Guide: Assessing Flame radiation to External Targets from Pool Fires or other methods capable of predicting thermal radiation.

BUY NOW

SFPE Engineering Guide: Evaluation of the Computer Fire Model DETACT-08

This guide is an evaluation of the computer model DETACT-08, a model for predicting the response time of ceiling-mounted heat detectors/sprinklers and smoke detectors, installed under large unobstructed ceilings, for fires with user-defined, time-dependent heat release rate curves.

BUY NOW

SFPE Engineering Guide: Guidelines for Substantiating a Fire Model For a Given Application

While fire models have existed since the early 1950s, they have only recently become regular tools across a range of fire protection applications. Models have a variety of purposes in fire protection. Common applications include evaluating performance-based designs, supporting the development of fire hazards and risk analysis, illustrating principles of fire behavior and fire protection for training or education; testing hypotheses in forensic analysis; and supporting fire research, both as a primary research tool and in experimental design.

BUY NOW
Job Opening at Verisk Analytics

Are you an experienced Risk Control professional with proven ability working in a fast-paced environment? Are you looking to utilize your knowledge in fire protection systems, building construction, loss control, and related discipline providing risk analysis, development of policies and practices, conduct research among others? Do you like working in a collaborative environment?

If you are looking to further your career in this field, we'd like to hear from you.

At Verisk, you can have a rewarding career with challenging and meaningful work, the chance to make a positive impact on the business, and find the support, coaching, and training it takes to advance your career. Our commitment to individual choice lets you customize aspects of your career path, your educational opportunities. And our culture of innovation means your ideas on how to improve our business efforts will be heard. As key contributors to our success, our team members enjoy working in a business casual, collaborative environment that offers state-of-the-art resources, advanced technologies, and an excellent benefits package.

As Risk Control Engineer, you will be responsible for:

- Providing technical support and guidance for the development of new and enhanced products
- Providing support in the development of loss control policies and practices and assisting in the maintenance of associated technical resources
- Conducting research to discover methods, techniques, and/or sources of information related to fire ignition, and sustainment and extinguishment. Researches complex problems, and analyses various related approaches and implements the most effective solutions
- Maintaining awareness of emerging issues from a technical and product development perspective
- Analyzing and/or identifying underlying principles, reasons, or facts associated with information or data to draw conclusions utilizing engineering knowledge and logic
- Working closely and effectively with the following key stakeholders: representatives from the property/casualty industry, municipal leaders, code officials, architects and engineers, governmental representatives, fire service personnel, and ISO staff members
- Preparing and presenting clear written and oral communications to external and internal audiences on technical issues

Requirements:

- 5 years or more experience in risk control with knowledge of the evaluation/design of fire protection systems, fundamentals of building construction and related resistance to fire and natural perils (wind, EQ, flood, etc.)
- Degree in fire protection or mechanical or civil engineering with some financial and accounting knowledge
- Professional Engineer (P.E.) designation, desirable.
- Working knowledge or familiarization with national building codes and standards (ICC), knowledge and understanding of fire and life safety codes including NFPA and other national industry standards (FM), and OSHA.
- Working knowledge of the basic processes of fire behavior, prediction of fire department, combustion of materials, effects on and performance of structures in a fire
- Knowledge related to the principles of fire water supply and hydraulic analysis with the ability to predict needed fire flows, with knowledge of emergency response and fire service standards and procedures
- Strong foundation in fire dynamics with knowledge of principles, methods, and practices of modern fire prevention, fire protection engineering, fire suppression activities, and new construction technology including fire protection and detection systems
- Knowledge of risk analysis techniques including predictive and analytic procedures for the assessment of hazards and probabilities with statistical analytic ability
- Experience in risk control concepts related to property insurance, workers compensation and liability issues

We are offering an excellent compensation package that includes short-term cash incentive. Our benefits package is competitive and includes full health care options, a 401(k) plan, and a generous Paid-Time-Off program.

If this opportunity looks exciting and challenging to you, please click below link to apply.


A leading source of information about risk, Verisk Analytics provides data, analytics, and decision-support services to professionals in many fields, including insurance, finance, real estate, health services, government, human resources, and risk management. Using advanced technologies to collect, analyze, develop, and deliver information, Verisk helps customers evaluate and manage risk. The company draws on vast expertise in actuarial science, insurance coverages, fire protection, fraud prevention, catastrophe and weather risk, predictive modeling, data management, economic forecasting, social and technological trends, and many other fields. See our website at www.verisk.com for information about our company. All members of the Verisk Analytics Family of Companies are equal opportunity employers.

#LI-VD1
Combustible deposits inside exhaust ventilation systems pose unique and difficult challenges because the deposits can ignite; ventilation systems can be difficult to access for manual firefighting; and the fires can burn undetected. More severe losses can occur due to unusually high accumulations of deposits, compounded by the lack of fire detection and/or fixed automatic fire suppression systems such as sprinklers.

This metalworking shop reprocesses commercial solders, some of which have flux cores. Fluxes for soft soldering are typically organic based compounds such as resins or fatty acids and are combustible.

The process involves small melting pots (called smelters) used to melt the recycle solders and remove unwanted flux and other materials. This purifies the mix to make specialty solders which are marketed for other metalworking processes.

Volatile components of the flux are vaporized at the surface of the pot and are collected into a ventilation collection system and dust collector above the pot.

So called “flareups” of organic flux volatiles are common on the surface of the molten solder due to extreme heat of the melt. Operators are instructed to use a fire extinguisher to suppress a flareup if it occurs. At the time of the incident, a new operator was having difficulty suppressing flux flares and eventually a larger than normal flame spread across the solder surface consuming all flux until it self-extinguished.

The employees at the facility failed to notice the spreading of the fire into exhaust ventilation ducts above the melting pot. The fire ignited combustible deposits of flux which had sublimed over time unnoticed on the interior duct surfaces. The fire spread up the vertical pot collection duct into a horizontal main header duct from multiple pots, and then into a rooftop dust collector and filtration system. The steel ducts and collector had no automatic sprinklers but had an automatic CO₂ system.

This system did not automatically actuate due to a poorly placed detector, and was reportedly also not manually actuated during the incident. The fire was eventually suppressed when all combustible flux resides were consumed and it self-extinguished.

The public fire department responded and contained the fire to the ventilation system.

Ventilation duct systems and the filtration system needed replacement due to high heat exposure. The dust collector was not structurally damaged and was reused.

The ignition source was a flareup of excess amounts of flux in the solder pot which entered the duct system.

What can you do to prevent a similar event in your facility?

- Design industrial exhaust systems to minimize formation and accumulation of combustible deposits.
- Assure that automatic fire suppression systems are installed and designed for the hazard. In this case, the CO₂ system might never have been functionally tested. In addition, only one detector was installed in the entire duct system and it failed to operate due to poor location placement.
- Inspect and clean the interior of ventilation systems where combustible deposits might occur. Up to one-half inch (1.27 centimeters) of deposits were noted in parts of the ventilation system following the incident.
- Properly train operators in process operation, process hazards and emergency response.

LOSS HISTORY

During a recent ten year period, a study of FM Global client losses involving fires in ductwork reveals that the average gross loss for ductwork fires in which sprinklers were not installed is about US$4.5 million. For similar losses with automatic sprinkler protection provided, the average gross loss was only about US$300,000.
Lithium-ion batteries supply power to many kinds of devices including smart phones, laptops, scooters, e-cigarettes, smoke alarms, toys, and even cars. Take care when using them. In rare cases, they can cause a fire or explosion.

**The problem**
- These batteries store a large amount of energy in a small amount of space.
- Sometimes batteries are not used the right way; batteries not designed for a specific use can be dangerous.
- Like any product, a small number of these batteries are defective. They can overheat, catch fire, or explode.

**Safety Tips**
- Purchase and use devices that are listed by a qualified testing laboratory.
- Always follow the manufacturer’s instructions.
- Only use the battery that is designed for the device.
- Put batteries in the device the right way.
- Only use the charging cord that came with the device.
- Do not charge a device under your pillow, on your bed or on a couch.
- Keep batteries at room temperature.
- Do not place batteries in direct sunlight or keep them in hot vehicles.
- Store batteries away from anything that can catch fire.

**Signs of a Problem**
- Stop using the battery if you notice the problems.
  - odor
  - change in color
  - too much heat
  - change in shape
  - leaking
  - odd noises
  
If it is safe to do so, move the device away from anything that can catch fire. Call 9-1-1.

**Battery Disposal**
- Do not put lithium-ion batteries in the trash.
- Recycling is always the best option.
- Take them to a battery recycling location or contact your community for disposal instructions.
- Do not put discarded batteries in piles.
- Lithium-ion batteries should be placed in a sealed metal container.

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**National Fire Protection Association**
The leading information and knowledge resource on fire, electrical and related hazards

www.nfpa.org/education ©NFPA 2016
Dear Brad,

When it comes to property loss prevention, it’s important to keep up with the latest trends and hands-on training. With this in mind, I invite you to attend the upcoming Property Risk Engineering/GAPS classes at Eastern Kentucky University (EKU), Richmond, Kentucky. Our dedicated training facility includes a newly renovated Fire Science Lab for hands-on learning. Classes are led by industry experts with over 25 years of experience.

**Upcoming Classes:**

- March 20 - 21, Basic Industrial Property Loss Prevention
- March 22, NFPA 25
- March 23, Advanced Industrial Property Loss Prevention


To learn more and to register for these classes, please contact [Nancy Pennington](mailto:nancy.pennington@xlcatlin.com).
6-alarm fire levels part of unfinished Avalon complex in Maplewood

MAPLEWOOD -- A six-alarm fire on a frigid Saturday morning leveled part of an empty luxury apartment complex in town, officials said.

"The fire was intense," Mayor Victor DeLuca said of the blaze reported just after 1:30 a.m. at the yet-to-open Avalon apartments on Boyden Avenue.

More than 120 firefighters were on scene battling the blaze at its peak that destroyed more than two-thirds of the community, officials said.

"Due to a lot of hard work and tremendous effort by the firefighter, we were able to stop the fire before it got into the completed section," Maplewood Fire Chief Michael Dingelstedt said at a press conference Saturday morning.

"It was a very cold night, now that the fire is over the area is full of ice," said Dingelstedt.

One firefighter was injured, who slipped on the ice while battling the blaze.

DeLuca said Avalon officials had followed higher standards in the Maplewood complex than at their previous development in Edgewater, which engulfed the apartment complex displacing more than 500 people due to an incident in a space without sprinklers.

The local apartments were just inspected last week, he said.

The cause of the fire was not yet known. Maplewood and Essex County authorities are investigating the blaze.
CSB Investigators Deploying to Explosion at Packaging Corporation of America Plant in DeRidder, Louisiana

Washington, DC, February 9, 2017 — A three-person investigative team from the U.S. Chemical Safety Board (CSB) is deploying to the scene of an incident that killed three workers and reportedly injured seven on Wednesday, February 8 at the Packaging Corporation of America (PCA) plant in DeRidder, Louisiana.

According to initial reports, the explosion took place while contractors performed welding on a tank during a facility shut down. The explosion was powerful enough to cause the tank to fly and land in a different area of the plant. Welding is one of several types of “hot work” — or spark-producing operations - that can ignite fires or explosions. Most hot work incidents result in the ignition of combustible materials or the ignition of structures or debris near the hot work.

“The CSB has investigated many hot work accidents across the country, including a 2008 explosion that killed three workers at a different PCA plant in Tomahawk, Wisconsin.” said Chairperson Vanessa Sutherland. “Hot work incidents are one of the most common causes of worker deaths we see at the CSB, but also one of the most readily preventable.”

Following the deadly 2008 explosion at the PCA plant in Wisconsin, the CSB issued a safety bulletin on the hazards of welding and other hot work entitled “Seven Key Lessons to Prevent Worker Deaths during Hot Work In and Around Tanks.” The agency also released a safety video called “Dangers of Hot Work,” which presents the findings from that bulletin.

Chairperson Sutherland said, “The CSB continues to be concerned about the frequency of dangerous hot work incidents and has added safe hot work practices to the agency’s Drivers of Critical Chemical Safety Change Program, a list of key chemical safety advocacy initiatives.”

The CSB is an independent federal agency whose mission is to drive chemical safety change through independent investigations to protect people and the environment. The agency’s board members are appointed by the President and confirmed by the Senate. CSB investigations look into all aspects of chemical incidents, including physical causes such as equipment failure as well as inadequacies in regulations, industry standards, and safety management systems.

For more information, contact public@csb.gov.
MEETING NOTICE
NJ Chapter SFPE

Date:   Monday, March 6, 2017
Place:  Hanover Manor
       16 Eagle Rock Avenue
       East Hanover, NJ 07936
Price:  $30.00
Time:   Gathering starts at 5 PM, meeting starts at 6 PM
Topic:  Building Fire and Life Safety Directors—A New NFPA Standard
        Coming Up, Tim Costello, Jensen Hughes, Inc.
### Meeting Dates/Programs 2016-2017

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**J.M. Cholin Consultants, Inc.**

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

Fire Protection Engineering and Consulting Services
101 Roosevelt Drive, Oakland NJ 07436 USA
Telephone: 201-337-8621 • Fax: 201-337-5603
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2016 - 2017 Chapter Committees

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Vanessa Gallagher, Chairman
Ron Reitberger

Archivist/Secretary
Jim Tito, Eoin & Nicole

Speaker GRL
Ron Reitberger

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bradhart07438@yahoo.com
Ana Crosskno—Coordinator

Communications- Other
Paul McGrath
Mike Newman

Mailing/Automation/e-mail—Vicki Serafin, Chairperson

Webmaster—Mike Newman & Paul McGrath

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Jim Loftus—Alarm Speakers Coordinator
Paul McGrath—Vendor Coordinator

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Dave Horace

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Rich Reitberger—Chairman
Vanessa Gallagher
C. Petet

HELPFUL LINKS

ADAAG http://www.access-board.gov/adaag/about/index.htm
AFAA National http://www.afaa.org/
AFSA http://www.firesprinkler.org/
ANSI http://web.anfi.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.fsdayn.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 Spklr Coalition http://www.homefiresprinkler.org/
AFAA-NJ http://www.afaaanj.org/
National of Fire Equipment Distributors (NAFED) - http://www.nafed.org/index.cfm

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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:
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