President’s Message…

Happy Holidays !! December 5th is our next meeting and also our annual Holiday Party. It will be a Hot Buffet dinner meeting with all of the trimmings. Start the Holiday Season off right with a little holiday cheer at the beautiful Hanover Manor. In addition we also have a guest speaker - Bruce Johnson, of UL who will be speaking on Energy Storage Systems Fire Safety Considerations and cover the hazards of the different battery types, configurations and exposures. Don’t miss it. Our November Bus Ride to the University of Maryland was canceled due to a low response to the trip. However, we still had hungry students to feed so myself, Ernesto Vega-Janica and Chuck Gandy made the trip to the University and hosted a NJSFPE sponsored lunch for 35 students, teachers and staff of the Fire Protection Engineering Department. After lunch the three of us gave an overview of the FPE career and an insight into life after college for these soon to be FPE professionals. Through our new Education Foundation we may be doing more with the Maryland FPE Department as well as developing more local training classes for continuing education and professional development. More on this as the new year unfolds. We will keep you all posted here in the Fusible Link, in e-mails and on the Chapter website. Exciting times are ahead !!

See you all at the next meeting. You never know who may show up ??

Rich Reitberger
President
December 5 is our next meeting and also our annual Holiday Party

It will be a Hot Buffet dinner meeting with all of the trimmings. Start the Holiday Season off right with a little holiday cheer at the beautiful Hanover Manor.

"Wines by Justine". Pre meeting wine tasting starting at 5 pm.

In addition we also have a guest speaker - Bruce Johnson, of UL who will be speaking on Energy Storage Systems Fire Safety Considerations and cover the hazards of the different battery types, configurations and exposures.

Don't miss it!

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AUTOMATIC SPRINKLER SYSTEMS have a phenomenal record for saving lives and reducing property damage—when they’re active. In order to confirm that the piping network associated with sprinkler systems has not become compromised due to corrosion (commonly microbiologically influenced corrosion, or MIC), NFPA 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, requires that the internal condition of sprinkler system piping be assessed every five years.

This assessment, not to be confused with an obstruction investigation, historically has been conducted by draining the system, disconnecting pipes and fittings, and physically looking inside the system. This is still the most common method for conducting the five-year internal assessment, but it also requires the system (or at least a portion of it) to be out of service for a period time. For larger facilities or high-rise buildings with multiple systems, this can mean several days (and in some cases weeks) of downtime for their sprinkler systems. In many cases, shutting down the sprinkler systems means that day-to-day business operations must be halted or modified due to system shutdown. This can be costly from both a financial and a productivity perspective and is untenable to many owners and facility managers.

As identified in A.14.2.1 of NFPA 25, though, draining the system and opening a flushing connection is not the only means for conducting the internal assessment. This section specifically states that nondestructive or noninvasive methods for conducting the assessment are permitted.

One such nondestructive approach involves the use of ultrasound, or ultrasonic technology. This technology allows an assessment to be performed without shutting down the system as the testing is being conducted. By applying ultrasonic transducers to the pipe’s exterior surface, internal conditions can be identified quickly and accurately. Pulse echo and guided wave technology are two types of ultrasound that have been used in the sprinkler industry for years with great success.

Pulse echo ultrasonic technology works by measuring the amount of time it takes for an ultrasonic straight beam signal to travel through the wall of the pipe and reflect off the back wall, resulting in a “remaining wall thickness” measured down to 1/1000th of an inch. Guided wrap wave, or lamb wave, ultrasonic technology travels around the circumference of the pipe, exposing the internal surface conditions. Both technologies allow technicians to obtain an instantaneous understanding of the internal condition of a segment of pipe. This allows for dozens of pipe segments to be analyzed in the time it would normally take to look at only a handful of segments. It also allows facility managers to reduce operational downtime and maintain the facility’s normal operating schedule.

While commonly associated with obstruction investigations, portable x-ray technology has also been employed as a means for conducting the periodic internal assessment. This noninvasive approach to conducting the assessment is also consistent with the intent of Chapter 14 of NFPA 25 and typically does not require draining the system.

While draining the system and looking inside the pipe has remained an industry staple for conducting internal assessments, it is not the only recognized approach. For facilities that are sensitive to downtime or the potential for water damage, such as hospitals, data centers, and production facilities, alternative assessment methods may be a better fit and tell a more complete picture for the facility manager.
Training the brain

A new team of NFPA data experts is developing powerful new tools that tap a century's worth of information and may soon reshape how fire and safety professionals do their job

BY JESSE ROMAN

SITTING ON SHELVES, in cabinets, and on microfilm in the basement archives of NFPA’s headquarters near Boston are thousands of documents that collectively tell the story of fire in the United States. Countless narratives, charts, photos, and maps recall the circumstances behind numerous calamities, from conflagrations that destroyed entire cities to detailed histories of fire in some of America’s most obscure industries and occupancies.

About 90 minutes away, in a data center in Springfield, Massachusetts, sits the latest addition to NFPA’s data depository. Beneath the casing of an unremarkable looking metallic box lies an assortment of circuits and chips that NFPA staff has nicknamed Crosby, after NFPA’s first secretary, Everett Crosby, who, more than a century ago, first championed the idea of collecting data to reduce fire loss. While the reams of paper in NFPA’s archives dutifully recall the past, Crosby has the potential to reveal the future, taking what has already happened to unlock what may come.

Over the last year, Crosby’s spacious hard drive has been populated with about seven terabytes of data obtained from fire departments, code enforcers, the U.S. census, the geographic information systems (GIS), and the National Fire Incident Reporting System (NFIRS), as well as decades of NFPA’s own fire survey records, with more added all the time. Crosby’s Intel Xeon 24 core processor brain hums, scouring the data to find correlations, clusters, and statistically significant variables, all the while reordering and reweighting the data as new information is added. Training that brain is NFPA’s newly hired team of data scientists and analysts, who busily develop the rules and algorithms that turn Crosby’s data from a collection of statistics into tools that could one day reshape how fire professionals do their jobs.

The effort, while technologically sophisticated, seeks to answer a single question, according to NFPA President and CEO Jim Pauley: “How can we take all of that data and put it in a form that helps our stakeholders with their decision making?” The answer, data analytics, has in the last handful of years become more advanced and more accessible than ever before.

Today’s powerful computers are so adept at sifting, sorting, and analyzing the world’s ever-increasing raft of information that the results often seem to bleed into the realm of science fiction. Google’s analytics servers, for instance, have advanced to the point of now being able to predict the timing and severity of the upcoming flu season. When Crosby’s potential is fully realized, the possible applications are no less impressive and also involve feats of forecasting. With enough good data, for instance, analytics could pinpoint which building in a specific neighborhood is most likely catch fire next. It could objectively tell public outreach officers which city blocks to target for the most impactful fire prevention education campaign and even how many lives their effort might save. Data from a firefighter’s career history may even one day help doctors quantitatively determine his or her risk for specific kinds of cancer.
“The potential of data analytics is so amazing, it’s scary,” said Ken Willette, the first responder segment director at NFPA and a former fire chief. He called NFPA’s new data efforts “transformational” for both the organization and the fire service.

“In the past, our reports have been primarily to inform federal decision makers, Congress, and state-level associations, but haven’t always been so useful to individual departments,” he told me. “But data has to be meaningful at the local level. With this system we have the potential to operate at that level and put the powerhouse of analytics behind it to empower local departments. That is a game changer.”

While businesses of all stripes, from Netflix to AT&T, have utilized this magic for years to learn about customers and boost efficiencies, the fire and life safety sector has barely dipped its toes into the analytics pool. NFPA is ready to provide a forceful shove off the edge.

Two years after NFPA’s Board of Directors made knowledge, information, and data focal points of the association’s new strategic plan, the investments are starting to bear fruit. By the end of November, the first NFPA data tool—a dashboard that will allow local departments to map and manipulate their local fire data—will go into beta testing. Twenty other data analytics projects are also in various stages of development, everything from an analysis of high-rise building sensor data to an algorithm that mines NFPA’s advisory services call logs for patterns that could inform training programs, handbooks, and codes and standards.

The most ambitious NFPA data project by far is the development of what is now being called the National Fire Data System (NFDS). As it’s currently envisioned, the NFDS would collect and analyze incident and operational data from thousands of fire departments around the country, enabling each department to harness the collective wisdom and experiences of the group to inform its own decisions and to justify those decisions to policy makers. In September, in a show of faith for NFPA’s emerging data program, the U.S. Fire Administration (USFA) awarded NFPA $1.2 million to develop the NFDS. The International Association of Firefighters, the International Association of Fire Chiefs, and several other prominent organizations also wrote letters in support of the project.

**Kidde Recalls Smoke/Carbon Dioxide Detector**

Name of Product: KN-COSM-IB Hardwired Combination Smoke/Carbon Monoxide Alarm

Concern: When the alarm reaches the end of its useful life, it issues an end of life chirp every thirty seconds. If the battery is replaced when the unit is at its end of life, and the test button is pressed within 10 seconds thereafter, the unit will no longer issue an end of life chirp and will no longer detect smoke or carbon monoxide.

Determine If You Have Affected Alarms

See Full Recall Announcement
New Coverage Areas for VK680 ECLH Concealed Sidewall Sprinkler

The Viking Corporation is pleased to announce expanded UL Listings for the Model VK680 extended coverage concealed sidewall sprinkler. Effective immediately, the sprinkler is now UL Listed for two additional coverage areas: 14 x 24 ft and 16 x 24 ft (width x throw). The sprinkler's technical data sheet has been updated and is now available on the Viking website.

The flat plate concealed VK680 offers the design flexibility of an extended coverage sprinkler together with the enhanced aesthetics preferred by architects and building owners. Listed for light hazard occupancies, the sprinkler’s compact design, with a total length of only 2 inches, allows for easy installation in tight wall spaces. The VK680 can also be installed up to 12 inches below the ceiling to better accommodate potential obstructions such as light fixtures and crown molding.

Please contact your Viking SupplyNet sales manager or customer service center for additional information.

Some ten workers were killed while over 45 others were injured in a chain of explosion which occurred earlier today at Pakistan’s Gadani shipbreaking yard, according to local media.

At the time of the incident, some 100 workers were reportedly dismantling an unused oil tanker at the yard.

The welding works which were being conducted on board the ship are believed to have caused the series of explosions.

Local media reported that around 30 workers are unaccounted for, while a number of people are reportedly trapped inside the oil tanker.

World Maritime News contacted relevant authorities for confirmation and details on the incident, however, they are yet to reply.

World Maritime News Staff
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The NY/NJ Chapters Scholarship Golf Outing Committee sends their special thanks to our long time sponsor Russ Fleming and the National Fire Sprinkler Association. We appreciate your continued support!!

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### Meeting Dates/Programs 2016-2017

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<td>Stat X Presentation</td>
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**JMCC**

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CSAA  http://www.csaaul.org/
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