

National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

March – April 2020
No. 219



Sprinkler Protection in Changing Environments

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ON THE COVER

New England Regional Manager Michael Young recently toured a sprinklered marijuana grow facility in Brockton, Massachusetts. Brockton Fire Department Deputy Chief of Fire Prevention, Ed Williams arranged the tour. One detail to notice is the fire sprinkler coverage beneath the plant tables, which can be moved laterally.

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- March 5, 2020
Understanding, Applying and Enforcing NFPA 25 Baltimore, MD
- March 12, 2020
Understanding, Applying and Enforcing NFPA 25 Windsor Locks, CT
- March 16, 2020
Two Week Layout Technician Training Baltimore, MD
- April 1, 2020
Navigating the ITM Liability Requirements Baltimore, MD
- May 7, 2020
Advanced Technician Training Baltimore, MD
- May 11, 2020
Two Week Layout Technician Training Baltimore, MD
- June 1, 2020
Layout Technician Blended Learning - In Class Practicum Baltimore, MD
- June 23, 2020
Advanced Technician Training Zionsville, IN
- July 2, 2020
Sprinkler System Plan Review (1 day) Baltimore, MD
- August 6, 2020
NFPA 13, 14, 20 Update 2016 Baltimore, MD
- August 10, 2020
Two Week Layout Technician Training Baltimore, MD
- September 9, 2020
Navigating the ITM Liability Requirements Baltimore, MD
- October 1, 2020
Pumps for Fire Protection Baltimore, MD
- October 5, 2020
Two Week Layout Technician Training Baltimore, MD
- November 5, 2020
Hydraulics for Fire Protection Baltimore, MD
- November 16, 2020
Layout Technician Blended Learning - In Class Practicum Baltimore, MD
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Fire is fast. Fire sprinklers are faster.

Positioning NFSA for an Evolving Future

When I think about our theme for this issue, *Fire Sprinklers in Changing Environments*, I think of the ways we are working to position NFSA for an evolving future and the changing environments in which we all live. Your NFSA Board of Directors has supported our vision of “A Stronger Industry...A Safer World,” and we are seeing this vision realized in many ways. Your NFSA team has responded to recent fatal fires and has influenced the actions taken following these tragedies by communities across America that want to protect citizens and firefighters alike. I hope you follow us on our social media platforms to see your Association in action every day.



Speaking of being in action every day, your Association is very active in public relations, media relations, and promoting the fire sprinkler industry using every tool from live television to social media. Tragic fires are horrible anytime during the year, but around the holiday season they draw a lot more attention. No one knows that more than I, except the advocates who have had family directly impacted by fires. NFSA is very thorough and caring in our response to tragic events. However, I will never apologize for using teachable moments to better educate and to increase awareness for the fire problem in America. I will also never apologize for representing the greatest industry in the effort to solve the fire problem in America.

Solving the fire problem and promoting this industry is part of our *Buy NFSA* campaign. We ramped up these efforts in 2020 with our exhibition at the International Builders Show, the largest show in North America for the building industry. Our SAM and Manufacturers Council, along with our Labor Relations Advisory Committee, stepped up in a big way to show the value of buying NFSA and using NFSA Contractors. Thank you all who attended and contributed product.

We are building our team, and I'm excited about our re-alignment of Engineering, Codes and Standards, and Public Fire Protection, and the addition of Contractor Services. We want our members to know that we place great importance on the services that we provide and the ways that we are able to add value to their daily work. If you have a need that you do not see us meeting, please reach out and let me know. Your ideas are always appreciated, and most welcomed. Chair Kent Mezaros said in his first article as Chair, which has been over two years ago, (and welcome back as Chair for a 2nd term), “please give us your feedback.” He was sincere. Our staff sincerely enjoying hearing from you and learning your needs.

I hope everyone is making plans to attend our Annual Seminar and Business & Leadership Conference in Phoenix, Arizona April 30-May 2, 2020. That week will provide us a great opportunity for networking, learning and sharing ideas together. As the theme says, we will be *#fastestwater under the sun!*

Again, I remind everyone that our Twitter push is focused on a partnership with all our stakeholders involved in fire protection, especially the fire service. It is our marketing attempt to say that fire is fast and firefighters are fast, however, with the modern material and modern construction, when fire strikes, we need fire sprinklers because they are the fastest response to containing a fire while the firefighters get there. This gives the occupants, owners, and the firefighters a chance to minimize loss.

Our Buy NFSA campaign is in full swing and our national marketing and media campaign of “*Fire Sprinklers Buy Time and Time Buys Life*” is also hitting major metropolitan area media markets. We are getting great data analytics on our outreach, but for me, the best feedback is from fire officials, elected officials, and you as members, that say they got the chance to see the commercial or see us on live television in their area. Our messages are motivating decision makers and increasing awareness about the fire sprinkler industry and the role we play in protecting people and property, from homes to high-rises.

As we focus our energy on our vision and our resources on fulfilling our mission, we are reminded that our work matters and our service makes a difference to you, our members. We thank you for trusting us with the member value that Team NFSA creates. We pledge our continued dedication to you, each other, the world that we strive to protect, and the industry we work diligently to promote.

A handwritten signature in black ink that reads "Shane Ray". The signature is fluid and cursive, with a large, stylized 'S' and 'R'.

Shane Ray, President

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I'm Baaaaaaaaack ...

Well, believe it or not, my first two-year term as Chairman of the Board of the NFSA has come to a delightfully quiet end. Thankfully, the economy has not blown up while the NFSA was under my leadership (not that I can take much credit for that), and while the Executive and Finance Committee did dutifully prepare a budget that included a recession plan this past year, we are blessed to not have had to incorporate it.

I must admit that there was a small part of me that entertained the idea of getting up at our last Board of Directors meeting, microphone in hand, and let it drop to the floor with a loud thud knowing that there is no chance the next two years could go as smoothly as the past two years have for me. However, the constant nervous leg bounce of our President who sits next to me, and the peaceful and joyous look at our beloved Vice Chairman that sits next to him sucked me back into hopping aboard for my 2nd and final term as your Chairman.

I must thank the other members of the Board of Directors for either their continued confidence in my abilities, or their fear that if they had not re-elected me someone may have nominated them for the position instead.

As a reminder to those that do not know me well, or possibly have not had the chance to meet me yet, I am CEO of Quick Response Fire Protection, a fire protection contractor from New Jersey. I got my start in the industry some 33 years ago working for my father-in-law Al Carnegie in his fire sprinkler business. Al was my first mentor. Al subscribed to the "Let him be, he will figure it out for himself (or not)" method of mentorship. While that method may not work for everyone, it fortunately worked for me. While striving to learn more for myself on how to be successful in the fire protection industry I was lucky enough to meet my second

mentor, Shawn Love of Grinnell Fire Protection in New Jersey. Shawn encouraged me to attend and become involved in the local NFSA New Jersey Chapter, and it was there that I truly started to understand our industry and learn from all the wonderful, intelligent, and experienced people that I have met. Since then, I've continued to grow and learn during my 15 years on the NFSA Board.

I'm also pleased to share that I have remained on our Seminar and Exhibition Committee that I previously served as Chairman of for many years. Sean Heskett has done an outstanding job serving as Chairman since, and thankfully much of the grunt work continues to be done by Vickie Pritchett and staff. This year's annual seminar will be a non-Expo Business and Leadership Conference at the JW Marriott Phoenix Desert Ridge Resort & Spa in Phoenix Arizona April 29th – May 2nd. The Business and Leadership Conferences of recent years have been tremendously well received and I'm confident that the level of content and program will again leave you wanting to come back. The weather should be perfect for many of us that will have suffered through a long winter and will enjoy the warm, dry Phoenix climate. Please go online to www.nfsa.org now and make your reservations, if you haven't already done so.

I continue to have a great deal of confidence in our president and his team. Shane and staff have worked diligently to make sure that NFSA remains "The Voice of the Fire Sprinkler Industry." I look forward to the next two years serving as your Board's Chairman and will take the good or the bad that may come along with it (although I, like you, hopes the good far outweighs the bad). Please be sure to drop me a note at kmezaros@qrfpss.com with any thoughts you may have, or better yet come say hello when we see each other in Phoenix.

Respectfully,



Kent Mezaros, Chairman

You can reach me at:

kmezaros@qrfpss.com

kent@quickresponsefireprotection.com

Editor's note:

The Jan/Feb 20 issue of NFSA inadvertently titled the Chair's and President's columns with the word "former" on their continuation pages. Both Kent and Shane are very much with us and we regret overlooking the error. The text was mistakenly pulled from our member takeover issue, when the former chair and president contributed articles.

Exceptions to Time Frames for Lawsuits

Editor's Note:

Stuart Zisholtz comments on New York State law.

Many of you are aware that there are specific time frames associated with bringing a lawsuit. A typical breach of contract lawsuit must be instituted within six years from the breach. A negligence claim must be commenced within three years from the accident.

There are, however, exceptions to the rule. These exceptions occur when the parties agree to a reduced Statute of Limitations. Sometimes these terms are incorporated in a contract in small language without you realizing the repercussions.

For instance, many public entities contain clauses reducing the Statute of Limitations to one year from substantial completion. Personal injury claims, such as those which occur on a cruise ship, are reduced to six months.

In a recent decision decided by the Appellate Court, a subcontractor's lawsuit was reinstated when it was determined that the one-year contractual limitation provision in the contract was unreasonable. The Appellate Court indicated that while a contractual provision which shortens the Statute of Limitations is enforceable, the period of time within which an action must be brought should be fair and reasonable in view of the circumstances of each particular case. The subcontractor was fortunate, in this particular instance, because the time frame when the Statute of Limitations started was ambiguous. While substantial completion may have occurred years earlier, there were multiple instances in the interim which kept the project open including, but not limited to, finalizing extras and various change orders.

The key to any claim is to know your rights and obligations under the terms of the contract. You do not want to be left out in the cold without any ability to pursue a claim. Never let your lien time run out. •

Do You Need a Tax Preparer or a Tax Consultant?

By Pierre Pinkerton

As tax season draws near, mostly everyone (I hope) is getting ready and setting appointments to get their tax returns prepared and filed. Good for you. With the speed and convenience of retail franchises like HR Block and Liberty Tax or even online free software, most people don't have to worry too much about where or how they will get their tax returns done before the filing deadline. But then, there are those that dread tax filing season because:

- They have more than one source of making money like having a two-income household;

- They operate a business;
- They make a lot of money;
- They have more than one type of income like wages from a job, income from a side business, retirement income, or even income from investments;
- They own either personal or business assets that they might have sold or gave away during the year

So... what do these people do? Better yet, what's better: a tax preparer or tax consultant? Let's discuss...

A Trusted Advisor

Though most preparers are trustworthy, they're primarily available during tax season (January to April). For those that are working at retail tax franchises, they are working part-time hours and have limited accessibility beyond the time they are preparing taxes. Tax consultants are usually available all year because tax preparation and consulting is their full-time business. Another advantage of being available for the entire year is for you to consult with tax consultants on transactions that could cause you to pay too much or not enough in taxes.

Deep Knowledge of the Tax Code

It's typically the norm for consultants to have a deep and thorough knowledge of the tax code. Most of them either have professional credentials such as Enrolled Agents (EA), Certified Public Accountants (CPA), or certifications obtained through accredited programs such as the National Tax Training School and other vocational institutions. Also, they have usually acquired many years of experience either working with clients or through past jobs related to tax prep or consulting.

Why is this important? It's not to sound like a tax nerd and talk in lingo that's too hard for anyone to understand. Unlike preparers (not all, but most), consultants rely on their knowledge of the code to offer strategic options for reducing your tax bill that's legal and fair. Also, this saves you time because they are often able to locate the reference needed in the code to take a certain deduction or exclusion without much effort or research.

If you're looking for speed, convenience, and the lowest pricing possible, then definitely go with a preparer at one of the retail franchises or maybe even complete your return online yourself. However, if you're looking for a trusted advisor with a thorough understanding of the code that's available all year, then choose a tax consultant. You won't regret it. •

Article Source: https://EzineArticles.com/expert/Pierre_Pinkerton/1809337

Sprinkler Protection in Changing Environments

by Mark Hopkins P.E., NFSA's V.P. of Engineering



The design and installation of sprinkler systems must evolve with the changing environments that we are presented with on a routine basis. Some changes require us to rethink the way that we design and install systems. Other changes require additional research and possibly changes to current requirements.

Building construction practices are continuously evolving and sprinkler system installations practices must adapt to the changes. This evolution has been happening for many years from the speed of design construction to the types of materials used and how they are applied. With each change, some aspect of sprinkler design or installation is affected. Applied research or hazards assessments are often the only ways of determining the true impact. Unfortunately, the convenience of waiting for the research to be completed is not always a reality. Changes have also begun in terms of how buildings function. A lot of this has been spurred by societal changes and attempts at amortizing costs.

This article will highlight some examples of how changes impact sprinkler protection.

Data Centers

The construction of data centers is the epitome of changing environments. In the past, data centers were constructed with defined computer equipment arrays, often having hot and cold aisles. Granted, changes happen on every project but for the most part general layouts would be maintained. Systems could be designed from the start and adjusted as needed. Computational fluid dynamics (CFD) modeling was often conducted as part of data center designs because of the unique air flow patterns created by the cooling systems. It is also worth noting that preaction systems are often installed in data centers due to the general hydrophobia concerns, which are unfounded.

The design of sprinkler protection and detection in these spaces must account for the unique air flow patterns in order to ensure timely detection and sprinkler actuation. Use of CFD modeling is/was essential to determine where detectors and sprinklers should be located to operate in an appropriate and timely manner. Having the known locations for computer racks, the size of the racks, heat generated by the computer equipment, as well as configurations of the racks, aisle widths, along with cable tray, lighting and ventilation equipment locations, is essential for accomplishing these objects.

Development of new computer cooling equipment utilizing cold water circulated from beneath the computer racks through large pipes and other innovate technologies can eliminate distinguishable hot and cold aisles from a sprinkler operational standpoint, but the more dramatic impact of modern data centers that has entered the picture relates to modular construction of these data centers associated with the advent of the cloud concept. As a result, data centers are now constructed in segmented sequences. Sometimes, the location of equipment is set at the start of the project and other times may not be known. Some modern data centers are essentially constructed as shell buildings with space sold or leased to tenants for their specific needs. As additional space is needed due to expanding client bases, additional space can be rented.

The needs of each tenant are unique, so the size, configuration and heat generated by each computer rack will vary. As a result, the layout of the equipment, cooling needs and configurations will continue to change as additional equipment is fit out in the space. This concept introduces new and unique challenges that were not often encountered in the past. This forces us to rethink how we design and install sprinkler systems in these changing environments. In conventional data centers where equipment locations are known the design and installation of sprinklers can be done using prescriptive methods. However, newer sequentially constructed data centers require a more flexible design approach using performance-based designs.

Marijuana Facilities

Many contractors, designers and authorities having jurisdiction are now dealing with the specialized hazards associated with marijuana growing facilities and extraction facilities. If anyone suggested that this would be a problem for our industry in the 1980's or 1990's, they would have likely been laughed at. However, this is now a reality in numerous states throughout the United States and its bordering countries. Some of the hazards have been studied in detail and specific requirements have surfaced. The challenges were initially felt in Washington and Colorado but are now being experienced all over.

We see some of the challenges in the questions asked as part of the Expert of the Day (EOD) program. In facilities where extraction processes occur, there are flammable gases used which can and have caused deflagrations (explosions) or flash fires. The installation of a sprinkler system is not the only answer to the

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problem. Fire prevention, housekeeping, and other mitigation methods are needed in these facilities. The operators can be very sophisticated or in other cases very naïve about the hazards in their facilities. There are a number of papers and research studies that have been conducted to assist in defining criteria, but the problem changes as the technology and methods continue to evolve in that growing market.

Another issue that has crept into our reality is how to deal with movable rack type structures being used for the growth of marijuana plants. The hazard is similar to a greenhouse except that it has live plants found in higher densities and in differing arrangements. There might also be growing lights, watering features, and drains installed. Defining the density and area requirements for these types of configurations might not be simple. Classification of the hazard is needed. Should the plants be considered a storage commodity or is it more appropriate to treat these facilities using occupancy hazard approaches? These are some of the questions requiring answers. How does the presence of solid shelves impact protection requirements? This is another changing environment that likely requires additional study to develop specific prescriptive requirements. Otherwise the only options will be to have performance-based designs where the overall protection schemes for these systems requires individual performance assessments by an engineer and approval by the AHJ.

Automatic Racking Systems (ARS)

Warehousing process design and layout is also continuing to change. Automatic racking systems with robotic picking has now entered the picture in the United States and other countries. We have some requirements for protection in our fire codes and NFPA standards; although, FM Global's requirements provide a better understanding of what should be done in these types of facilities. Market needs are requiring facilities to be more expansive thus surpassing the current protection requirements.

This was evidenced in the Ocado Warehouse fire in Andover, Hampshire, UK last year. These types of incidents are financially devastating but also provide valuable lessons. Each major fire typically results in the breakdown of one or more aspects of the overall fire protection and prevention concept for a facility. Sometimes the investigation can identify vulnerabilities associated with some of the decisions made during the construction process, or by facility management afterwards.

The economic desire that drives the change in these facilities could also be considered to have caused its demise. This was not a failure of the sprinkler system, it worked as it was designed to. The real breakdown related to a change in the environment which prevented firefighters from doing their job. The facility had sprinkler protection designed according to FM Global requirements. However, the ARS storage exceeded height and area limits. Although the sprinkler system reportedly operated as intended, the firefighters could not get to the fire to extinguish it due to poor visibility and equipment obstructions. As a result, the water supply was consumed, and the sprinkler system was overwhelmed.

I am quite certain that the outcome of this event will lead to future changes in requirements but also highlights the true importance of a holistic approach to fire protection.

Museum Galleries

There are other ways in which environments change. Museums galleries are a good example since exhibits are constantly changing. The layout of exhibits often includes changes to the physical construction of the gallery hall along with the contents of the exhibits. Fire protection impacts are sometimes overlooked in these types of facilities. In others, an assessment of fire protection features would be made for each and every exhibit change. Providing sprinkler protection in a cost competitive manner which meets minimum code requirements is not always the only objective. Sometimes it is also necessary to include features which will allow for flexibility in sprinkler system modifications to accommodate changes in these exhibit galleries.

It is also important to understand that museums are often used for social events. Galleries are sometimes configured to have catered events, seating, temporary storage, and open heat sources. Design of a sprinkler system as a light hazard occupancy might not always be appropriate.

Not all museums are the same, they range from single story, single room cottages to multi-floor expansive facilities. Identification of key objectives for the design of sprinkler systems, (essential in these types of facilities), is only found through communication with the design team (if there is one), conservators, curators, facility operators, insurers, and other stakeholders. As an installer, designer or engineer, it is next to impossible to know how the museum will operate without having these discussions. It may be determined that exhibit halls will be turned over on a 6-month rotation which could require reconfiguration of the fire protection each time.

Although not required for compliance with the minimum requirements of the codes and standards, there might be a need or desire to zone each gallery (exhibit hall) separately to allow for modification while minimizing impact and impairments to the remainder of the facility. In other instances, there may never be a need to make modifications.

Modern Vehicles and Parking Garages

We routinely receive EOD questions relating to car stackers. Protection requirements vary drastically throughout the United States and Canada. This issue was discussed in an article written by Ken Isman, which was published in the March/April 2007 issue of SQ magazine. The initial frustration of defining protection for these configurations led to NFSA's submission of a public input for the 2016 edition of NFPA 13. By definition, extra hazard (Group 2) occupancies can have extensive shielding. Clarification was added to the 2016 edition of NFPA 13 which added "car stackers and car lift systems with 2 cars stacked vertically" to the list of extra hazard (Group 2) examples in annex section A.5.4.2 (NFPA 13-2019 section A.4.3.6).

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5.4.2* Extra Hazard (Group 2). *Extra hazard (Group 2) occupancies shall be defined as occupancies or portions of other occupancies with moderate to substantial amounts of flammable or combustible liquids or occupancies where shielding of combustibles is extensive.*

A.5.4.2 Extra hazard (Group 2) occupancies include occupancies having uses and conditions similar to the following:

- 1) Asphalt saturating
- 2) Flammable liquids spraying
- 3) Flow coating
- 4) Manufactured home or modular building assemblies (where finished enclosure is present and has combustible interiors)
- 5) Open oil quenching
- 6) Plastics manufacturing
- 7) Solvent cleaning
- 8) Varnish and paint dipping
- 9) Car stackers and car lift systems with 2 cars stacked vertically

In addition, testing by BRE Global in Great Britain demonstrated that installing sprinkler protection beneath the upper car could also be a viable option while maintaining ordinary hazard protection at the ceiling.

These options allow for protection schemes involving car stackers limited to two vehicles in height. However, as with most occupancies, there is constant change. Reports of car stackers having, four, five, seven, eight and even nine vehicles stacked vertically introduces additional uncertainties.

A Public Comment (PC 209) was submitted as part of the NFPA 13-2019 code cycle (A2018). The proposed section was as follows:

20.17 Protection of Car Stackers and Car Lift Systems.

20.17.1 *Car stackers and car lift systems with cars stacked 2 vertically shall be protected as an extra hazard group 2 occupancy. Reduction in overhead area of application shall be allowed in accordance with 20.17.3*

20.17.2 *Car stackers and car lift systems with cars stacked more than 2 vertically shall be protected as follows:*

1. *An automatic overhead wet-pipe sprinkler system designed to Extra Hazard Group 1. Reduction in the overhead area of application shall be allowed in accordance with 20.17.3; and*
2. *Standard coverage sidewall sprinklers listed for ordinary hazard shall be provided under each parking level, including the bottom level if the car stacker or car lift system is provided with a pit. Each sidewall sprinkler shall cover an area not to exceed 80 square feet; and*

3. *Flow from all sprinklers in the area of application including those at the ceiling and those below each level of the car stacker shall be included in the hydraulic calculation.*

20.17.3 *The area of application of the overhead system may be reduced from the required 2500 sq. ft. but not less than 1500 square feet if:*

- 1) *1-hour fire rated walls are provided to separate the car stacker areas from the standard parking stalls, and*
- 2) *The car stacker areas are divided up into areas by 1-hour fire rated walls, and*
- 3) *One-hour fire rated walls are provided to separate the car stacker areas from any other areas in the garage, though no separation is required from the drive aisles.*

The following substantiation was included with the public comment submitted by Sagiv Weiss-Ishai of the San Francisco Fire Department:

“Currently, NFPA 13 does not address how to handle cars in car stacker and car lift systems when they are stacked more than two vertically. The proposed added language addresses this gap.”

My records indicate that the technical committee “rejected, but held this comment.” This means that the technical committee was not necessarily opposed to PC 209, but did not have sufficient information to accept it. The “reject, but hold” also meant that this PC was returned to the technical committee as a public input during the current code cycle (A2021). Unfortunately, there was still insufficient information for the technical committee to make a change during the first draft.

There is a lot of debate over the appropriate classification of a modern parking garage as ordinary hazard (Group 1) which may or may not be appropriate. This is subject to debate and is the focus of a current Fire Protection Research Foundation (FPRF) project. The classification is based on testing done in the 1970’s and the cars of that era were primarily steel and had metal gas tanks.

The hazard has changed. The argument for parking garage fires was always that one or two vehicles would be lost, but the concrete structure would be robust enough to withstand the exposure and the fire department would be able to extinguish the fire. This is no longer the case. There have been numerous fires of significance in the past several years in open parking garages without sprinkler protection. Two fires of significance occurred in 2018. A fire in the UK resulted in the loss of a 5-story parking structure constructed of concrete and 1,400 vehicles. A second fire in 2018 in Brooklyn, NY resulted in the loss of 120 vehicles and injuries to three fire-fighters and 18 civilians. Another multi-hundred vehicle loss was experienced in Cork, Ireland in 2019. And most recently, there was a fire in Norway at an airport garage on January 7, 2020 where hundreds of vehicles were lost, the airport was shut down and the building incurred major structural damage.

Modern vehicles containing significant amounts of plastics are easier to ignite and burn much more intensely. It has also been

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found that approximately 70% of all combustion engine vehicles have plastic gas tanks. These differences have changed the hazard from what was contemplated in the testing done 50 years ago. The other significant change has been the use of lithium ion battery technology in electric vehicles. Damage to the batteries can cause thermal runaway which results in very intense burning that requires copious amounts of water to control the fire, let alone extinguish it. Testing of lithium ion batteries suggests an Extra hazard (Group 1) application rate might be the minimum discharge required.

The National Transportation Safety Board has identified that many fire departments throughout the country do not carry enough water to extinguish roadway vehicle accidents involving electric vehicles. Their findings suggest that three to four times the amount of water is necessary to extinguish these fires. As a result, it is often necessary to allow the vehicles to burn until the fuel runs out. There have also been many instances where the initial fire has been extinguished but the vehicle is involved in one or two additional subsequent fires. The hazard associated with these vehicles is definitely much greater than what is presumed in an ordinary hazard fire.

Required protection schemes for car stackers vary throughout the country from extra hazard (Group 2) with sidewall sprinklers below every level to ordinary hazard (Group 1) with sidewall sprinklers below every level, or even others designs requiring secondary water supplies and compartmentalization. This is a subject area where

additional research is needed.

There are two possible compliant options for two level high car stackers: 1) using a ceiling only design based on extra hazard (Group 2) as identified in NFPA 13-2016, or 2) using a ceiling only design based on ordinary hazard (Group 1) and sprinklers below the upper vehicles which would be considered obstructions greater than 4 ft in width. The BRE testing could be used to support the later if approved.

The design for multi-level stackers having more than two cars stacked vertically requires engineering evaluation. Certainly, it could be argued that a ceiling design using ordinary hazard (Group 1) and sidewall sprinklers below each level or that the ceiling level system might need to meet extra hazard (Group 2) requirements with sidewall sprinklers below each level might be appropriate. Right now, it is anyone's guess as to what would be appropriate. The FPRF study is in Phase I with an expected draft report scheduled to be issued in the next couple of months. Hopefully, this FPRF project will help to provide a better understanding of the true hazards in the future so that definitive protection requirements can be formulated by the NFPA 13 technical committee.

These are just a few examples of the way our environment continues to change. The construction industry is constantly evolving. Architects continue to push the boundaries of code compliance in ways that make it difficult to do things the same on every project. All sorts of changes can be observed, from the way buildings are designed and built, to the materials used. •

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2021 IFC Storage Frequency Inspections

by Jeffrey M. Hugo, CBO, [Director of Codes and Public Fire Protection](#)



Maintaining buildings and fire protection systems, such as the NFPA 25 (*the Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems*) is one of the International Fire Code's (IFC) main purposes. When it comes to high-piled storage and fire sprinkler systems, the 2021 IFC has a bold new requirement that intends to improve the tracking of changing commodities, fire sprinkler system maintenance, and overall fire performance of high piled storage systems.

The new text for the 2021 IFC is in the housekeeping and maintenance section. This section is for the building owner, enforced by the fire code official for existing storage buildings such as aisle, height of storage and flue space clearances. So, it seemed to be a natural fit to add to this section the requirement to enforce previously approved storage and fire protection systems, listed in IFC Section 3201.3.2. The new 2021 IFC text is below:

3205.1 Storage layout plan maintenance. *The approved storage layout shall be verified and evaluated annually in accordance with Section 3201.3.2. Modifications or changes to the provisions of the approved storage layout shall not be made without prior approval of the fire code official.*

The "...approved storage layout..." per Section 3201.3.2 is an actual posted floor plan in a conspicuous place that shows over nine critical areas for storage buildings to maintain throughout the life of the building. It is important to note a posted floor plan is only for newly installed or modified systems that underwent a change that required a permit and a plan review with construction documents.

The posted storage layout plan is required to be "...verified and evaluated...". The verification portion is to insure the previous posted floor plan is still posted. It would be difficult for facility manager or building owner to continue with these maintenance requirements if the actual roadmap is missing. The evaluation portion of the text is to visually check the storage plan to the actual storage conditions. Building owners need to understand that the operations and fire protection systems are based on what, how, and where storage is occurring. For example, when commodities, packaging, and pallet types change it can affect how the sprinkler system will operate, control or suppress the fire. As commodities, packaging and storage methods continually change, the evaluation is to make sure the fire protection system still provides the same level of protection. The important part here is the approved storage plan and fire protection system was designed together and needs

to remain in-sync for the life of the building. Storage deviations can and do affect how fire protection systems and fire departments perform during a fire in the facility.

The "...annually..." portion of the text is a frequency that the verification and evaluation of the current storage situation to the approved plan must occur. The annual inspection is performed by the owner or the owner's representative. It would be a mistake to confuse this inspection by the owner to an annual inspection using NFPA 25. Both inspections are required. The annual inspection of NFPA 25 is for the fire protection system, i.e. sprinklers, fire pumps, tanks, etc. as installed. NFPA 25 does charge the owner, in Section 4.1.6, to evaluate any system changes, changes in commodity, etc, but there is no codified mechanism to require such inspection until the 2021 IFC. Where the owner typically hires a sprinkler contractor to do the annual NFPA 25 inspection, the owner could perform this visual IFC inspection or hire it out. The AHJ could also perform this IFC annual inspection where it could correlate with an operational permit, or other annual inspections. Ultimately, it is the owner's responsibility to make sure any inspection, regardless of the frequency, is performed.

The remaining sentence on "Modifications or changes...shall not be made without... approval of the fire code official." This is another important part for the 2021 IFC. As stated above, Section 4.1.6 of NFPA 25 warns the building owner not to make changes without evaluating if the sprinkler system can still adequately protect the building. The text in the 2021 IFC is for the whole storage building system, including the fire protection system, storage thresholds, access and more. Building and fire protection system changes will trigger checking with the fire code official prior to any modifications to the floor plan. This is like other plans in the IFC (such as lease plans, door removals, fire drills, etc.) that adds an additional level of communication between the storage management and the local fire code official.

Sprinkler systems and storage building rules span across the IFC, NFPA 13, and NFPA 25 at the very minimum. These codes and standards, used by the code official, contractor, and building owner can be complex but the subject of this article, the change to the 2021 edition of the IFC is attempting to bridge the three together. It will increase the fire and building performance by tying who, where and when of existing storage building inspection. For more on the 2018 IFC changes, and a deeper explanation of the storage layout plan (2018, IFC Section 3201.3.2) see *Code Corner: 2018 IFC Chapter 32 Changes* in the September/October 2017 edition of NFSM. •



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NOTES
FROM THE

Fire Scene

2020 Annual Seminar... We Sure Hope You'll Join Us There!



by Vickie Pritchett, Executive Officer

Annual Seminar time is one of my favorite times of the year! Why, you may ask? Because I get to see so many friends who are like family! That's right, I always describe our group to the hotel prior to our arrival as one big family reunion! In my opinion, the fire sprinkler industry is a lot like one big family. Your respective love of making a difference, of saving lives, and finding new and creative ways to tell the world who we are and what we do. Yes, we are family! (and proud to declare it to the world).

Have you made plans to join us at the JW Marriott Desert Ridge Resort in Phoenix? It will provide the perfect gathering spot for our *2020 Annual Seminar and Business & Leadership Conference*. The Seminar Committee has lined up an awesome selection of workshops that have a wide variety of topics on business, leadership and technical topics. There is something for everyone, and we hope you'll bring your team and enjoy learning, networking and planning with our Team NFSA family!

We will be joined by President Harry S. Truman's grandson **Clifton Truman Daniel**, who will be our keynote speaker at Opening General Session on Thursday, April 30, 2020. Clifton has studied his grandfather and will amaze you as he slips into character to deliver the speech on fire prevention from 1947 that President Truman made following a rash of deadly fires! President Truman had a way of communicating that still resonates today, and we are excited to partner with Clifton to see his legacy continue today. As President Truman challenged fire service and association leaders in 1947 to take action against the deadly fires that were ravaging our nation, we can continue to do so today. Let's join "Give 'Em Hell Harry" and make his vision for a Fire Safe America a reality in 2020!

We are excited to have **Gene Marks** join us for our Closing Gen-

eral Session, I want to share with you Gene's description of himself because I think it will give you a glimpse of the caliber of speakers we are bringing to you! "I was a former senior manager at KPMG and since 1994 the owner of the Marks Group PC, a 10-person customer relationship management consulting firm based outside Philadelphia. I've written six small-business management books, most recently *The Manufacturer's Book of Lists* and *In God We Trust, Everyone Else Pays Cash: Simple Lessons from Smart Business People*. Besides Forbes, I formerly wrote for *The Washington Post* and the *New York Times* and now write regularly for *The Guardian*, *The Philadelphia Inquirer*, *Inc. Magazine*, *Entrepreneur Magazine* and *Fox Business*. I make no compensation from the number of people who read what I write." From CNN to Fox, Gene is known for being spot on with his economic forecasting and his interpretation of the U.S. economy. We look forward to his insight for our industry and construction in general.

We also hope you'll join us for the Fifth Annual Common Voices Golf Classic, which will be held on Thursday afternoon.

To register for the conference, visit

<https://members.nfsa.org/event/AnnualSeminar2020>

I sure do hope to see you in the valley, ready to show everyone *#fastestwater* under the sun!

Until next time, stay safe!

Cheers,



#fastestwater
Fire Sprinklers Save Lives!



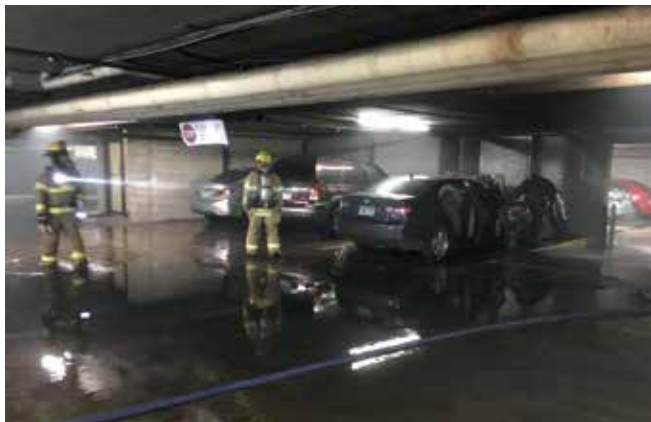
FIRE SPRINKERS IN ACTION

Fire Sprinklers Control Fire in Edina, Minnesota Underground Parking Garage

Thank you to Edina, Minnesota Fire Chief Rick Hamerschmidt for sending us this sprinkler save!

Description of incident:

On December 24th, a vehicle fire broke out in an underground parking garage of an apartment complex. The fire was controlled by two fire sprinklers. Fire damage was held to the vehicle, minor damage occurred to a motorcycle that was stored in front of the affected vehicle.



Nuts and Bolts:

Type of system:	Wet-garage only
Number of sprinklers activated:	Two
Installation Contractor:	Viking
Value of building:	\$20,014,100
Value of contents:	\$10,207,191
Value saved:	\$30,221,291

Sprinkler Save at Minnetonka, Minnesota Apartment Building

Thank you to Luke Berscheid, Minnetonka Assistant Fire Chief – Fire Marshal for sharing the success of fire sprinklers and fire-fighters. The loss of lives in a Minneapolis high-rise in November will result in policy changes, but it shouldn't take a tragedy. We are working diligently to show the comparison of communities that have made good policy decisions in the past, like St Paul. We know San Antonio is working to retrofit all its high-rises, and we know that includes public housing. Thanks to member support and the hardworking team we have at NFSA, we are making progress. Sharing our success is making a difference.

Description of Incident:

Dispatched for north and south water flow alarms at a three-story, 96- unit apartment building. While on the way to the building, we received a report of a smell of smoke on the second floor, and just prior to arrival, smoke coming from unit 108 on the first floor. The call was upgraded to an apartment fire.



As crews were making their way to unit 108 to investigate, it was apparent that water was flowing in the unit, as the hallway was

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wet. Crews made entry into the unit and found a single sprinkler had controlled fire.

The occupants were in the process of moving in, but the unit was unoccupied at the time of the fire. During the move, the occupants had placed combustible items on the stovetop, accidentally turning it on, and left the unit to pick up another load of items. While they were gone, the items on the stovetop ignited and spread to the kitchen cabinets. One fire sprinkler in the kitchen activated which controlled and extinguished the fire.

Nuts & Bolts

Date & Time of Incident:	10/18/2019 at 5:11p.m.
Type of Building:	3-story apartment (R-2)
Living Units:	96
Type of System:	Wet
Number of Heads Activated:	1
Value of Building:	\$9,689,000
Value of Contents:	\$1,440,000
Value Saved:	\$11,091,000

Farmers Branch, Texas Fire Department Reports Two Recent Sprinkler Saves!

Thank you to Tim Dedear of the Farmers Branch Fire Department for sending us these saves!

Description of Incident:

On November 27, 2019, at approximately 11:08 am, the Farmers Branch Fire Department and Addison Fire Department responded to an automatic fire alarm – water flow alarm at Jefferson Landmark Apartments. Farmers Branch Medic 132, Addison Battalion 101, and Addison Engine 101 arrived on scene at 11:13 am with nothing showing from the exterior. Crews were directed to apartment #1209. Occupant stated that she was heating food on the stove and she had turned away for a brief minute. Later she observed the pan of food on fire. Occupant grabbed the pan to carry to the sink to put the fire out. During this time, the single station smoke alarm activated in the apartment and startled her. Occupant dropped the pan on the floor and the fire increased in size. The heat activated one sprinkler above the sink and stove. The fire was extinguished. Sprinkler floor control valve was shut off and water was removed out of the unit. Units cleared the scene at 11:54 am.

On November 18, 2019, at approximately 5:41 pm, the Farmers Branch Fire Department responded to an automatic fire alarm – water flow alarm at a local manufacturing plant. Farmers Branch Engine 132 arrived on scene at 5:45 pm with nothing showing. Upon further investigation, building personnel directed the crew to a manufacturing processing machine. The product within the machine overheated causing one internal sprinkler to activate. Fire loss was estimated to be \$0. Engine 132 crew shut off the control valve. Building occupants notified their fire protection company to replace the sprinkler and recharge the system. Engine 132 cleared at 5:55 pm.

Single Sprinkler Saves Schnectady, New York High-Rise

Thank you to NFSA member SRI Fire Sprinkler's Justin Russell for sending us this sprinkler save!

Description of Incident:

A fire broke out at Summit Towers, a 12-story high-rise in Schenectady, New York on Sunday, January 5th, 2020. The fire was located within a bedroom in an apartment on the 4th floor. The blaze began by minors playing with fire.

The fire sprinkler system activated, and the fire was contained to the area of origin by one sprinkler. The fire caused minor damage to the contents within the room. All occupants were able to reside back in their apartments within 24 hours.

Summit Towers is federally subsidized Section 8 housing for those 62 or older and for people with disabilities. It is filled to 100 percent occupancy.

Sprinkler Save at Burnsville, Minnesota Apartment Building.

Thank you to Jon Nisja, Supervisor, Minnesota State Fire Marshal Division and Jim Shull Owner / President, Express Fire Protection Services, Inc. for sending us this sprinkler save!

The fire sprinkler system, serviced by NFSA member Express Fire protection, in a Burnsville, Minnesota apartment building controlled a dryer fire on Sunday, December 22nd.



Sprinkler Save at the \$34 Million Maris Apartments in Annapolis, Maryland

Thank you to John Lane, AHJ with the Anne Arundel County, Maryland Fire Department for sending us this sprinkler save!

Description of incident:

A box of food was placed on top of a stove, burner knob possibly bumped, electric burner heated cardboard box with contents to ignition temperature. Fire extended into cabinets then placed in check with one sprinkler activation seven feet from front of stove and cabinets. Responding fire units used a 2 ½ gallon water can to extinguish what was left of the fire.

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Nuts and Bolts:

Type of system:	13R-wet
Number of sprinklers activated:	One
Value of building:	\$34 million
Value of contents:	\$10,000
Value saved:	\$5,000 contents, \$34 million structure

*“Fire suppression and detection systems save lives and property,”
–John Lane.*

Sprinkler Save at 53-Story Senior Independent Living High-Rise

Thanks to F.E. Moran’s Gavin Hansen for sending us this great save! F.E. Moran did the original install 10 years ago and have provided service and inspections ever since!



From F.E. Moran’s Field Work Order:

Responded to a call at 7:00 p.m. about a fire in the kitchen on the 26th floor. Sprinkler had activated and extinguished what looked to be a stove fire and needed to be replaced so system could be returned to service.

The photo is worth 1,000 words!

Fire in Conroe, Texas Apartment Extinguished by Single Fire Sprinkler

Thank you to Stephan Cottar of the Conroe, Texas Fire Department for sending in this sprinkler save!

Description of incident:

“This is the second sprinkler save in the last week. The last was a movie theater. The popcorn machine caught fire and the sprinkler stopped it immediately,” Stephan Cottar

The City of Conroe Fire Department was notified of an apartment fire at approximately 08:25 a.m. on December 3, 2019.

Conroe Firefighters arrived at approximately 08:30 a.m. and discovered an extinguished fire in an upstairs apartment. A single fire sprinkler had activated and extinguished a stovetop grease fire.

There were no reported injuries to firefighters or other occupants of the building. Thanks to the activation of the fire sprinkler, there was minimal fire or smoke damage.



A fire investigation has been completed by the City of Conroe Fire Marshal’s Office and the fire has been classified as accidental in nature.

This incident is an excellent example of the vital role a properly installed and maintained automatic fire sprinkler system can play in saving lives and reducing property damage. It is likely that the automatic fire sprinkler system saved hundreds of thousands of dollars in damage and property loss to the building’s owners and occupants.

Single Sprinkler Saves Wheat Ridge, Colorado Office Building

Thank you to Kelly Brooks of the West Metro Fire Protection District in Lakewood, Colorado for sending in this sprinkler save!

Description of incident:

On November 25th, the fire department was called to a three-story office building. Ironically, the building was just in the process of completing a renovation project which included life safety upgrades like the voluntary installation of the sprinkler system that activated. The call came in as a fire alarm.

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Upon arrival, crews found nothing showing and horns and strobes activated. Building was unoccupied. Interior of building is under construction/renovation. Investigation showed water flow alarm on first floor and smoke detector activated on third floor.

Crews made their way to the South East corner of the first floor and heard water flowing in a large storage room under construction with smoke entirely filling the room.

Further investigation found that a single sprinkler was activated and that there was a small fire directly under activated sprinkler on and around a desk that was extinguished by the sprinkler prior to fire department arrival.

Sprinkler Save at Albany, Oregon Senior Living Facility

Thank you to JCI's Mark Fessenden for sending us this great save with an even better backstory!

Description of incident:

This is a classic example of "fire alarms" and the response of occupancy staff. This would have likely been a multiple loss of life fire without fire sprinklers, as we know well from history, with fire alarms ignored, delayed response, etc.

"I wanted to share this sprinkler save. The fire originated in my Grandmother's room. She shares a room with another woman who's electric blanket malfunctioned. I feel so blessed to be part of this industry," Mark Fessenden

On April 21st, the Albany, Oregon Fire Department responded twice to a fire in a unit at the Brookdale Senior Living facility.

Sandy Roberts of the Fire Department said firefighters were initially called to the facility, by an automated alarm. However, staff at the facility thought it was a false alarm and called the department and told them to disregard the call, she said.

Staff eventually realized there was a fire and called the department again. Roberts said the building was equipped with sprinklers, which activated and extinguished the fire. "It's an excellent case showing why sprinkler systems are incredibly useful," she said. Roberts said the fire appeared to have been started by a nightlight that fell onto a resident's bed.

Albany fire personnel evaluated the resident in the unit that caught fire but did not transport the resident to a hospital. The resident was not displaced by the fire. No injuries to residents, staff or firefighters occurred.

Fire Sprinkler System Saves \$1.2M Pigeon Forge, Tennessee Luxury Cabin

Thank you to Pigeon Forge Fire Chief Tony L. Watson for sending in one fantastic sprinkler save!

Note: This home is an NFSA member install, Cumberland Fire Protection, who does a lot of residential work across the state, including my own hometown of Pleasant View, Tennessee.

Description of incident:

On Thursday, November 21, 2019 at 3:03 p.m., The Pigeon Forge Fire Department received an alarm call at 4125 Sherwood Heights



While responding, our dispatch informed us that they had received multiple calls for smoke and flames visible from a large rental cabin. Upon arrival, we found a working fire on the rear deck of a 6,400 square foot, three-story, rental cabin.



A single sprinkler on the exterior of the cabin held the fire at bay until our crews arrived on scene and put the fire out. It appears that a pool heater in a mechanical room on the rear of the cabin caused the fire and it burned the mechanical room.

There is no doubt this exterior fire sprinkler saved this \$1.2 Million dollar cabin. In addition, it kept the damage to approximately \$15,000.

We felt that it would be beneficial to use this incident to show the benefits of sprinkler systems.

Sprinkler Save at South Glens Falls, New York Apartment Complex

Thank you to Nicholas Quinn of the South Glens Falls Fire Department for sending us this sprinkler save.

Description of incident:

A resident of the Schemerhorn Apartments in So. Glens Falls was working on a computer when a fire started. The resident received burns to their hands and was unable to extinguish the fire. Two occupants evacuated the structure. A single fire sprinkler activated and confined fire to the area of origin.

Nuts and Bolts:

Number of Sprinklers Activated: 1

Value of Building: Approximately \$500,000

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Sprinkler Save at Milliken, Colorado Industrial Building

Thank you to Ty Drage, Deputy Chief of Life Safety, Fire Marshal/Emergency Manager of Front Range Fire Rescue in Milliken, Colorado, for sending us this great save!

Description of incident:

On Monday, November 11, 2019, at approximately 1300 hrs, Front Range Fire Rescue (FRFR) received a report of an explosion and fire at a 150,000 square foot light industrial building. The first fire suppression personnel arrived on scene in less than five minutes and reported no visible signs of fire.

Upon further investigation, it was determined that unsafe hot-work practices were being performed to repair valves on a chemical liquid hauling trailer. The hot-work ignited vapors within the trailer, resulting in a deflagration and fire originating from the top of the trailer. One sprinkler of the building's installed automatic fire sprinkler system activated and completely suppressed the flames with very minimal damage to the \$6.3 million dollar building.



Fort Bend County, Texas-Two Kitchen Fires at Different Apartment Buildings, in Each, a Single Sprinkler Extinguishes the Fire

Thank you to Assistant Chief Steven McDonald of the Fort Bend County Fire Marshal's Office in Richmond, Texas for sending in these sprinkler saves!

Description of incident:

On January 4th, the Fulshear Fire Department was dispatched to an apartment fire. Upon arrival, they found a sprinkler had controlled a kitchen fire. The department stated that prior to their

arrival, a Willowford Fire Department chief had arrived to activate fire and water flow alarms entered the apartment and found the fire extinguished by the fire sprinkler system.

The occupant stated she was home heating a pot of cooking oil in preparation to make fried chicken. The pot was unattended at times while heating. At some point, she stepped out of the apartment. When she re-entered, she saw black smoke coming from the kitchen. Upon investigation, she found the pot of oil had ignited. She placed a kitchen towel over the fire, located her daughter, left the apartment and called 911.

Nut and Bolts:

Number of Sprinklers Activated:	1
Heads Extinguished Fire:	Yes
Damage Caused by Fire:	Fire damage to range hood above stove and underside of cabinets directly above pot of cooking oil that ignited.
Other Living Units Damaged:	No
Pre-Fire Property Value:	\$21,530,720.00
Estimated Damage Value:	\$5,000.00

Single Sprinkler Extinguishes Kitchen Fire in Richmond, Texas Apartment

Thank you to Assistant Chief Steven McDonald, of the Fort Bend County, Texas Fire Marshal's Office for sending us this sprinkler save!

Description of incident:

On January 16th, the Community Fire Department responded to a water flow alarm at an apartment building. Upon arrival, crews noted activation of one fire sprinkler in the kitchen area of a unit in the building. The fire was extinguished by a single fire sprinkler. The fire department closed in the riser to stop water flow and notified the Fire Marshal Investigator.



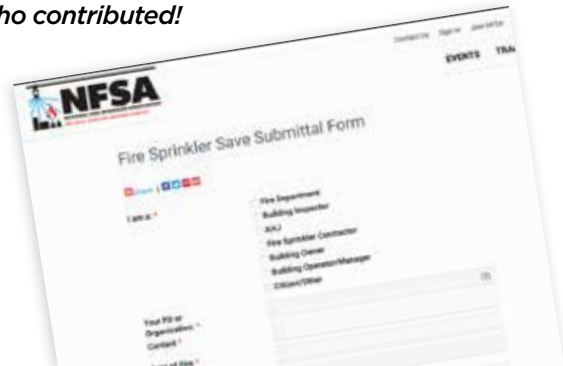


Nuts and Bolts:

Number of Sprinklers Activated:	1
Heads Extinguished Fire:	Yes
Other Living Units Damaged:	No
Damaged Caused by Fire:	Minor smoke and heat damage to ceiling
Pre-Fire Property Value:	\$150,000.00
Estimated Damage Value:	\$20,000.00



Send us your sprinkler saves to be featured in this column. We've made it easy! An online submission form is available at nfsa.org/sprinklersaveform, where you can share your information and upload a photo. Have additional photos you'd like to submit, or don't have the ability to access the form? Send your information directly to NFSM editor Joanne Genadio at genadio@nfsa.org. Thank you to all who contributed!



NFSM Article Submission Guidelines

National Fire Sprinkler Magazine (*NFSM*), a members-only publication of the National Fire Sprinkler Association, is published six times a year. It offers Fire Sprinkler Industry news and articles of interest to Association members.

■ **Query**

Send an e-mail or letter briefly describing your article proposal, why the topic is important, and how it is relevant to our audience. Say something about the sources of your information (*personal involvement? interviews?*) and about your present position and background. Tell us what types of photographs and graphics are available to illustrate your story. Be sure to include an email address and a daytime phone number. *NFSM* runs full-length feature articles of approximately 800-1200 words.

■ **Feature Articles**

Articles for *NFSM* should be on a topic of significant interest to the industry. Articles promoting a specific product or service will not be published. We have advertising opportunities available to boost your sales.

■ **Writing Guidelines**

NFSM tries to maintain a straightforward style. Accuracy is vital. All facts should be double-checked before a manuscript is submitted. All manuscripts must be submitted as Word docs, single-spacing between sentences. Images must be submitted as separate hi-res jpegs. Charts and tables must be submitted as separate pdfs.

Each manuscript should be accompanied by a list of resources on the topic at hand: relevant books and reports, conferences, and/or contact people and

their phone numbers.

To settle points of style, use *The Chicago Manual of Style* (University of Chicago Press).

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NFSM uses a variety of photographs, line art, charts, and maps.

We prefer to receive artwork electronically, and all illustrations should include credit and caption information.

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Sprinkler Protection in Changing Environments

by Vince Powers, *NFSA's ITM Specialist*



In most cases, when sprinkler protection in changing environments is mentioned, it typically means how the industry is changing to new building materials and methods. This article will focus on how to address changes in an existing building using *NFPA 25 the Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems* and the model fire codes.

When sprinklers fail to control a fire, six percent of the time the system was the inappropriate system for the use being protected. This means the system was not designed to protect the hazard or commodity. There are several reasons for the wrong system, such as, when one business closes and another business moves into the space with a different hazard, commodity or changes how items are stored.

Let's start to look at this from a NFPA 25 standpoint. NFPA 25 sets the minimum standards to ensure a reasonable degree that a water-based fire protection system will operate. It does not directly address changes in occupancy or use of an existing building and is not part of routine inspections in accordance with NFPA 25. Section 4.1.6 of the 2017 edition of NFPA 25 addresses the owner's responsibility in ensuring any changes made do not affect the ability of the fire sprinkler system to do its job.

4.1.6* Changes in Occupancy, Use, Process, or Materials.

The property owner or designated representative shall not make changes in the occupancy, the use or process, or the materials used or stored in the building without evaluation of the fire protection system(s) for its capability to protect the new occupancy, use, or materials.

4.1.6.1 *The evaluation required by 4.1.6 shall not be considered part of the normal inspection, testing, and maintenance required by this standard.*

4.1.6.2* *The evaluation shall consider factors that include, but are not limited to, the following:*

- (1) *Occupancy changes such as converting office or production space into warehousing*
- (2) *Process or material changes such as metal stamping to molded plastics*
- (3) *Building revisions such as relocated walls, added*

- mezzanines, and ceilings added below sprinklers*
- (4) *Removal of heating systems in spaces with piping subject to freezing*
- (5) *Changes to the storage method, arrangement, height or commodities*
- (6) *Changes in water supplies*

Since this evaluation is outside the scope of NFPA 25 and routine inspections; the Authority Having Jurisdiction (AHJ) becomes the enforcer of the evaluation requirements. Along with NFPA 25, the AHJ will typically use one of the two model fire codes, NFPA 1 Fire Code or the International Fire Code (IFC) to enforce these requirements. The 2018 edition of NFPA 1, Section 13.3.3.4.1.6* extracts the same text as cited above from NFPA 25, Section 4.1.6. The 2018 IFC, Section 102.3 states, "A change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code (IFC) and the International Existing Building Code."

A tool that can help to determine if the system is correct for a commodity is a general information sign. The general information sign was introduced in Section 25.6 of the *2007 edition of NFPA 13, the Standard for Installation of Sprinkler Systems*. It was later added to Section 5.2.9 of the 2014 edition of NFPA 25. The general information sign has great deal of building, commodity, and system information required to be included on the sign. It can assist the AHJ and building owner in verifying any changes to a building and use.

NFPA 13, 2016

25.6* General Information Sign.

25.6.2 *The sign shall include the following information:*

- 1) *Name and location of the facility protected*
- 2) *Occupancy classification*
- 3) *Commodity classification*
- 4) *Presence of high-piled and/or rack storage*
- 5) *Maximum height of storage planned*
- 6) *Aisle width planned*
- 7) *Encapsulation of pallet loads*
- 8) *Presence of solid shelving*
- 9) *Flow test data*
- 10) *Presence of flammable/combustible liquids*

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- 11) Presence of hazardous materials
- 12) Presence of other special storage
- 13) Location of venting valve
- 14) Location of auxiliary drains and low point drains on dry pipe and preaction systems
- 15) Original results of main drain flow test
- 16) Original results of dry pipe and double interlock preaction valve test
- 17) Name of installing contractor or designer
- 18) Indication of presence and location of antifreeze or other auxiliary systems
- 19) Where injection systems are installed to treat MIC or corrosion, the type of chemical, concentration of the chemical, and where information can be found as to the proper disposal of the chemical

It is not always easy to address changes in occupancy or use, but it is vital in ensuring the sprinkler system will protect the building as it is intended. There are tools in place to assist in making these determinations, such as a hazard evaluation form in Annex H of NFPA 25. As we advance in technology, some of these items will be addressed. As this evolves, we as an industry must work together to educate all parties involved on how to address these changes. •

SPRINKLER SYSTEM — GENERAL INFORMATION		
for		

Pipe schedule system	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date: _____
High-piled storage	<input type="checkbox"/> Yes <input type="checkbox"/> No	Flow test data:
Rack storage:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Static: _____ psi bar
Commodity class: _____		Resid: _____ psi bar
Max. storage height _____ ft m		Flow: _____ gpm lpm
Aisle width (min.) _____ ft m		Pitot: _____ psi bar
Encapsulation	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date: _____
Solid shelving:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Location: _____
Flammable/combustible liquids:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Other storage:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Location of aux/low point drains: _____

Hazardous materials:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Idle pallets:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Dry pipe/double interlock preaction valve test results _____
Antifreeze systems	<input type="checkbox"/> Yes <input type="checkbox"/> No	Original main drain test results:
Location: _____		Static: _____ psi bar
Dry or aux systems	<input type="checkbox"/> Yes <input type="checkbox"/> No	Residual: _____ psi bar
Location: _____		Venting valve location: _____
Where injection systems are used to treat MIC or corrosion:		
Type of chemical: _____	Concentration: _____	For proper disposal, see: _____

Name of contractor or designer: _____		
Address: _____		
Phone: _____		

Courtesy of NFPA 13



<p>The Equipment...</p> <ul style="list-style-type: none"> ▪ Controls discharges ▪ Accurately measures flow rates ▪ Is FM approved ▪ Comes convenient bundled with case storage 	<p>The Software...</p> <ul style="list-style-type: none"> ▪ Easily manages clients and their pumps ▪ Securely stores information in the cloud ▪ Professional pump curves ▪ Field accessibility
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Existing System Modifications —The New Chapter 29



by Roland Asp, *NFSA Manager of Codes and Standards*

The theme of this issue of the *National Fire Sprinkler Magazine* is “Sprinkler Protection in Changing Environments,” and as I was brainstorming to come up with a topic for my article that fits this general theme, I thought “things are changing all the time but one thing remains constant: the purpose of fire sprinkler systems.” Sprinkler systems are installed to protect lives and property from the ravages of fire. Officially, NFPA 13 states its purpose in part as:

“...to provide a reasonable degree of protection for life and property from fire...”

Although the purpose of fire sprinkler systems has not changed, the building that the sprinkler system is installed in does change quite frequently and the sprinkler system must change with it. This article will concentrate on how the 2019 edition of *NFPA 13, the Standard for the Installation of Sprinkler Systems* deals with modification of existing sprinkler systems.

Often a new sprinkler system installation project begins with a clean slate; the new system may be installed in a new building or a new system may be retrofitted into an existing building. Other times the project consists of modifying a previously installed sprinkler system to meet changing conditions within a building. These modifications may be as simple as relocating a few sprinklers due to a change in walls within a building, or a more extensive change consisting of upgrading the system to meet the requirements of a change of use or performing a tenant fit-out of a shell building system. Regardless of the scope of the change, NFPA 13 is still the guiding document and requirements specific to such modification are found within.

Prior to the 2019 reorganization of NFPA 13, the requirements specific to modifications of existing systems was scattered throughout the standard. In order to ensure that all the requirements related to modifying a system has been met, the entire standard must be reviewed. Requirements were found in Chapter 6, 7, 8, 11, 12, 23, 25 and 27. In the 2019 edition, the committee created a brand-new chapter that consolidated all these scattered requirements into one place. These requirements can now be found in the new Chapter 29 titled appropriately enough “*Existing System Modifications*”. The purpose of the 2019 reorganization was to make the document more intuitive and user friendly. The new Chapter 29 is one proof that this effort was successful. It certainly is easier to go to a single chapter to find the modification requirements than to pursue multiple chapters for the same requirements. There were not any

significant technical changes relating to these requirements, the sections, now in Chapter 29, were also in earlier editions – if they could be found!

In order to incorporate the requirement from multiple chapters and concepts in a single location, Chapter 29 is organized into seven sections:

1. General
2. Components
3. Sprinklers
4. Revamping of Pipe Schedule Systems
5. Revamping of Hydraulic Design Systems
6. System Design
7. Testing

Just because Chapter 29 now includes all the system modification specific requirements, it does not mean the rest of NFPA 13 can be ignored. All necessary rules cannot be included in a three-page chapter. NFPA 13 must be followed in its entirety (as applicable) however this chapter will add to or modify the requirements for when changing an existing system. This concept is found right in the beginning of the chapter in section 29.1.1 which reads:

In addition to the applicable requirements of this standard, the requirements of Chapter 29 shall apply where modifications or additions are made to existing systems.¹

As this new chapter does not contain any significant technical changes, this article will highlight how this chapter may help those who are modifying an existing system.

For instance, if on-site welding to modify an existing system is being contemplated, section 29.17 would need to be reviewed. This section which clearly states:

Torch cutting and welding shall not be permitted as a means of modifying or repairing sprinkler system.²

Torch cutting and welding is permitted on new systems (under certain circumstances), but is not permitted when modifying an existing system, as during this modification the sprinkler system would not be operational, and welding will introduce a source of ignition. This is not a new section and was previously found in section 6.5.2.2.5 of the 2016 edition of NFPA 13.

Another improvement of the reorganization is dealing with systems abandoned in place. Certain modifications on existing systems are quite extensive and there are times where portions of

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the existing systems will be taken out of service. A very common question posed to NFSA's EOD service is "can these out of service portions be left in place?" This concept was dealt with in the 2016 and earlier editions of NFPA 13 in Chapter 27, System Inspection, Testing and Maintenance. One of the reasons there are so many questions on this issue is that the ITM chapter probably was not the correct location for this information. In the 2019 edition, this information was moved to Chapter 29, Existing Systems Modifications (Sections 29.2.2 – 29.2.4), which is a much more intuitive location for this information. The problem with systems abandoned in place is that they may give people a false sense of security and, in general, the IFC states that the owner is prohibited from having any device that looks like a fire protection device that does not perform the function of a fire protection device. NFPA 13 goes into a little more detail and the three applicable sections in NFPA 13 (Section 29.2.2 – 29.2.4) basically say that abandoned sprinklers, hose valves, hose and alarm devices need to be removed, abandoned control valves are allowed to stay in place as long as the operating mechanisms are removed and abandoned pipe and other valves are permitted to stay in place as long as they are "uniquely identified to differentiate them from active system piping and valves."

The last example that will be highlighted in this article is regarding revamping of hydraulically designed systems. Section 29.5.1, which was found in Section 8.15.20.5.1 in the 2016 edition of the standard, states:

When hydraulically designed systems are revamped, any existing bushing shall be removed and a nipple not exceeding 4 in. (100 mm) in length shall be permitted to be installed in the branch line fitting.³

The existing bushing that this section is speaking of is not mentioned in Chapter 29, but rather relates to section 16.3.12 titled

"Piping to Sprinklers Below Ceilings". Section 16.3.12.1 states that when a new sprinkler system is being installed and it is expected to supply sprinklers below a ceiling in the future, 1-inch outlets need to be provided. In order to install sprinklers at the ceiling and provide flexibility to allow future modification to extend the pipe to sprinkler(s) below the ceiling, hexagonal bushings can be installed in the 1-inch outlet with upright sprinklers. When the ceiling is installed, the modifications would be in accordance with section 29.5.1, which states that the upright sprinkler and bushing is removed, and a short piece of pipe is installed to supply the new pendent sprinkler(s) below the ceiling. This is the situation which is quite common in shell building installation and tenant fit-outs.

There are many more examples of how Chapter 29 provides guidance when dealing with modifications of an existing sprinkler system. As previously stated, the new Chapter 29 does not really provide any significant technical changes but does dramatically improve the ability of users to find the sections applicable to system modifications. In earlier editions, the requirements pertaining to system modifications were intermittently found throughout the standard but now these requirements are consolidated in Chapter 29. This change adds to the usability of the standard and is just one example of how the reorganized 2019 edition of NFPA 13 improved the standard. The reorganization aimed to follow the process of how the user would approach the design of a fire sprinkler system in a logical manner. The new Chapter 29 contains the applicable requirements specific to systems modifications in one location and this is a change that is logical and of benefit to all the users of this document. •

¹NFPA 13, Standard for the Installation of Sprinkler System, 2019 edition, 29.1.1

²NFPA 13, Standard for the Installation of Sprinkler System, 2019 edition, 29.17

³NFPA 13, Standard for the Installation of Sprinkler System, 2019 edition, section 29.5.1

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Retrofitting: A Vision Achieved

by Keith Brower

Recently our family achieved a milestone in our personal safety by retrofitting our home with a NFPA 13D residential fire sprinkler system. This idea had long been in my mind, but I had been reluctant over the years, concerned about the unknown: Can well water sustain demand? How much drywall will be affected and what would be the cost? Can the system be adequately protected against freezing? But a recent move potentially removed these concerns, we decided to invest effort into the installation.

Our present home is the fifth home our family has lived in. All but one home has been existing construction, and years ago when I tried to have sprinklers included in a residence that was being built in the early 1980s, the builder would not agree to do it.

We now live in a single-story home that was built in 1999. It has a second-floor room over the garage, measures 2,236 square feet and is serviced by public water.

In April 2019, we sought out Wayne Automatic Fire Sprinklers, Inc., to help us determine the feasibility of retrofitting. Representatives conducted two site visits and confirmed the job could be done without a great deal of drywall disruption. Despite having public water, I elected to install a tank and pump system, mainly because I didn't want to have to deal with the possibility of a separate water line from the street, as is required in some localities. (In retrospect, I could have taken the time to research this and I would encourage anyone considering a retrofit to do the research).

Wayne Automatic conducted measurements and calculated the net protected space to be 1,700 square feet. NFPA 13D exempts attic spaces, bathrooms under 55 square feet and closets under 24 square feet. The 2-head design resulted in a fire flow requirement of 28 GPM for seven minutes, necessitating 196 gallons stored for use. We received a set of drawings and I provided these to the local building official, who was quite knowledgeable about residential sprinkler systems.

Within two weeks, our plans were approved. I then purchased a 225-gallon poly tank, which was complemented by a 50 GPM General Air Products fire pump. The tank and pump were placed in the garage on a "built up" platform to elevate such that they met flood zone requirement. Last, the 220-volt power supply was wired in. In a matter of weeks work would be done.

In early December 2019, Wayne Automatic arrived. Our lead installer was successful in locating an interior wall chase which allowed the rated Spears CPVC piping to run directly from the garage to the attic, thus we avoided drywall cuts throughout the

house, saving time and money.

Within two days, all the piping was in place and secured and 21 Viking 494 residential concealed glass bulb pendent heads were installed. The local inspections office was called to witness the system pressure test and inspect the system. It passed with no issues and our cost evened out at \$3.52 per square foot.

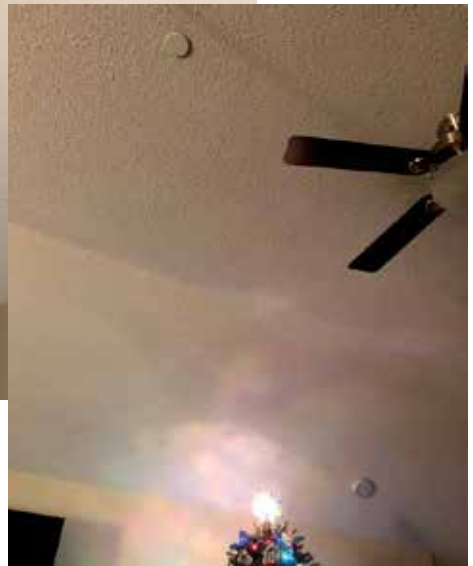
The remaining issues to address are back up power and researching an insurance discount.

Here are some considerations for anyone thinking about a retrofit:

- Pursue the idea, no matter what. Seek facts, don't rely on stories. If you live in a two-story home, there may be a way to bring piping without major drywall cuts. Ask the questions and do the research. Remember, as an advocate, what we do speaks volumes to those who oppose our passion;
- Determine the sprinkler system option. We chose the NFPA 13D system, but nothing prevents you from electing to provide more coverage. Especially living in an area that does not experience freezing, we could, and may, add attic sprinklers;
- Determine your best water supply option. If you live on a well, have a licensed professional calculate the fire flow needs. You can opt for a tank and pump system with a refill component so that you can meet water flow needs;
- Consider your back up power needs; UPS systems are expensive but provide the most reliable emergency power; we have a generator, which means someone must be at home to manually power it up;
- Are there any special circumstances? We live in a flood zone and needed the pump height to be above the minimum elevation as stated on our home flood certificate;
- Have a certified set of plans produced and reviewed. Establish a good rapport with the local building code office. Hopefully you will encounter someone familiar with residential fire sprinkler systems- if not, be patient and seek to educate.

In short, we are blessed to have this done. Even at a higher cost, and if no insurance break comes, it was worth doing. Does this mean our home can't burn down? No. But has this system, in combination with smoke alarms on all floors and in all bedrooms, provided us, as my friend Gary West terms it, with a "reasonable level of protection?" Unequivocally, yes. •

Keith Brower is a retired System Chief from Loudoun County, Virginia.



Retrofitting: A Vision Achieved

NFSA's Erik Hoffer Retrofits His New Home with Fire Sprinklers

by Erik Hoffer, *Executive Director of Northern Illinois Fire Sprinkler Advisory Board*

When Erik Hoffer, Executive Director of the Northern Illinois Fire Sprinkler Advisory Board (NIFSAB), bought an existing home in Frankfort, Illinois, approximately 30 miles southwest of Chicago, he saw it as an opportunity to retrofit with home fire sprinklers before he and his family would move in.

"There are only a few homes in Frankfort that are protected with home fire sprinklers," he said. "Having two young daughters, protecting our home and family with sprinklers was a priority for my wife Karah and me, but it also presented an important educational opportunity for officials in our area."

According to Hoffer, although Illinois has over 110 jurisdictions that individually require fire sprinklers in new construction homes, Frankfort and most nearby communities in the Will County area are not represented in that group.

"The local area has seen quite a bit of opposition to home fire sprinklers during community and county code update cycles, but the tide is starting to change with some progressive newcomers taking positions," stated Hoffer. "An educational open house at our home was the first step in reengaging local officials in the conversation."

While the drywall cutouts were still open and the fire sprinkler piping visible, the Hoffers hosted a "behind-the-walls" open house to introduce their fire sprinkler-retrofitted home to neighbors, elected officials, building officials, real estate agents, and members of the fire service so they could view and learn about the system.

NFSA Illinois State Coordinator Bob Tinucci, representatives from the national nonprofit Home Fire Sprinkler Coalition, and Jen Peterson from Lake Forest-based installing contractor United States Alliance Fire Protection (USAFP) were also there with displays and educational information for guests.

"The event helped dispel the common myths and allowed guests to see how seamlessly fire sprinklers can fit into a home. Frankfort Mayor Jim Holland and Trustee Margaret Farina attended and showed great interest in the system and how it works. They were amazed at how simple it was, even for a retrofit," added Hoffer.

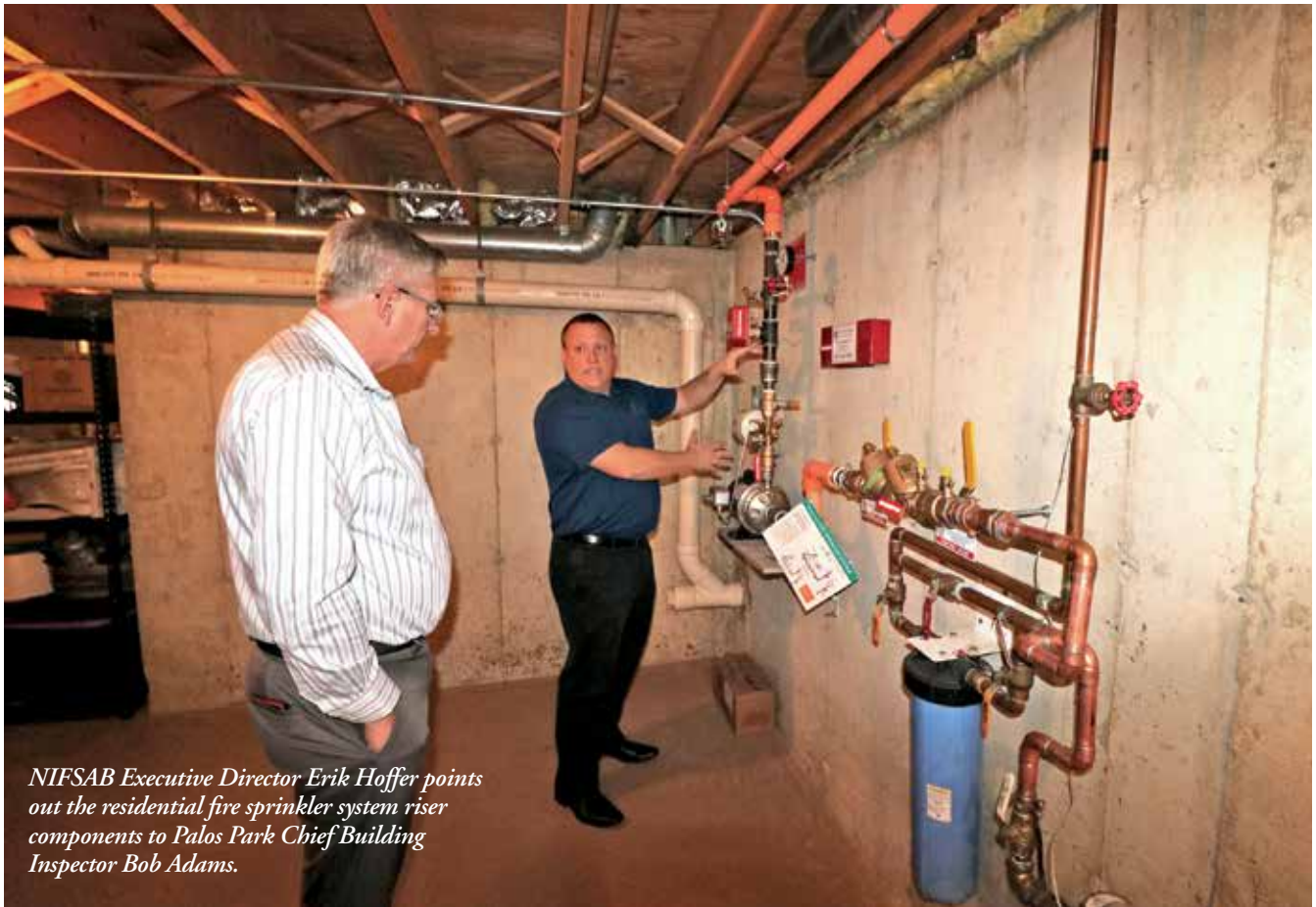
With considerable experience retrofitting homes, USAFP took just over a week to install the system, which includes a residential fire pump, an exterior horn strobe, and two six-inch bells on the return air ducts.

After patching up some holes, minor repainting, and cleaning, the Hoffers were able to move in just before the holidays and able to relax with the peace of mind that they will be protected from fire at all times. They look forward to continuing to use their home as an educational opportunity for various interested groups in the future.

"I am in a role to educate various groups about the dangers of unwanted fire and the important life-safety benefits of fire sprinklers. With my work advocating for fire sprinklers, there was no question I wanted to be able to say 'yes' when asked if I have sprinklers in my own home," said Hoffer. •



Left to right: Jen Peterson (United States Alliance Fire Protection), Marny McNitt (Home Fire Sprinkler Coalition), Margaret Farina (Trustee – Village of Frankfort, IL), Jim Holland (Mayor – Village of Frankfort), Erik Hoffer (Executive Director – Northern Illinois Fire Sprinkler Advisory Board), and Lisa Woodward (Home Fire Sprinkler Coalition).



NIFSAB Executive Director Erik Hoffer points out the residential fire sprinkler system riser components to Palos Park Chief Building Inspector Bob Adams.



NFSA Illinois State Coordinator gives a tour of the fire sprinklered house to Tinley Park fire officials.

Dealing with Trade Uncertainty

by Graham Stonebraker, *McCombie Group, LLC*

Since President Trump took office, the news media has covered the so-called “Trade War” ad nauseam. Businesses are paying attention too. A U.S. Chamber of Commerce survey found that 158 Fortune 500 companies discussed the impact of tariffs and ongoing trade tensions on earnings calls in the first half of this year. While most of the conversation has focused on China and tariffs, there is a bigger picture that is impacting nearly all our traditional trading partners.

Since WWII, U.S. trade policy has focused on liberalizing markets by reducing trade and investment barriers through trade agreements and negotiations. But based on the latest agenda, current objectives include pursuing trade policies that support U.S. national security and preserve national sovereignty, negotiating new trade deals, enforcing U.S. trade laws and protecting U.S. rights under trade agreements, and reforming the global trade system.

We have no intention of attempting to predict the changing landscape of U.S. trade policy. Regardless of whether you support or oppose these policies, what is certain is that this ideological shift is a reality and owners should take steps to prepare their businesses for the inevitable near and mid-term impacts.

Monitor Your Supply Chain

No matter the size of your business, you likely directly or indirectly buy components and raw materials from abroad. Changes in tariffs can have a dramatic impact on your price, which could place you at a cost disadvantage relative to your competitors.

We recommend analyzing each of your suppliers, starting from largest to smallest, to determine which countries you are exposed to. Each year, the Office of the United States Trade Representative puts out a trade policy agenda and annual report. The report includes a list of countries that the U.S. Government is currently negotiating with. If your supply chain is heavily reliant on any of these countries, it might be time to look for alternative suppliers. At the very least, keep an eye on the progress of these negotiations so you can move quickly if things take a bad turn.

On the other hand, the report also lists countries where free trade agreements with the U.S. are in force. While products from some of these countries might be more expensive, others are developing countries where you can source affordable components while mitigating trade risk.

Diversify Your Supply Chain

As the saying goes, don't put all of your eggs in one basket. If you

source all or most of your supply chain from a single country, and relations with that country deteriorate, your business will be in serious trouble. Make sure that suppliers for different components are located in different countries to decrease your exposure to trade risk with any one country. This is a no-regret move as geographic exposure is a risk aside from the trade considerations. For example, 60 percent of the world's supply of critical auto parts were manufactured in the region that was most impacted by the earthquake and tsunami that devastated Japan in 2011. In the days that followed, a General Motors truck plant in Louisiana shut down temporarily for a lack of Japanese-made parts.

It is important to consider that these effects can affect both direct and indirect suppliers. German chemical maker Merck produced its entire supply of Xirallic, a pigment used to create the shimmering effect in vehicle paint, was produced in that very same region in Japan. Merck was unable to access its warehouse in the earthquake's aftermath. As a result, automakers including Ford and Chrysler suspended sales of vehicles in certain colors.

It never hurts to have a back-up plan. Develop relationships with alternative suppliers. That way, in the event of trade pressure or other disruptions in the country where one of your suppliers is located, you will be able to source the missing link in your supply chain with minimal disruption to your business. This has the added benefit of increasing your bargaining power over existing suppliers. If a supplier knows you have another potential supplier competing for your business, you may be able to negotiate better payment terms or lower prices.

Prepare for a Slower Growth World

A recent IMF report has attributed rising trade barriers to its predictions of slower worldwide growth. While the most significant dispute is between the U.S. and China, the rising trade barriers and increasing geopolitical tensions are not relegated to any one country. Overall, trade volume growth in the first half of 2019 has fallen to 1 percent, the weakest level since 2012.

In the face of slowing global growth, businesses should consider moving their supply chains closer to home. Businesses that use domestic suppliers have more control over their supply chains while drastically decreasing the risk of geopolitical disputes disrupting shipments. Of course, businesses typically use imported components for a reason: they tend to be cheaper. There are ways to mitigate this risk. By looking at markets with high levels of imports, businesses can leverage the over-supply of imported goods to negotiate lower prices. •



Industry Standards.

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See You in Phoenix-Where the Wild West Meets the Ultra-Modern!

No trip to Phoenix would be complete without knowing a bit of its Wild West history. In 1867, Jack Swilling stopped to rest his horse at the foot of the White Tank Mountains. He looked down the Salt River Valley and saw brown, dry soil turned up by the horse's hooves. He envisioned farmland, and here would be planted the roots of what would become Phoenix. A little sidebar you might enjoy; Jack died in jail while awaiting trial for highway robbery.

Fast-forward to present times, Phoenix is now the fifth-largest city in the U.S., with a population of over 1.6 million. Phoenix's elevation is 1,117 feet. It is located in the Sonoran Desert, which is one of the wettest and greenest deserts in North America, with 3 to 15 inches of annual rainfall. According to data compiled by the National Climatic Data Center, Phoenix basks in sunshine more often than any other major metropolitan area in the U.S. The sun shines on Phoenix during 85 percent of its daylight hours. The city has an average temperature of 75.05 degrees and an annual high temperature of 86.7 degrees. And for you golfers, know that Phoenix is home to nearly 200 golf courses!

Things to do

DESERT BOTANICAL GARDEN – 50,000 desert plants are nestled amid the red rocks of the Papago Buttes at Desert Botanical Garden. Take a stroll through five themed trails to explore the beauty of desert plant life, from towering cacti and gorgeous succulents to colorful wildflowers and lush trees. Specialized tours are available. There are special events, seasonal exhibits, concerts and family activities scheduled throughout the year. Check the Garden's website to see what's available during your visit at <https://dbg.org/>.

PHOENIX ZOO - The Phoenix Zoo is home to more than 3,000 animals, including 30 species that are endangered or threatened. The zoo opened in 1962 and is the largest privately owned, non-profit zoo in the United States. It operates on 125 acres of land and contains 2.5 miles of walking trails. It is divided into four main themed areas or trails: The Arizona Trail (American Southwest flora and fauna), the Africa Trail (animals from Africa), the Tropics Trail (residents of the rain forests), and the Children's Trail, which includes a petting zoo. The zoo has special events and attractions throughout the year. Check the zoo's website at <https://www.phoenixzoo.org/>.

FIRST FRIDAYS ART WALK – On the first Friday of every month, crowds gather to see artworks in galleries, retail venues and on the street. This is a great way to take in the city's diverse art scene. The monthly events feature rotating exhibitions by artists working with all mediums. You'll also see live street performers and have the opportunity to sample goodies from area eateries and

food trucks. Check it out at <https://artlinkphx.org/first-fridays/>.

PAPAGO PARK – Just minutes from downtown Phoenix, Papago Park is a hilly desert park covering 1200 acres. It has many distinctive geological formations and its wide variety of typical desert plants, including the giant saguaro cactus. The park features picnic areas, several small lakes, hiking trails, bicycle paths, a fire museum, and Hunt's Tomb, the pyramidal tomb of Arizona's first governor. <https://www.phoenix.gov/parks/trails/locations/papago-park>.

CITYSCAPE PHOENIX – CityScape is the central hub of downtown Phoenix, where people go for dining, nightlife, shopping, and entertainment. Encompassing two city blocks, CityScape Phoenix is home to more than 20 great destinations including sophisticated entertainment and nightlife at Stand up Live, Copper Blues, Gypsy Bar and Lucky Strike. <https://www.visitphoenix.com/listing/cityscape-phoenix/4137/>.

PHOENIX NIGHTLIFE – In Downtown Phoenix, be sure to check out the Roosevelt Row Arts District with spots such as The Churchill, Sazerac, Arizona Wilderness Brewing Co., and Angels Trumpet Ale House; Crescent Ballroom, where local and national music acts take to the stage most every night of the year; Cobra Arcade Bar; Bitter & Twisted Cocktail Parlour; Little Rituals; Dust Cutter; The Park; and the two-block CityScape complex, which includes Gypsy Bar and Lucky Strike, Chico Malo, and Blue Hound Kitchen & Cocktails. In Central Phoenix, you can hang out with the locals as they gather after work at neighborhood hangouts such as Culinary Dropout at The Yard, The Vig Uptown, Linger Longer Lounge, The Womack, Across the Pond, The Casual Pint and more. <https://www.visitphoenix.com/things-to-do/nightlife/>

CHASE FIELD – Cubs fans are in luck! The Diamondbacks will be playing the Chicago Cubs at Chase Field on Saturday May 1st and Sunday May 2nd. Catch a game at Chase Field, located right in Phoenix near Papago Park. Did you know Chase Field features a swimming pool in right-center field, which is rented to patrons as a suite holding 35 guests? <https://www.mlb.com/dbacks/ballpark>

Come and enjoy our Annual Seminar and Business & Leadership Conference in the beautiful J. W. Marriott Desert Ridge Resort and Spa, that boasts a AAA-Four Diamond rating, network with the Who's Who of the fire sprinkler industry, learn best practices from industry recognized speakers, visit our supplier and manufacturer members who will be displaying their wares on tabletops near the breakout sessions, and enjoy all Phoenix has to offer in your free time. Great weather, fabulous restaurants, gorgeous scenery, a world-class hotel and your fellow NFSM members all await you! We look forward to seeing everyone there! •



JW Marriott Desert Ridge Resort



Phoenix, AZ

Papago Park



Exterior of Chase Field, Jefferson Entrance



Elephant Watching at Phoenix Zoo



Jack Swilling



Fountains at CityScape at Night



Roosevelt Row First Friday



Desert Botanical Garden Wild Rising Meerkats

We hope you'll choose to support our Advocates' Coalition as we work to create Fire Safe Homes

Working together, we can create resources to educate those who make the decisions regarding community fire protection.

Our goal is to be a go-to resource for community leaders who need a first-person account of the devastating impact fire can have on a community and a family. We can prevent future tragedies, and we believe that our stories help everyone understand in a way that makes a difference. Visit our website for additional resources and information. Order our Media Kit for a complete package of PSAs, media information, talking points, statistics and actual examples of resources used in communities. Your support is greatly appreciated, and as a non-profit 501(c)3 we are now ready to grow our mission and expand our efforts. We hope you'll support our team as an Advocate, Supporter or Corporate member (details on reverse side, along with form).

 CommonVoices1

 CommonVoices1



Did you see us on Fox & Friends and Good Moring America?



fireadvocates.org
Fire Sprinklers Save Lives

Joanis Joins NFSA as Director of Contractor Services

NFSA is pleased to announce that **Michael Joanis, P.E.** has been appointed to the position of Director of Contractor Services. This position is part of the leadership team and reports to President Shane Ray.



Mike will be responsible for assessing the needs of our contractor members and assisting our existing departments with the delivery of technical and member services including engineering, codes & standards, and training.

Mike is a University of Maryland F.P.E. graduate, licensed fire protection professional engineer, licensed sprinkler contractor, and former firefighter. Prior to accepting this position, he served as a managing partner of a fire sprinkler contracting firm and a department head for a consulting engineering firm.

Mike resides in New England with his wife and daughters, who are in college. He will travel to our members across the country, as well as NFSA National Headquarters, in commitment to our

members.

Mike brings over 25 years of experience and a proven track record of success in the fire sprinkler industry, which will be valuable in meeting our goals and objectives.

“I know that Mike will be a critical link on our team with this new position,” explains NFSA President Shane Ray. “Our Board of Directors, the Executive and Finance Committee, and our Chair of the Board, have not only supported this addition of staff, but pushed for it with the appointment of a Technical Services Steering Committee and the advice of outside consultants. The result of a year-long effort and the direction of our Contractors Council is now complete and 2020 is off to a great start.”

We are confident that Mike will be an excellent addition and strong asset to the NFSA team. He will definitely help us achieve our vision of “A Stronger Industry, A Safer World” and our mission of “saving lives and protecting property for fire through the widespread acceptance of the fire sprinkler concept”.

Mike can be reached at joanis@nfsa.org. Please join us in welcoming Mike to the NFSA.

NFSA Exhibits at International Builders Show

A new, big, beautiful booth and the opportunity to turn adversaries into allies. Team NFSA was proud to exhibit at the International Builders Show in January in Las Vegas. The booth drew attendees from throughout the exhibit hall and the placement of our booth in the central hall made for unlimited opportunities to discuss the life- and property-saving benefits of fire sprinkler systems, as well as trade-offs available to builders should they install them. We'd like to extend a huge thank you to our forward-looking Board of Directors and all of the members that made this happen!



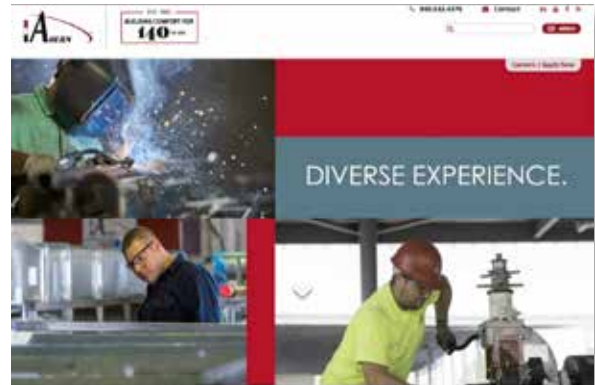
PEOPLE

J.F. Ahern Announces Personnel Transitions

J.F. Ahern is happy to announce that Ryan Plaski and Jamie Fort have both transitioned to Fire Protection Superintendents with the Menomonie office. Plaski joined Ahern as a fire sprinkler foreman and most recently held the role of senior services sales representative. Plaski has 23 years of industry experience and holds licenses as a WI State Journeyman Automatic Fire Sprinkler Fitter and WI Cross Connection Control Tester. Fort has been with the Company for 12 years and previously held the role of sprinkler fitter foreman. He has 22 years of industry experience and is licensed as a Fire Sprinkler Fitter in both the state of Wisconsin and Minnesota. Both are active members of UA Local 669.

In their new roles, Ryan and Jamie will be coordinating and overseeing the installation of company systems to ensure work is performed in accordance with safety, design, budget, and schedule parameters. Utilizing their knowledge and industry experience, Ryan and Jamie will help support the fire protection growth in western and northwestern Wisconsin and Southern Minnesota.

J. F. Ahern Co. is a mechanical and fire protection contractor specializing in HVAC, Plumbing, Controls, Sprinkler, Extinguisher & Alarm and Fabrication for construction and service projects. The company has over 1,400 employees servicing commercial and industrial customers across the United States. To keep up with the latest company news and events, visit jfahern.com.



Fire happens fast!



U.S. fire departments respond to an average of one home fire *every 86 seconds*.

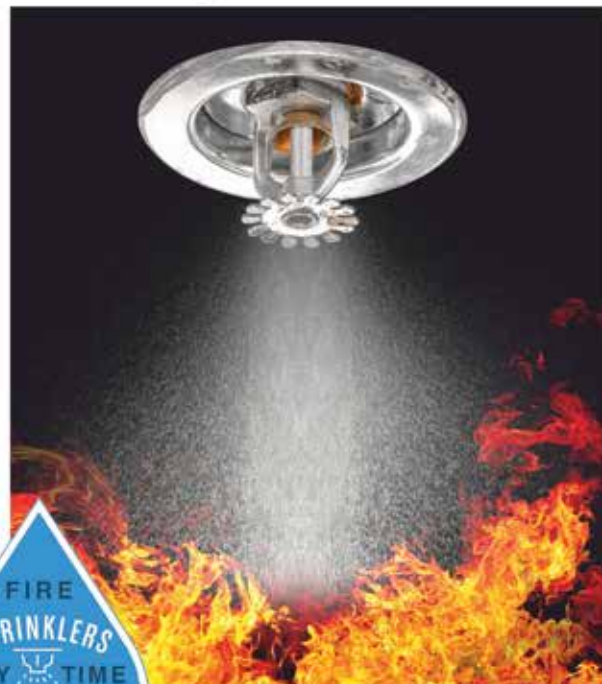
On average, seven people per day die in U.S. home fires where fire sprinklers are not present.

Fire sprinklers can control and may even extinguish a fire in less time than it would take the fire department to arrive on the scene.

In a home with sprinklers, the average *property loss per fire is cut by about 70% compared to fires where sprinklers are not present*.

Residential fire sprinkler systems cut the risk of dying in a fire by about 80%.

But, hey, so does this!



www.nfsa.org



Guns ‘n Hoses

Once again, the **St. Louis Metro Area Chapter** and the St. Louis Fire Sprinkler Alliance teamed-up to sponsor the Budweiser Gun ‘n Hoses event. The event is the largest fundraiser for BackStoppers.

St. Louis BackStoppers began in 1959, recognizing the tremendous sacrifices made every day by police officers and firefighters. Their charity provides needed financial assistance and support to spouses and dependent children of the public servants who have lost their lives or suffered a catastrophic injury performing their duty.

By making mortgage and car payments, paying off debt and defraying the expenses of higher education, the BackStoppers are honoring their philosophy to care for the loved ones of those who have protected us.



“The Chapter and Alliance are proud to be a partner and help our public safety officials in their time of need,” said Richard Boyer of the St. Louis Fire Sprinkler Alliance.

Guns ‘N Hoses has brought nearly 19,000 people together each year to watch firefighters go head-to-head against police officers in a boxing showdown. Annually, the event raises about \$800,000 to provide assistance to about 80 families of public servants in the St. Louis Metro area.

Wisconsin Chapter Presents Antifreeze Discussion

On November 18, 2019 the **NFSA Wisconsin Chapter** presented an antifreeze discussion panel to review the issue. The program panel included Mark Hopkins, NFSA Vice President of Engineering; Kerry Bell, UL Principal Engineer; Mark Fessenden, Johnson Controls Industry Relations Director, and Sean Pearce, Lubrizol Fire Protection Business Manager. They presented information on the history behind the code changes, antifreeze listing process, current listed product from Johnson Controls, and Lubrizol’s current product development.

This was the first offering of this type of presentation which

featured a collaborated effort to educate and inform the industry of the issue and the status of solutions.

We are looking to incorporate some of the information in a short presentation for code officials so that they understand the industry issues and the enforcement actions needed. We hope this will be available online soon.

Presenting the NFSA Texas Chapter!

In November 2019, NFSA North Texas changed its name to **NFSA Texas Chapter**. The name change allows all Texas NFSA members to automatically be Chapter members, serve on the Chapter Board and to participate in meetings and activities.

NFSA Texas bylaws require Chapter Board elections every two years. The official call for nominations has produced the 2020 NFSA Texas Chapter Board Nominating Slate below.

Thank you to outgoing Texas Chapter Chair John Pecot of JCI, Inc. John has served as Chapter Chair and Vice Chair since 2015. We appreciate John’s leadership efforts while forming partnerships with industry groups. We very much appreciate the entire 2018-2019 Chapter Board for their gift of time and support during the past 2 years.

2018-2019 Chapter Board

Chair – John Pecot, Johnson Controls

Vice Chair – Tate Hitzeman, Potter Electric Signal Company

Treasurer – Daniel Merritt, Reliable Automatic Sprinkler Company

Secretary – David Welcher, Automatic Sprinkler of Texas

Officers At Large – Dale Payne Northstar Fire Protection,
Aaron Hitzeman Ferguson Fire & Fabrication

2020 NFSA Texas Chapter Board

Chair Tate Hitzeman, *Potter Electric Signal*

Vice Chair Conor Kauffman, *Kauffman Company*

Treasurer Daniel Merritt, *Reliable Automatic Sprinkler Company*

Secretary David Welcher, *Automatic Sprinkler of Texas*

Past Chair John Pecot, *Johnson Control*

Officers at Large Aaron Wilson, *Ferguson Fire & Fabrication*

Brad Anderson, *Firetron Inc.*

Crystal Reed, *Ferguson Fire & Fabrication*

Dale Payne, *Northstar Fire Protection*

Danna Wells, *Viking SupplyNet*

John Sayre, *JFS Consulting*

Tyler Mobley, *WSP USA*

SPRINKLING OF NEWS

■ Johnson Controls Smoke Detection Technology Designed to Meet 2021 UL Standard

TrueAlarm advanced smoke sensors will meet UL 268 7th edition testing requirements coming in June 2021

The latest updates to UL 268, Standard for Safety of Smoke Detectors for Fire Alarm Systems, call for significant improvements to smoke detection technology. Set to take effect in June 2021, the new UL 268 7th edition standard requires smoke sensors, detectors and smoke alarms to pass more than 215 new or revised performance tests, including three new challenging tests: a cooking nuisance alarm test, a flaming polyurethane foam test and a smoldering polyurethane test. To satisfy these requirements, Johnson Controls is introducing advanced smoke sensors built upon the established performance of its flagship TrueAlarm technology.

The UL 7th edition polyurethane tests better represent the type of smoke and flames produced in modern building fires due to the increased use of synthetic furnishing materials that can ignite and burn faster than other materials. The cooking test was added after



research showed people frequently disable smoke alarms due to nuisance alarms caused by cooking and shower steam.

The new TrueAlarm sensors provide earlier detection, better fire type recognition and fewer nuisance alarms. They use sophisticated algorithms to analyze particles and determine whether they are generated by an actual fire rather than smoke or steam from cooking. Sensor alarm points can be programmed for timed, multi-stage operation per sensor. A lower percentage alert can cause a warning prompt to investigate the issue while a higher programmed percentage will initiate an alarm.

The ability of the redesigned TrueAlarm sensors to intelligently differentiate between high-risk fires and burning food or steam is especially important for commercial spaces such as hotels, dormitories, hospitals and other facilities that are prone to nuisance alarms. The new 7th edition compliant TrueAlarm sensors will be available for both the Simplex and Autocall product families in the Spring of 2020.

For more information, please visit <https://www.johnsoncontrols.com/fire-detection/sensors-and-initiating-devices>.

■ Potter Announces Acquisition of TowerIQ

Potter Electric Signal Company, LLC of St. Louis, Missouri USA, announced the acquisition of TowerIQ, a designer and manufacturer of emergency communication systems with offices in New York, Florida and Kiev. By supporting the technology offered by TowerIQ, Potter expands its capabilities in life safety and emergency communication systems thus providing partners and end users with state-of-the-art wireless communications technology.

Gerry Connolly, CEO of Potter said, “The technology offered by TowerIQ is in the evolving and fast-growing field of Public Safety Two-way Radio Communication Enhancement Systems (RCES), which includes Auxiliary Radio Communication Systems (ARCS) and related monitoring equipment. Since their founding, TowerIQ has been a leader in creating advanced technology that gives first responders the ability to communicate effectively and uninterrupted during an emergency. We are excited to invest in TowerIQ’s technological development and support the management team’s growth strategy.”

Connor Crowley, CEO of TowerIQ said, “We’re excited to become a part of the Potter family and know that with the infrastructure Potter has in place, TowerIQ will continue to grow. Potter has over 120 years of experience as a leader in the Fire Protection industry and we are thrilled to become a part of that history. Our goal at TowerIQ is to ensure first responders can safely communicate during an emergency. Our wireless communications technology will remain on the forefront of the industry. Combined with Potter’s experience as a leading manufacturer in the Fire Protection industry, TowerIQ will have the tools to reach new heights and better serve our customers.”

continued on page 47

An advertisement for ARGCO featuring a collage of fire protection equipment. At the top left is a circular logo with a figure. Below it is a pressure gauge. The central text reads "NOT JUST THE BEST PRICE" above the word "Quality" in a large, stylized orange font. Below the text are various pieces of equipment: a red fire hydrant, a black fire alarm pull station, a red fire alarm bell, a red fire alarm horn, a red fire alarm strobe, a red fire alarm siren, a red fire alarm speaker, a red fire alarm bell, a red fire alarm horn, a red fire alarm strobe, a red fire alarm siren, a red fire alarm speaker, a red fire alarm bell, a red fire alarm horn, a red fire alarm strobe, a red fire alarm siren, a red fire alarm speaker. At the bottom left is the ARGCO logo and the slogan "THE BRAND OF SAVVY SHOPPERS" with the phone number 800-854-1015. At the bottom right is a small logo for "COMING TO A SEMINAR NEARBY & LOCAL CONFERENCE".

continued from page 46

■ Perimeter Solutions Supports Australian Bushfire Suppression Efforts

Perimeter Solutions announced the company is sending additional quantities of fire retardant and resources in support of increased airtanker operations in Australia focused at combating and preventing bush fires.

On January 4, Australian Prime Minister Scott Morrison, announced additional funds would be provided for leasing four additional Large and Very Large Air Tankers (LATs/VLATs) to supplement the current air tanker fleet of six LATs, one VLAT and nine large helicopters. Under the new funding, two additional DC-10s and two MD-87s have been contracted, bringing the air tanker fleet up to eight LATs and three VLATs for the current fire season. The additional aircraft are scheduled to arrive in country over the next few weeks.

Perimeter Solutions is the manufacturer of PHOS-CHEK® Long-Term Fire Retardant (LTR), PHOS-CHEK® WD881 Class A foam and SOLBERG® FIRE-BRAKE™ Class A foam, used by the USDA Forest Service and many other fire management agencies around the world, for prevention and suppression of wildland fires. In collaboration with the company's Australian business partner, PHOS-CHEK Australia, the company has supplied these critical products to the Australian State Country Fire Authorities for years.



PHOS-CHEK Fire Retardant Readied for Transport to Nellis Air Force Base – Nevada.



Fire Retardant Airtanker Drop – Photo Steve Whitby

To support increased air tanker operations during this period of extreme and tragic fire activity, the company is sending additional U.S. and Canadian production and technical service personnel to reinforce existing PHOS-CHEK.

Since the start of the bush fire season, the company has sent thousands of tons of fire retardant and Class A foam in support of firefighting activities.

PHOS-CHEK Australia's Equipment Service Center Operations provides equipment, field services and distribution of parts and supplies for fire suppression operations. The company also operates a fleet of mobile equipment capable of ground applying fire retardant.



OLBERG Class A Foam Bound for Cudlee Creek and Kangaroo Island Bush Fires - SA Australia

In August 2019, Perimeter Solutions and PHOS-CHEK Australia jointly held workshops to support the fire agencies, aircraft operators and timber companies in the use of aerial and ground applied LTR. The workshops were in response to abnormally large damaging bushfire frequency that both Tasmania and New Zealand experienced from 2016-2018.

The workshops were conducted in Launceston, Tasmania, and Taupo, New Zealand. Participants included Tasmania Fire Service, Tasmania Parks and Wildlife Service, Sustainable Timber Tasmania, Timber Companies, National Heritage Area Personnel, SEAT Operators, pilots, vendors and other local Government personnel.

More info: www.perimeter-solutions.com

■ Dyne Fire Protection Labs' New Service – Dry Chemical Testing

Dyne Fire Protection Labs announced the expansion of their lab services to include dry chemical composition testing. The International Maritime Organization (IMO) MSC.1/Circ. 1432, Section 8.2.4 dated May 31, 2012 "Revised Guidelines for the Maintenance and Inspection of Fire Protection Systems and Appliances", requires biennial testing of dry chemical powder for moisture content. In addition to testing for moisture, Dyne is now able to verify that the concentration of the active ingredients meets the manufacturers specification.

Dyne recently developed and validated an analytical method using ion chromatography that accurately quantifies the active ingredients – such as sodium bicarbonate, potassium bicarbonate

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and ammonium phosphate – in a dry chemical sample. This testing may also be useful beyond marine applications. For example, NFPA 10 Standard for Portable Fire Extinguishers, 2018 Edition, Section 7.8.3.4.3 Dry Chemical Agent Re-Use, states “Where doubt exists with respect to the type, contamination, or condition of the dry chemical, the dry chemical shall be discarded.” The testing being offered by Dyne will give inspection contractors a testing outlet to remove doubt and potentially reuse dry chemical that would previously have to be thrown out. Furthermore, this testing may be useful for dry chemical systems referenced in NFPA 17 to ensure the proper chemical is employed both initially and during recharge. This analytical method was developed by Grant Lobdell, who is the Laboratory Manager at Dyne



To learn more about dry chemical testing, please contact: Jennie Novak, Media Relations 2357 Ventura Drive, Suite 108 Woodbury, MN 55125 Office: (800) 632-2304 jennie@dyneusa.com or visit our website at www.dyneusa.com.

■ Reliable Automatic Sprinkler Co., Inc. and Titus Group Inc. Announce Premier Partnership

Reliable Automatic Sprinkler Co., Inc. will begin rolling out Titus pipe connection products for fire protection customers in the Americas market in the first quarter of 2020. Please contact your local Sales and Distribution Center for details.

“This new partnership represents a key strategic opportunity for both organizations,” commented Reliable’s Vice President of System Components Rex Schwendiman. “We are thrilled to offer Reliable customers a new option in high-quality grooved couplings, grooved fittings, and threaded fittings.” “We could not have aligned ourselves with a better national partner to distribute our fire products in the Americas market,” added Titus CEO Max Farley. “Titus has established their name as a premium provider in the high-pressure Industrial and Energy markets,” he continued, “and we’re looking forward to bringing our high-quality battle-tested products to the Fire Protection industry.

Reliable’s expansive distribution network, technical expertise, industry leading service, and customer relationships make them the perfect fit with Titus.” As the Premier Partner, the full range

of Titus fire protection pipe connection products will be available at each of Reliable’s 18 Sales and Distribution Centers. Rigorously tested to Titus’ Quality Assurance Program and backed by an industry-leading 2-year warranty, Titus grooved couplings & fittings and threaded fittings are a natural complement to Reliable’s portfolio of fire protection products.

“Put simply, the Titus partnership is just one more way Reliable continues to improve the portfolio of products we provide to our contractor customers,” noted Reliable® President Kevin T. Fee. “We are always looking for more ways to give Reliable customers a competitive advantage when bidding and installing jobs. This is a prime example.”

■ Kennedy Valve Adds Normally Closed Option to Butterfly Valve Line

Kennedy Valve announced that they have added a normally closed option to their UL-FM butterfly valve line. This option is available on their standard grooved end valve (G300), water valve (W300), as well as tapped long body (G300E) versions.

The normally closed option can be ordered on 6” and smaller sizes. The supervised normally closed option is only intended to satisfy the installation requirements associated with fire pump metering test lines, per NFPA 20, as well as rooftop test units.

Additionally, the G300E (long body version) may be utilized on pressure reducing valve bypass lines per NFPA 14.

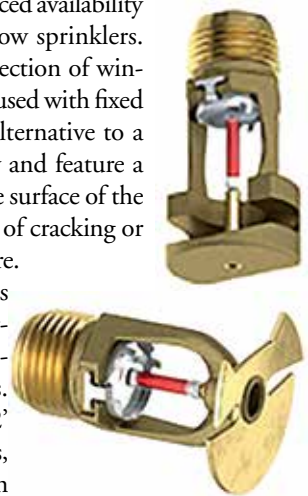
Find out more at www.cadlibrary.kennedyvalve.com, www.kennedyvalve.com.

■ Window Sprinklers from Viking Offer Spacing Advantages for Protection of Interior Glazing

The Viking Corporation announced availability of new specific application window sprinklers. Designed to provide interior protection of windows or glazing, the sprinklers are used with fixed glazed assemblies to provide an alternative to a fire resistance rated wall assembly and feature a unique spray pattern that coats the surface of the glass with water, reducing the risk of cracking or shattering glass in the event of a fire.

Viking’s new window sprinklers are available in both pendent vertical sidewall (VK960) and horizontal sidewall (VK962) models. The VK960 is Listed for up to 12’ (3,7 m) spacing between sprinklers, along with 7’ (2,1 m) maximum distance from vertical mullions, providing significant installation advantages. The VK960 is also Listed at 15 gpm at all spacings up to 12’ (3,7 m). Additionally, both sprinklers offer a maximum pressure rating of 175 psi in all approved applications.

The cULus Listed sprinklers are available in brass, chrome, white



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polyester, black polyester, or corrosion resistant ENT plating. With a thread size of 1/2" NPT or 15 mm BSPT, the 5.6 (81) K-factor sprinkler can be ordered with temperature ratings of 155° F (68° C) or 200° F (93° C).

To learn more about the new window sprinklers from Viking, visit www.vikinggroupinc.com or contact your local Viking SupplyNet distribution center.

■ InstaSeal® CPVC Sprinkler Head Adapter Eliminates the Need for Thread Tape or Sealant

The Viking Corporation introduced a new CPVC sprinkler head adapter that allows for installation without the use of thread tape or sealant. Manufactured with BlazeMaster® CPVC compound at Viking's plastics plant in Charlestown, Indiana, the InstaSeal® adapter allows for fast and easy sprinkler installation.



The InstaSeal® CPVC sprinkler head adapter features brass threads with an EPDM seat for efficient installation.

To install, the contractor will hand tighten the sprinkler until it makes contact with the rubber seat. An additional 1/2 to 1-1/4 turn by hand or with the appropriate wrench completes the installation. The final position of the sprinkler is adjustable, allowing the installer to properly align pendent or horizontal sidewall sprinklers with ease.

Available in 1" and 3/4" slip x thread and spigot x thread models, the products can be used with sprinklers having a K-factor of 5.8 or less. The product joins Viking's industry-leading line of CPVC sprinkler pipe and fittings which now includes three different sprinkler head adapters. Viking is vertically integrated to ensure CPVC material compatibility and product dependability at every step of the supply chain, from manufacture to jobsite delivery.

To learn more about Freedom® residential fire protection solutions from Viking, visit www.vikinggroupinc.com or contact your local Viking SupplyNet distribution center.

■ Zurn Expands California Service Center Operation

Zurn Industries, LLC announces the relocation of its service center facility from Ontario, Calif. to Fontana, Calif. The service center operation move will expand the total space from 115,000 to 186,000 square feet and position the company for future development.

The transition process wrapped up Monday, Nov. 18. The company's customer care and operations teams continued to process orders over the two-day move. The new service center address is 14650 Miller Ave, Fontana, CA 92336.

"As a leader in water solutions, we continually assess our business and keep pace with the industry and our customer base," said Craig Wehr, Zurn President. "Investing in a larger facility allows us to preserve the high level of service customers expect from us."

For more information, visit Zurn.com.

50 U.S. FIRE DEPARTMENTS WILL RECEIVE \$500 FOR LOCAL HOME FIRE SPRINKLER EDUCATION

The Home Fire Sprinkler Coalition (HFSC) is inviting all U.S. fire departments to apply for new stipend awards that will increase local awareness of home fire sprinklers. With generous underwriting from State Farm, National Fire Protection Association (NFPA) and National Fire Sprinkler Association (NFSA), 50 qualifying departments will receive \$500 to enhance their local outreach.

The stipends are being rolled out ahead of Home Fire Sprinkler Week, which will take place across North America May 17-23, 2020. Co-Sponsored by HFSC and the NFPA Fire Sprinkler Initiative, the week emphasizes the dangers of home fires to residents and firefighters and promotes the importance of building new homes with automatic fire sprinklers.

The deadline to apply is March 6, 2020

The stipends will help fire departments of any size or type conduct educational demonstrations. The funds can be used to build a portable, full-scale home fire sprinkler riser display, build or refurbish a side-by-side home fire sprinkler and flashover unit or produce an educational banner. HFSC has comprehensive online guidelines [\[link\]](#) that describe materials, construction and outreach strategies to create these powerful and reusable teaching resources.

To qualify, applicants must be current members of the free Built for Life Fire Department Program (BFLFD), developed by HFSC in the 1990s to help the fire service improve local home fire sprinkler education. They will also be required to describe their plan to use and evaluate their awards. Join the BFLFD Program and apply for a stipend. The deadline to apply is March 6, 2020.

**May 17-23
2020**



**HOME FIRE
SPRINKLER WEEK™**

A project of the NFPA® Fire Sprinkler Initiative®
and the Home Fire Sprinkler Coalition®

CALL FOR SUBMISSIONS!

NFSA Contractor Members

-It's Your Turn to Shine!

In an effort to increase our contractor members' visibility in **NFSM Magazine**, we're looking to showcase your work that dovetails with the themes of our remaining issues. Got some great photos of the work you do? Able to shoot us a quick description? We'd love to feature our members' work on the cover of each issue, as well as within. Themes for the issues follow.

**Send materials to NFSM editor
Joanne Genadio at genadio@nfsa.org.**

Please do not embed photos into a document. We need hi-rez images sent as attachments to an email. For the cover shot, we're looking for portrait-oriented photos.

Any questions, shoot Joanne an email and she'll get right back to you. We can't wait to see what you've been up to!

MAY/JUNE

Advancements in Technology

Deadline March 6th

JUL/AUG

Storage and Shipping

Deadline May 15th

SEPT/OCT

Member Takeover -*your choice!*

Deadline July 15th

NOV/DEC

Sprinkler Acceptance Initiatives -What Are You Doing to Advance the Industry?

Deadline September 16th



REGIONAL NEWS

**From Maine to California,
and every place in between,
NFSA Regional Managers bring
the best of the Association
right to your doorstep.
Helping our members is Job #1.**

CAPITAL REGION

Capital Region Fire Sprinkler Association Free Training Series Developed for the Inspector

We are happy to announce our new partnership with the University of Maryland -MFRI which will host two of the CRFSA's Developed for the inspector series in 2020. These two programs will focus on the operations of fire systems with presentations in the auditorium and hands on in the new valve lab. The June program will once again be hosted by the Fairfax County Fire & Rescue and will focus on fire protection with four great presentations.

June 10th 9am-3pm

Location: Fairfax County Fire & Rescue FASST Lab
12099 Government Center Parkway Fairfax Virginia 22035

October 14th 9am-3pm

Location: University of Maryland Fire Rescue Institute (MFRI)
4500 Campus Dr College Park Maryland 20742

FLORIDA REGION

Bonita Springs Fire Marshal Janet A. Washburn Named FFSA 2020 Champion of the Industry

Janet A. Washburn is a Fire Marshal for the Bonita Springs, Florida Fire Control and Rescue District. She started her fire service career as a volunteer firefighter in 1993 with the Key Biscayne Fire Department and later worked at the City of Hollywood Fire Rescue Department for twenty-one years retiring as a Division Chief of Fire Prevention.

Fire Marshal Washburn earned a Master of Science Degree in Leadership from Northeastern, a Bachelor of Arts Degree in Organizational Leadership, and holds Associates of Science Degrees in Fire Science and Fashion Merchandising. She recently attended Harvard Kennedy School of Executive Education in Cambridge, Massachusetts. After her studies at Harvard, she was requested by the department chair to return and work with the undergraduate students for a special project on decision making for the retrofitting of fire sprinkler systems in residential high-rises.

In addition to her career in Bonita Springs, FM Washburn serves on national technical committees developing fire codes such as; NFPA 101 Assembly Committee, and the NFPA 1 Fire Code committee. She serves on the Florida Fire Code Interpretations Committee, Florida Fire Marshal and Inspector Association Legislative Committee, is Past President of the Fire Inspection As-

sociation of Broward County, is a peer reviewer for the fire marshal designation for the Center for Public Safety Excellence and serves as a peer reviewer for International Fire Protection Engineer group. She was elected to the Board of Director's for NFPA's Certified Fire Protection Specialist group. Fire Marshal Washburn enjoys teaching fire code interpretation to local architects, fire marshals, and fire inspectors in Florida. Recently, she wrote an article on hoarding which was published in the Florida Fire Chiefs Association magazine.

Washburn is passionate about encouraging fire sprinklers in single family residential occupancies and is currently installing fire sprinklers in the new home she is building. She is also lobbying for greater awareness among builders to allow customers to install fire sprinklers in their single-family homes during the construction process.

GREAT LAKES REGION

News from the Great Lakes Region

The 2020 Indiana Residential Code was signed by Governor Eric Holcomb on November 26th and went into effect on December 26, 2019. The code is based upon the 2018 Edition of the International Residential Code with Indiana Amendments, which unfortunately eliminated the model code requirements to sprinkler one- and two-family dwellings and townhouses.

Prior to the new IRC adoption, the State of Indiana was still using the 2003 Edition of the IRC, which was not even available for purchase and badly outdated.

While it is very disappointing that the citizens in the State of Indiana will not benefit from the life- and property-saving benefits available from residential sprinklers, the state does now have requirements for the installation of carbon monoxide detectors and arc-fault circuit interrupters, and every basement will now be required to install an escape and rescue opening, none of which was required under the previous Indiana Residential Code.

GREAT PLAINS REGION

Colorado Chapter of ICC Educational Institute

NFSA will be participating in the Annual CCICC Educational Institute during the week of March 2-6, in Loveland, CO. The conference annually draws about 1,800 building and fire code officials, engineers, architects, and designers. In addition to sponsor-

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ing a booth at the event, the popular NFSA seminar Fire Service Mains and their Appearances will be presented on Thursday, March 5. The course will be modified somewhat to focus on issues specific to the Colorado regulatory environment and will meet the needs of underground fire line contractors and AHJs responsible for accepting these systems. The Division of Fire Prevention and Control will be offering scholarships to cover the already low cost of this program. Additional information can be found at coloradochaptericc.org.

• Colorado Fire Protection Association

NFSA President, Shane Ray presented at the November meeting of the Colorado Fire Protection Association, where he affirmed NFSA support for CFPA's mission. CFPA, while it is not an NFSA chapter, holds many of our goals and objectives and has been successful in expanding the interests of the sprinkler industry within the State. It is the hope of your field service coordinator that Shane or other national staff can be brought out for similar opportunities in the other states within the region.

• Home Fire Sprinkler Coalitions

Your regional field service coordinator has been working with the NFPA regional managers for Wyoming and Colorado and officials within these states in an effort to re-energize the Home Fire Sprinkler Coalitions within these states. Initial meetings have yielded some exciting new directions for both Coalitions, which will be open to anyone with an interest in advancing the cause of residential fire sprinklers. Look for additional information as it becomes available.

MID-ATLANTIC REGION

Legislation Update: Bills Mandating Townhome Sprinklers Show Promise in New Jersey

The New Jersey State Senate voted overwhelmingly in support of Senate bill 3252, also known as the New Townhouse Fire Safety Act. The bill calls for fire sprinklers in new townhouse construction throughout the state. While the bill passed in the Senate, its counterpart in the Assembly, A4713, had amendments made to it. Because technical amendments were made to the bill in the Assembly, the Senate needs to take a procedural vote on the final version of the bill, which is expected to take place on January 9, 2020. Once that happens the bill will go to the Governor's desk for his consideration.

The New Jersey Fire Sprinkler Advisory Board would like to thank everyone for calling and emailing their State representatives to help push passage of the New Townhouse Fire Safety Act A4713/S3252. Input from members and fire service professionals no doubt had an effect in the passing of these bills. The New Jersey Fire Sprinkler Advisory Board is pleased to see elected officials being proactive in curbing fire deaths in New Jersey.

• Philadelphia News Outlet Addresses City's Fire Problem, Expert Weighs in on Simple Solution

WHYY'S Billy Penn magazine covered yet another huge fire in the city in 2019. A rowhome fire in South Philadelphia collapsed

a house and caused two fatalities. It was just one of six major fires this year. The article, which detailed all of these fires, interviewed an architect from Center City who blamed "antiquated electrical systems, lack of general maintenance and the absence of sprinkler systems." While fire sprinklers are required in commercial high rises in Philadelphia that are over 75 feet, they are not mandated in many other buildings, making disastrous fires common year-round. The PenJerDel Chapter will continue to advocate for sprinklers in all buildings and make disastrous fires like these a thing of the past.

Find the full article on billypenn.com.

• NFSA Contractors Launch Media Campaign

Contractors from NFSA's PenJerDel Chapter ran a successful multi-media campaign this past October. The campaign, which focused on inspection, testing and maintenance for fire sprinklers, included digital ads, billboards, television commercials and press releases. The campaign reached millions throughout the Delaware Valley and beyond. This campaign introduced the fire sprinkler concept to many and highlighted the importance of ITM to many more.

To learn more, visit protectphilly.org.

NEW ENGLAND REGION

Legislative Advocacy for Fire Sprinklers

- The "Local Option" Bill in Massachusetts, H-2027, "An Act relative to enhanced fire protection in new one- and two-family dwellings" sponsored by Representatives Balser of Newton and Donato of Medford, and others- for legislation to authorize municipalities to require automatic sprinkler protection systems in certain housing. Testifying in support of the bill were Dr. Colleen Ryan, surgical burn specialist at Massachusetts General Hospital and Shriners' Burn Center Boston MA.; Diana Tenney, Burn Survivors of New England; Rob Feeney, Station Club Burn Survivor; and NFSA Regional Manager Mike Young. The Joint Committee on Public Safety and Homeland Security held public hearings and as of January 2020 the bill has not yet been reported out of committee.



(L-R): Diana Tenney, Burn Survivors Of New England; Dr. Colleen Ryan, Surgeon, Burn Specialist, MA General Hospital and Shriners' Burn Center Boston; Rob Feeney, Onset MA Fire Department and Burn Survivor- Station Club Fire.

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- NFSA’s 30-second Public Service Announcement video, “What Used to Be”, aired during the months of October, November and December on Channel 5 WCVB-TV Boston, as well as in the Western Massachusetts market and Connecticut area on West Massachusetts News: ABC 40; CBS 3 and FOX 6.



- Connecticut Department of Consumer Protection has been working with NFSA’s Roland Asp and Dave LaFond to develop a curriculum and testing standard for an F5/F6 “Limited License” for plumbers to train, test and certify for the installation of multi-purpose fire sprinklers in residential dwellings. Classes are scheduled to begin in April 2020.
- Meeting with Fire Marshals and State Officials to promote fire & life safety through advocacy of residential fire sprinklers is a year-round process. Regional Manager Young met up with four of the New England State Fire Marshals at an NFPA Summit in Lebanon New Hampshire and conducted a Side-by-Side Live Burn Demonstration for the attendees. WCAX channel 3, a CBS affiliate in Burlington Vermont, provided coverage on the local news, while the Valley newspaper did a front-page story on the event.



State Fire Marshals Joseph Thomas, Maine; Paul Parisi, New Hampshire and Michael Desrochers, Vermont; with NFSA Manager Young



Photos of the Side by Side Burn in Lebanon, NH

- Upcoming NFSA Connecticut Chapter Meeting Dates for 2020 April 21, August 11, November 10. Check out the NFSA Events website for upcoming meeting dates and locations of the Connecticut and Boston Chapters

NEW YORK REGION

New York City Pressing Local Law for Residential Retrofit

New York City Councilmember Barry Grodenchik publicly reminded his fellow council members that Intro 1146 is on the table to retrofit all residential buildings of 40 feet or more within the five boroughs by 2029. This link is the Intro language; Int 1146 of 2018

Joining Councilmember Grodenchik on the steps of City Hall were NFSA Regional Manager Dominick Kasmauskas, members of the NYC MCA Fire Sprinkler Council, the Steamfitters Local 638, and the New York Fire Sprinkler Contractors Assn. NFSA members; Tim Bowe, Ivan Pesante, Drew Slocum, Kevin Gillen, Al McKeon were part of the supporters on the scene.

New York State Codes Council Moves to Adopt 2020 NY State Codes

It is expected that the 2020 New York State Codes (based upon the 2018 I-codes) will be available and in force in early March 2020. As with the 2016 New York Codes, there will not be a supplement published to the I-codes. Because of the confusion of researching between a book, a supplement, and any referenced standards, the Department of State has opted to return to the ICC publishing the New York Code set.

NORTH CENTRAL NEWS

Minneapolis recently had a tragic fire in a public housing property. Five people lost their lives. As a result of this fire and one other there will be legislation offered in the 2020 Session to examine the question of retrofit of high-rise buildings. In addition, the NFSA Minnesota Chapter is working on a bill that would allow the State Fire Marshal to retain all fire sprinkler related fees to a dedicated account to be used for their Fire Sprinkler Program. It is possible that these two bills will be combined in the legislative process.

The State of Minnesota passed two high-rise retrofit bills that were vetoed by the then Governor over twenty years ago. NFSA State Coordinator Tom Brace was the Minnesota State Fire Marshal at the time. Seldom does one get a second chance to go back and accomplish what was once a major effort that was not successful. “Recently, I heard a quote that will sum up this effort.” Explained Brace. “The quote was ‘We are what we stand up for.’ The former Governor and lobbyist were interviewed recently, and the Governor thought that maybe a mistake had been made but the lobbyist was unrepentant.”

NFSA headquarters has been extremely helpful in designing a program to move this legislation ahead. We are in very close working relationship with the Minneapolis Fire Chief who has been supportive of our efforts. The Minnesota Fire Service has been a strong supporter of sprinklers and will play a major role in a high rise retrofit effort. We are going to have a busy session ahead with

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hopefully a successful outcome. Certainly, we have just begun.

There is no “good time” to have a devastating fire; every fire results in the loss of treasured heirlooms, a sense of comfort and security stolen forever, the interruption of a business’s operations, and all too often the loss of a beloved pet or family member. You never really recover from a fire. The Christmas season is especially hard on fire survivors and family or business recovery efforts following a fire. There were several fires of national significance during the 2019 holidays, and they marred family and community celebrations with loss and sadness.

Northwest Regional Manager Tim Butler adds: The Minneapolis, Minnesota community suffered a major loss when five people died in a wind-driven high-rise fire in the Cedar High Apartments on the day before Thanksgiving. The 24-story building, owned by the Public Housing Authority, had no sprinklers in the residential floors of the building. This fire prompted the U.S. Senators from Minnesota, Tina Smith and Amy Klobuchar, to introduce the Public Housing Fire Safety Act of 2019, which, if passed, will provide \$25 million in grant funding for sprinkler retrofit projects in PHA properties. The fire has also prompted state legislators to discuss the introduction of retrofit initiatives in high rise properties in Minnesota.

Las Vegas suffered a deadly fire in an unsprinklered apartment building on December 21st. That fire killed six people, left several more in critical condition, and left many victims without a home for Christmas.

The Minneapolis community suffered another devastating fire loss on Christmas Day, when the historic Drake Hotel suffered major fire damage, left several people injured, and displaced more than 200 others. Many of the fire victims were homeless people sheltering in the hotel.

The question, “Why weren’t these buildings sprinklered?” has promoted many local, state, and national conversations that will no doubt lead to positive changes. These discussions are boosted by other stories that occurred over the holidays – stories of sprinkler successes resulting in saved lives, property, and businesses.

A December 11th fire in the first-floor laundry room of the Eddy Apartment building in Des Moines, Iowa was controlled by a single sprinkler. That sprinkler save was a wonderful “retrofit success story.” The retrofit initiative followed a deadly fire in that same building in May 2017, when a fourth-floor apartment fire killed four people, injured several others, and displaced 64 residents.

Another laundry room fire controlled by a single sprinkler occurred in the Fitzgerald Apartments in Burnsville, Minnesota on December 22nd. That sprinkler save was reported by Express Fire Protection Services, an NFSA contractor servicing the system.

A fire in the staff kitchen on the 11th floor of the Kahler Hotel in Rochester, Minnesota was suppressed by a single sprinkler on December 22nd.

Two sprinklers activated to save a residential building still under construction in Saint Cloud, Minnesota on December 22nd. The contents of a garbage can ignited causing sprinkler activation, which controlled the fire until fire crews arrived and put out the remaining fire with a pump can and snow.

These sprinkler success stories are a powerful counterpunch to

the deadly fires that marred the holiday season for so many people. They also offer hope that fire recovery efforts will incorporate sprinkler retrofit decisions and will result in future success stories in 2020.

NORTHWEST REGION



Newly elected Columbia-Willamette NFSA Chapter Board Members meet with outgoing officers for a transition planning meeting. From left: Jeff Murphy, Western States Fire Protection, Steve Cartales, Delta Fire Protection; John Berres, Cosco Fire Protection; Michael Stoehr, Western States Fire Protection; Don Krause, retired from Viking Automatic Sprinkler Co.; Chuck Rabbitoy, Patriot Fire Protection; Grant Laine, Viking Automatic Sprinkler Co. Not shown: Treasurer Kevin Singer, Cosco Fire Protection.

Columbia-Willamette Chapter:

In December, the Columbia-Willamette Chapter bid farewell to John Berres of Cosco Fire Protection, who has served as Chapter Chair since its inception. John will be relocating to the Chicago area. For the past eight years, John worked to form and energize the chapter, push for statewide fire sprinkler contractor licensing, and promote the industry through his involvement with a number of groups and associations. Also stepping off the board is Jeff Murphy of Western States Fire Protection, who provided great insight and perspective for the Chapter and has served as Treasurer. Don Krause who recently retired from Viking Automatic Fire Sprinkler Co. will step down after serving the Chapter as Vice Chair and will continue to serve the serve as a committee chair for Chapter Education. Two current Board members, Chuck Rabbitoy of Patriot Fire Protection and Steve Cartales of Delta Fire Protection, were elected to new positions. The chapter members also voted to amend the Chapter By-Laws to include a Membership Chair as a fifth board position.

Congratulations to the newly elected Columbia-Willamette Chapter officers:

Chuck Rabbitoy, *Patriot Fire Protection, Chair*
Steve Cartales, *Delta Fire Protection, Vice Chair*
Grant Laine, *Viking Automatic Fire Sprinkler Co., Membership*
Kevin Singer, *Cosco Fire Protection, Treasurer*
Mike Stoehr, *Western States Fire Protection, Secretary*

The Chapter is continuing to spearhead the effort to bring fire sprinkler contractor endorsements to the state of Oregon.

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Around the Region

The first few months of the decade brought a host of training opportunities to Northwest NFSA members.

The Fire Sprinkler Advisory Board hosted three days of advanced tech training with Kenneth Isman in Fife, Washington in January. The well-attended classes provided advanced training in subjects identified by members as of vital importance to their design staff: hydraulics, fire pumps and an overview of key points in the codes and standards.

NFSA partnered with the American Institute of Architects for a Design Advantage class in Medford, Oregon. The course addressed Fire Sprinkler Systems in the IBC.

NFSA partnered with the American Alarm Association to offer a course on how NFPA 25 and 72 work together in both Fairbanks and Anchorage, Alaska in January. This popular class offered CEUs that qualified for both fire sprinkler and alarm technicians.

NFSA also partnered with the Alaska Central ICC Chapter for Plan Review class in February in Anchorage as part of the annual Alaska Fire and Building Official Forum.

NFSA will be partnering with the Oregon Building Officials Association for a day of training at its April Education Institute.

Regional Manager Suzanne Mayr also provided fire sprinkler and association membership information at the Alaska Fire Chiefs Leadership Conference in Juneau in February and will be attending the Montana Building Codes Education Conference in Helena in March.

The Washington Residential Fire Sprinkler Coalition hosted its first of three “Best Practices Forums” in January. The next two forums are set for April 14th and Sept. 15th, from 10:00 to noon at Redmond City Hall. The Oregon Residential Fire Sprinkler Coalition kicked off the year with a meeting in February at the Oregon Public Educators Conference; the April 2nd meeting will be hosted by the Eugene-Springfield Fire Dept., followed by a June 4th meeting at Medford Fire-Rescue.

SOUTHEAST REGION

Fire Sprinkler System Controls Arson Fire at Kinston, North Carolina Supermarket

On January 17th, the Kinston Fire Department received a call that two pallets of firewood were burning at local supermarket, just outside the left entrance.

KFD Chief Damien Locklear said the store’s sprinkler system activated on the outside and firefighters were able to extinguish the flames. He said no firefighters were injured and the store was not open at the time.

“There was an individual in the parking area,” Locklear said. “The person is (in custody) with the KPD and we cannot release a name or age.”

The Kinston Police Department said a juvenile male was placed in custody, but did not release a motive.

Sprinkler System Controls Fire in Dothan, Alabama Apartment Building

On January 14th, the Dothan Fire Department was dispatched to an apartment complex in response to fire alarms.

“In a little over three minutes our first unit arrived on scene,” Dothan Fire Battalion Chief David Hasty said. “When they made it to the fire door, they found a room full of smoke inside with just a with just a few flames in there.”

Crews evacuated everyone in the apartment building, extinguished the fire and checked to make sure there was no extension of the fire throughout the building.

“The sprinkler alarm system actually extinguished the fire all but just a little bit of it,” Hasty said. “It actually did what it’s supposed to do. Our units got there and were able to manage the small amount of fire at that point in time.” The chief stated that one sprinkler activated to control the fire.

Damage was minimal and no injuries were reported.

TEXAS REGION

Texas Talk

Real Estate News – The 2018 U.S. Census Bureau data shows a large influx of migration into Texas during 2019 came from highly populated coastal states such as New York, Florida, and California or adjacent states like Oklahoma and Louisiana.

Last year, over 86,160 moved to Texas from California. Migration from Florida was the second highest number of migrants at 37,270 residents making the move to Texas. California residents who moved to Texas could be the result of the Tax Cuts and Jobs Act of 2017, which now limits state and local income deductions to \$10,000.

South Central Fire Sprinkler Industry Events

March 6, 2020	Oklahoma Life Safety Summit
March 25, 2020	Texas Fire Protection Association
March 26-27, 2020	Louisiana Life Safety Summit
April 15-17, 2020	Arkansas Fire Marshals Association Spring Conference & Life Safety Summit
April 22-25, 2020	Oklahoma Fire Sprinkler Association Boondoggle
April 29- May 2, 2020	NFSA National Conference, Phoenix AZ
May 14, 2020	NFSA & FSCATX Joint Fire Sprinkler Industry Meeting, Dallas TX
May 19-20, 2020	NFPA 14 & 25 Pflugerville TX
June 4-7, 2020	Skins & Fins FSCATX, League City TX

WISCONSIN REGION

Wisconsin Sprinkler Save

A Motel 6 in Glendale, Wisconsin caught fire on the morning of December 17th. Thankfully, the building’s fire sprinklers did their job. The alarm came at about 11:00 a.m., sending the North Shore Fire Department to the motel on Port Washington Road. Everybody inside the building was evacuated; some of them elderly and some in wheelchairs. The fire was confined to a maintenance closet on the third floor and the sprinkler system helped crews control the fire quickly.

The cause of the fire was determined to be arson and a suspect had been taken into police custody. •



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