July-August 2024
No. 246

National Fire Sprinkler Magazine

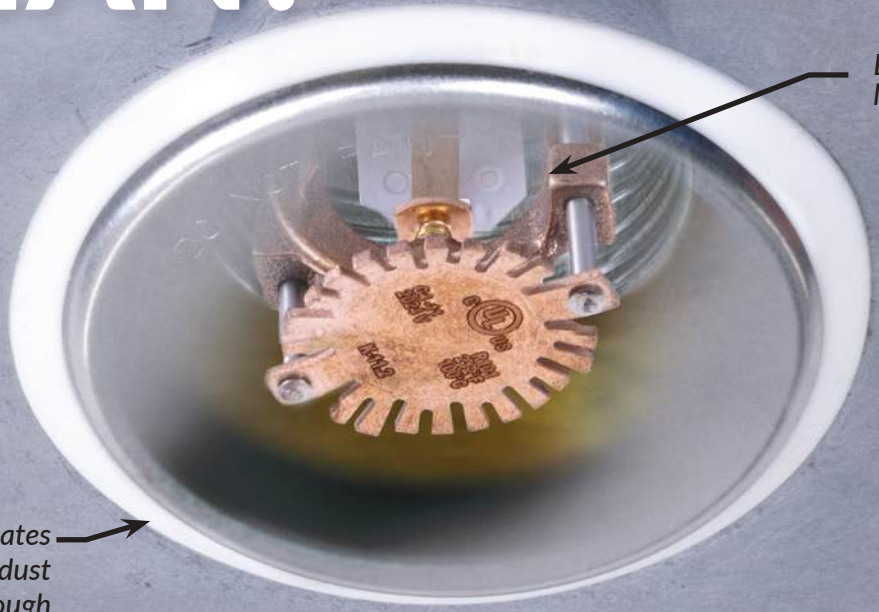
The Flagship Publication of The National Fire Sprinkler Association

NFSA
NATIONAL FIRE SPRINKLER ASSOCIATION
The Voice of the Fire Sprinkler Industry

Inside this issue:

2023 MARCOM
GOLD
WINNER

CLEAN?



New Model G4-11, K11.2 Flat Plate Concealed Sprinkler

for ***industrial clean room applications***

OR DIRTY?

For today's Extra Hazard Occupancies

for ***traditional Extra Hazard applications***

Reliable®

The industry's ONLY lineup of rugged standard response fusible element K11, K14 and K17 spray sprinklers. And introducing the new G4-11 concealed sprinkler with a gasketed flat plate for industrial clean room applications or other finished areas.

ON THE COVER
Team NFSA proudly presents our 2024 Golden Sprinkler Award Recipient, APi's Steve Ulmer. NFSA Chair Jim Boulanger and President Shane Ray were honored to present Steve this year's award in beautiful Maui during our Annual Seminar and Business & Leadership Conference.

ADVERTISERS

EDITOR
JOANNE GENADIO

DESIGNER
JOHN L. SULLIVAN/SULLIVAN Design

"National Fire Sprinkler Association reserves the right to accept or reject any advertisement for any reason, in its sole discretion."

National Fire Sprinkler Magazine (ISSN 1050-4958) (USPS 524-010), is published bimonthly (January/ February, March/April, May/June, July/ August, September/October, November/December) by the National Fire Sprinkler Association, Inc., 514 Progress Drive, #A, Linthicum Heights, MD 21090. Periodicals Postage is Paid at Linthicum Heights, MD, and at additional mailing offices.

Subscription free to NFSA members and member companies.

POSTMASTER: Send address changes to:
NFSA, 514 Progress Drive, Suite A, Linthicum Heights, Maryland 21090
or update your membership profile at www.nfsa.org

National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

July/August 2024 • No. 245

CONTENTS

FEATURES

Departments

NFSA TRAINING & EDUCATION CALENDAR

VISIT THE TRAINING AND EDUCATION PAGE OF THE NFSA WEBSITE TO VIEW THE MOST UP-TO-DATE LIST OF UPCOMING COURSES.

NATIONAL FIRE SPRINKLER ASSOCIATION
TECH TUESDAY WEBINARS

TECH TUESDAY CALENDAR

Tech Tuesdays earn CE Credit and are free as a benefit for NFSA members. They are scheduled on the third Tuesday of each month at 12:30 PM eastern time.

For further information and a complete listing of all NFSA courses, go to **https://bit.ly/ldNFSA**.

JULY 16

The ABCs of AFFF

AUGUST 20

Update from the NFPA 13 Technical Session

SEPTEMBER 17

Inspection, Testing and Maintenance

OCTOBER 15

Modifications to Existing Sprinkler Systems

NOVEMBER 19

NFPA 14 Standard for the Installation of Standpipes and Hose systems – Updates to the 2024 edition

DECEMBER 17

Updates and Proposed Changes to Codes and Standards

Take Advantage of Your **Learning Partner**

Tuition Discount

COLUMBIA SOUTHERN UNIVERSITY

Learning Partner 10% Discount

Learning Partner 10% Tuition Discount

NFSA NATIONAL FIRE SPRINKLER ASSOCIATION *The Voice of the Fire Sprinkler Industry*

Why CSU?

At Columbia Southern University, technology brings the classroom to you. Our online degree programs give you the freedom to pursue your dreams, on your own terms, at your own pace, while studying anywhere you choose.

CSU Offers

- **Complimentary Evaluation of Prior Education and Training**
- **eTextbooks Provided at No Cost**
- **Flexible Learning**
- **Math and Writing Assistance**
- **No Application Fee**
- **No ACT, SAT, GRE, GMAT Required**
- **Multiple Course Schedule Options**
- **Career Services**

Graduate & Undergraduate Tuition Rates

	Tuition *Per Credit Hour*	Learning Partners† *Per Credit Hour*
Undergraduate Courses	$245.00	$220.50
Graduate Courses*	$335.00	$301.50
Doctoral Courses	$435.00	$391.50

Tuition rate effective July 1, 2022. Rates are per credit hour. Most courses are three (3) credit hours. Tuition and fees are payable in U.S. funds. Tuition Rates are subject to change. For the most current tuition information, please visit www.ColumbiaSouthern.edu/Financial.

**The tuition rate for graduate courses per credit hour is $250 for all active-duty military members using military tuition assistance (not applicable for CSU learning partners). The lower rate is offered to keep the tuition rate at the DoD cap of $250.*

†CSU Learning Partners receive a tuition discount that is applied to the full tuition rate.

Online Degree Programs

Columbia Southern University offers **online associate**, **bachelor's**, **master's** and **doctoral degree programs** in a variety of majors and concentrations including:

- **Business**
- **Criminal Justice**
- **Cyber Security**
- **Emergency Medical Services**
- **Fire Science**
- **Forensic Investigation**
- **Health Care**
- **Homeland Security**
- **Human Resources**
- **Information Technology**
- **Military Studies**
- **Occupational Safety & Health**
- **Environmental Management**
- **Emergency Management Services**
- **Organizational Leadership**
- **Psychology**
- **Public Administration**
- **Public Health**

For a complete listing of online degree programs, concentrations, certificates and micro-credentials, visit **ColumbiaSouthern.edu**.

SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS COMMISSION ON COLLEGES — ACCREDITED INSTITUTION

For more information about your Learning Partner benefits or our online degree programs, contact your dedicated learning partner representative.

Representative's Name

kim.plash@columbiasouthern.edu

800.344.5021

ColumbiaSouthern.edu/Partners

From the President's Desk
Shane Ray

High Energy in Hawaii

High-energy, high-impact, those are my words to describe **NFSA's Annual Seminar and Business and Leadership Conference.** With 548 attendees, we realized a record turnout for a non-expo year event. It's always great to be with our members to share information and to see how much everyone cares for this great industry.

NFSA is blessed that we can host such a vital event for the fire sprinkler industry and do so as a member value, which means we put all the money from the conference into the conference. We are one of very, very few associations that produce events such as conferences and regional seminars where we don't have to make money off of our members. What a great investment by our members back into our members and the overall fire sprinkler industry. Thank you to the entire Board of Directors, the Seminar Committee, and the great staff at NFSA for making this our reality.

"The best thing about a conference is connections we can establish and nourish. I always enjoy the knowledge gained, the information transfer on projects and programs, but most of all the passion it is all delivered with."

The best thing about a conference is connections we can establish and nourish. I always enjoy the knowledge gained, the information transfer on projects and programs, but most of all the passion it is all delivered with. We are not only making connections between members, but also connecting regions to other regions and learning from activities and actions in those areas that help drive the industry. Speaking of areas (NFSA Contractors Council is made up of 12 Area Directors from across the country), we are going to increase the number of Area Conferences we have over the next two years, and we will be moving some of these around the country. Stay tuned as we take our events closer to our members.

Being in Maui was certainly beautiful, but the connections to the tragic fire that occurred in Lahaina on August 8-9, 2023, reminded us of a somber note. Out of all fire tragedies, those of us in this industry work diligently to bring good out of it, and that's what NFSA did once again. We raised money for Firefighter Tanner Mosher, who saved the lives of other firefighters and lost his own home to the fire. NFSA will also assist in any way possible with the on-going report after actions from the fire, as well as our continued support to the Hawaii Fire Chiefs Association and their legislative efforts, from homes to high-rises.

From the Opening Reception to the closing Awards Banquet, I heard nothing but great conversations and compliments for the staff, speakers, and vendors that put on a great show. We learned a lot about Ha'vii, which is how the locals properly pronounce it, and the culture that makes leading people and managing programs with Aloha, as we all found our ha! The technical sessions were amazing, and the Contractors Forum was full of information exchange and trends shaping our industry. From the Future Leadership Committee Reception to the vendor table-tops, the comradery and valuable time shared with people across the industry was heart-warming.

The speech delivered by **Steve Ulmer** when he received the *Golden Sprinkler Award* was the cherry on top to close out the conference. Steve Ulmer, APi Group, gave a passionate speech from the heart that was filled with his four generations of Davis-Ulmer people in the fire sprinkler industry, with humor, and with lots of thanks from him to all who had contributed so much. Congratulations Steve, well deserved and well conveyed.

It was my honor to present the *President's Award* to **Fred Barall** for his 20+ years of service to NFSA. Fred just retired in January as the Senior Vice President of our Legal/Labor Relations Department. Fred and his wife Mary were able to be with us and

continued on page 6

From the President's Desk

Shane Ray

continued from page 5

Fred gave his acceptance speech during the closing general session. A great man who contributed so much to advance and promote this great industry.

The *Russell P. Fleming Technical Service Award* was presented to **Mark Fessenden**, formerly with Johnson Controls and now the managing director of the International Fire Suppression Alliance.

The *Hall of Fame Class of 2024* included 3 industry legends: **Buch Buchanan, Gregg Huennekens**, and **Jay Livingston**. Each of these men have poured years into the fire sprinkler industry, NFSA, and me. What a joy to see them added to our Hall of Fame!

The *Public Safety Leadership Award* was presented to **Todd Short**, Fire Marshal, Redmond Washington. He always gives credit to NFSA for being supportive in their efforts not only in his community but across the region to advance fire and life safety. Todd, and his community are examples of the differences made with Fire Team USA and beyond.

In the big room sessions, we were honored to have **Zach Page** from JP Morgan brief us on the economy, we had our own Vice President **Jeff Hugo** and our Chief Engineer **Mike Joanis** brief us on the technical advances in codes and standards as well as the research, testing, and demonstrations NFSA has been so heavily involved in. I was honored to close out the conference with the *"Impact of NFSA"* and all the great programs we have across the country and how large loss fires are impacting our industry. But I assured everyone that NFSA is working diligently daily to influence legislation and regulations impacting the built environment as well as to bring the fire sprinkler industry and the fire service together to know that we are all here to save lives and protect property.

If you couldn't be with us in Maui, we look forward to seeing you at the North American Fire Sprinkler Expo in May of 2025 in Nashville, Tennessee!

Shane Ray, *President*

From the Chair's Desk
Jim Boulanger

"...And Miles to Go Before We Sleep"

It is that time again, the opportunity for me to communicate to our Fire Sprinkler Industry Family. As much as I dreaded the call from Joanne reminding me my article for the magazine was due yesterday, I still look forward to the stage time, the spotlight, the uninterrupted lecture that I can provide without even the quietest bit of rebuttal. It is kind of soothing. Imagine a political debate where you are allowed to keep going and going and no one ever interrupts you, or the joys of writing an article for a paper magazine with no internet blogs following. Writing the article is even better when you share it with a great glass of wine on Friday evening just before Memorial Day Weekend 2024, so let us get started.

For all of you who attended the NFSA seminar in Maui I truly hope you had a great time and took away from it a tremendous amount. As I reminded everyone at our opening session, "What you put in is what you get out. Put a lot in and you will be amazed at what you receive." From my perspective, not only did everyone have a great time in Hawaii, but the vast majority found it extremely worthwhile and took a lot home from our conference. All the feedback I received backed that up. A quick reminder, we do it all over again in 2025 bigger and better with a full-size exhibition in Nashville, Tennessee the first full week of May.

I was told the primary topic for this edition of our Magazine is Residential Sprinklers. We have come a long way in the last 50 years with acceptance of residential systems in the United States, but we have so much farther to still go. When your Chair entered the industry, way back when, there really were no residential sprinklers. If someone wanted to sprinkle their house, they were considered weird. NFPA13D came out in 1975, but almost zero jurisdictions adopted it in those early years. For the record, I was one of those weird ones and did sprinkle our first home in the early 80s. The system I designed and installed was a complicated non-calculated 1-inch schedule 40 steel pipe screwed network connected to my domestic and intertied in multiple locations over two floors. There were maybe 35 sprinklers in total, none spaced over 7.5 feet from a wall. The product was recessed commercial heads with big red bulbs at 165 degrees. It might have saved a portion of my house if we had a fire, but the chance of sleeping residents surviving the fire and smoke would be doubtful.

Today, with the ease of plastic piping materials and the new residential head technology, our product is truly an affordable life saver. Despite that, we continue to have a lot of work ahead of us. The public, by and large, educated by misinformation or Hollywood, really do not want them in their homes. Perceptions can and must change if we are ever to fully grow the residential single-family market.

A friend of mine was forced by the local codes to sprinkle his house ten years ago. Like most new homeowners paying for a new house, he went kicking and screaming trying to eliminate what he felt was a government mandated nuisance he felt no need to live with. We ultimately put sprinklers in the house, and he found they hurt no one, and I assumed he would go off into sunset as a happy pro sprinkler customer forever. Last week I received a call, he is remodeling his kitchen and porch area, and asked for a mechanic to come out and cap a sprinkler line. The orange pipe was in the way of a beautiful new beam, and he wanted us to pull those heads out and call it good. I said, "Are you sure? Don't you want us to adjust and add where needed?" "Nope, don't need them anymore, we have a new hydrant within 1000 feet of our house." Wow that is the world we live in, somehow that hydrant is going to save his family from a fire. Like I said, we have work to do.

Thank you all for being members of NFSA, your association staff deals with and counters bad education and misinformation every day of the year on your behalf. Imagine someday my friend worrying more about his life-saving sprinklers being back in service vs his burglar alarm he could never live without.

My wine glass is empty, and my lecture is complete, continue to have a great summer and always remember how blessed we are to work in this great, positive industry.

To the industry, thanks for your continued support

Jim

TALCO FIRE SYSTEMS

RESIDENTIAL & COMMERCIAL FIRE PUMP SPECIALISTS

THE TRUSTED SOURCE FOR ANY FIRE PUMP APPLICATION

HH2-250 Gal

HH3-350 Gal

HH4-450 Gal

NFPA-13D Home Hydrant®

The most complete and compact residential fire pump system on the market.

13-ULV NFPA 20 - Single-Phase* Packaged Fire Pump System

- 230 Volt, Single-Phase Electric Motor/ Controller
- UL Listed Fire Pump
- Hand-built and tested by expert craftsmen
- Measures 33"d x 78"h x 32"w

NFPA-20 Diesel Packaged Fire Pump System

Reliable. Innovative. Experienced.

THOROUGHLY TESTED, SHIPS COMPLETELY ASSEMBLED, READY TO INSTALL

www.talcofire.com

Talco Fire Systems 6040 NE 112th Ave. Portland, OR 97220

503-688-1231 • 800-878-8055

SCAN ME Cut Sheets / Submittal info available

Best Practices for Fire Sprinkler Contractors

Fire sprinkler systems are vital for ensuring the safety of buildings and their occupants. As a fire sprinkler contractor, adhering to best practices not only enhances the effectiveness of your services but also helps in maintaining compliance with industry standards and regulations. Here are some essential best practices that fire sprinkler contractors should follow:

1. Thorough Knowledge of Codes and Standards

Understanding and staying updated with the National Fire Protection Association (NFPA) standards, local building codes, and other relevant regulations is fundamental. NFPA 13, which outlines the installation of sprinkler systems, is a key document that contractors must be intimately familiar with. Regular training and professional development can help keep your knowledge current.

2. Comprehensive Site Assessments

Before beginning any project, conduct a detailed site assessment. This includes evaluating the building's layout, occupancy type, water supply, and potential fire hazards. Accurate assessments ensure that the sprinkler system is tailored to the specific needs of the building.

3. Detailed Design and Planning

Creating a detailed design and plan is crucial for the success of any fire sprinkler installation. Utilize advanced design software to develop precise schematics. Consider factors such as water supply pressure, pipe sizing, sprinkler head placement, and coverage areas. Collaboration with architects and engineers can lead to more efficient and effective designs.

4. Quality Materials and Equipment

Use high-quality materials and equipment from reputable manufacturers. Ensuring that all components meet or exceed industry standards will enhance the reliability and longevity of the sprinkler system. Regularly inspect and maintain your inventory to prevent the use of outdated or defective parts.

5. Skilled Installation Team

Hire and train a skilled installation team. Proper training on installation techniques, safety protocols, and troubleshooting is essential. A knowledgeable team can install systems more efficiently and can quickly address any issues that arise during the installation process.

6. Adherence to Safety Protocols

Safety should always be a top priority. Implement comprehensive safety protocols for your team, including the use of personal protective equipment (PPE), proper handling of tools and materials, and adherence to Occupational Safety and Health Administration (OSHA) guidelines. Regular safety drills and training sessions can help reinforce these protocols.

7. Regular Inspections and Testing

Once the system is installed, conduct regular inspections and testing to ensure it functions correctly. NFPA 25 outlines the standards for the inspection, testing, and maintenance of water-based fire protection systems. Regular maintenance helps identify and rectify issues before they become significant problems.

8. Clear Documentation and Record-Keeping

Maintain detailed records of all installations, inspections, maintenance activities, and any modifications made to the systems. Clear documentation ensures compliance with regulations and provides valuable information for future reference.

9. Customer Education and Support

Educate your clients on the importance of regular maintenance and the proper operation of their sprinkler systems. Provide them with manuals, training, and support to ensure they understand how to manage and maintain their systems effectively.

10. Responsive Customer Service

Offer responsive and reliable customer service. Be available to address any concerns or emergencies that arise. A strong relationship with your clients can lead to repeat business and positive referrals.

11. Continuous Improvement

Regularly review and analyze your processes and procedures to identify areas for improvement. Stay abreast of technological advancements and industry trends to incorporate new methods and tools that can enhance your services.

Conclusion

By adhering to these best practices, fire sprinkler contractors can ensure the highest standards of safety, efficiency, and customer satisfaction. Continuous education, attention to detail, and a commitment to excellence are key to thriving in this critical industry.

Did we miss something? We'd love to hear from our contractor members about their best practices! *Email NFSM Editor Joanne Genadio at genadio@nfsa.org and we'll follow up in a future issue.*

VIKING®

Trusted above all.™

New K3.7 Concealed Residential Pendent

Provides the lowest flows and pressures at the 14′ coverage area

Viking's new low-flowing K3.7 sprinkler, the VK495 Residential Concealed Pendent, is optimized at the 14′ x 14′ coverage area flowing only 10 gpm at 7.3 psi! The cULus Listed sprinkler rounds out the robust residential concealed sprinkler line from Viking, making it a one-stop-shop to find every residential protection solution needed.

Learn more at **vikinggroupinc.com**.

Viking's revolutionary Sprinkler Selector ensures that you can find the right sprinkler for the job — every time. Get started today by visiting **webtools.vikingcorp.com/sprinklerselector**.

NFPA 13D-New Annex Chapters

by Roland Asp, NFSA Manager of Codes and Standards

The new 2025 edition of NFPA 13D, ***Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes***, is complete and has been published. This new edition was the culmination of three years of work by the Technical Committee on Residential Sprinkler Systems, and the resulting document is a robust and comprehensive design and installation manual for fire sprinkler systems installed in one- and-two family homes.

The new edition of 13D does include numerous and important technical changes, however these changes are mostly of an evolutionary nature and will not radically change the way these vital life-safety systems are designed and installed. What these changes do accomplish is making an already successful standard even more user friendly and capable of meeting the goal of life- safety in the places we all deserve to feel safest, our homes. This edition of 13D continues the work of the previous 15 editions of NFPA 13D to provide a reasonable level of life-safety in a cost-conscious manner.

The focus of this article will not be the changes to the 2025 edition of NFPA 13D, but rather on two recently added annex chapters. As those who use the NFPA installation standards are aware, the annex sections are not part of the requirements of the standard and are not enforceable. What the annexes are is information that the technical committees felt would be useful in explaining the requirements in the body of the standard and to further the goals of the standard. Prior to the 2022 edition of NFPA 13D, the standard had two annex chapters. Like other NFPA standards, Annex A titled Explanatory Material explains and expands on the requirements in the body of the standard. Annex B, titled Informational References, simply lists documents that pertain to NFPA 13D systems and are referenced in the informational section of the standard.

In recent years the Technical Committee on Residential Sprinkler Systems, which is responsible for NFPA 13D and of which the author is a principal member, identified two areas which need further clarification and information. These two topics are:

1. Convincing developers and communities that residential fire sprinkler systems have not only life safety benefits but also make financial sense.
2. Ensuring that NFPA 13D sprinkler systems are properly maintained and will be operable when needed.

Recognizing that these two topics are vital to the core principles of NFPA 13D, ensuring that people will be safe from the ravages of fire in their homes, the residential committee added two new annex chapters to the standard:

- **Annex B**, titled *Incentives for Residential Fire Sprinkler Use — Advantages for Builders, Developers, and Communities* was added to the 2022 edition of NFPA 13D.
- **Annex C**, titled *Inspection and Testing at Time of Sale* was added to the 2025 edition of NFPA 13D.

Many of us who work in a standard such as NFPA 13D are very familiar with the requirements found in the body of the standard and are also familiar with the contents of Annex A, which expands and explains these requirements. However, many users of the standards do not have the same familiarization with the other annex sections. This article will explore these two new annex sections and summarize the why and the what are contained within.

Annex B – The "Carrot" vs the "Stick."

Home fire sprinklers and NFPA 13D were developed based upon, in large part, the information from *America Burning*, a 1973 report prepared by the National Commission on Fire Prevention and Control. This far-ranging and comprehensive report looked at the dangers of fire in the nation and recommended steps to reduce the risk of fire. This report's findings clearly showed that America has a fire problem, which is largely a residential fire problem.

This report also made a series of recommendations to help mitigate the startling statistic regarding the danger of fire. Of particular interest to the fire sprinkler industry is this recommendation:

> ***The Commission recommends that the Proposed U.S. Fire Administration support the development of the necessary technology for improved automatic extinguishing systems that would find ready acceptance by Americans in all kinds of dwelling units.***

This recommendation has been partially achieved. The necessary technology in the form of residential sprinklers and home fire sprinkler systems has been developed. Installation standards such

continued on page 12

continued from page 11

as NFPA 13D and P2904 in the International Residential Code have been developed to ensure a high level of life safety in a cost-conscious manner. Where we fall short is gaining the widespread acceptance of this concept.

The model building codes have long recognized the value and necessity of fire sprinklers and require all one- and two-family homes and townhouses to be equipped with home fire sprinkler systems. (The International Residential Code (IRC) has had this requirement since 2009.) This is the "stick". What better incentive to installing sprinklers in homes than making it a requirement of the building codes?

Unfortunately, many states and jurisdictions have adopted these model codes but amended out the requirements to install residential fire sprinkler systems. The most often cited reason to remove the requirement to install residential sprinkler system in residences is cost. The policy makers have made the shortsighted determination that the costs associated with installing fire sprinklers (which are a small percentage of building costs) outweigh the safety provided by these systems. As a result, most homes today are built without fire sprinklers even though the codes have determined that fire sprinklers are a needed requirement to ensure the public is living in safe housing.

The "Stick" Approach

As the "stick" approach (building code requirement) was circumvented by the policy makers, the committee, in adding Annex B, recognizing the "carrot" approach may be more effective. By highlighting the benefits (both financial and safety) perhaps more homes will be built with these vital life-safety systems.

The model codes such as NFPA 1 Fire Code, NFPA 5000 Building Code, the International Residential Code (IRC), the International Building Code (IBC), and the International Fire Code have long recognized the benefits of fire sprinkler systems and have included many cost off-sets and design flexibility for homes and developments incorporating residential sprinkler systems. These incentives often make building with fire sprinklers more cost effective than building without. Annex B highlights the financial benefits to developers and home builders to include fire sprinklers and highlights the benefits to the community at large.

The benefits of residential buildings with fire sprinklers are numerous and far reaching. These benefits impact many aspects of residential development including Site and Development, Building Construction, Community and Environmental benefits.

Site and Development Benefits when building with sprinklers may include:

• Street- width reduction	• Homes closer together
• Longer Dead-End streets	• No expansion of water supply
• Tee turnarounds allowed	• Reduced fire flows
• Increased street grades	• Additional building lots
• Increased setbacks	• *And more*

Building Construction Benefits when building with sprinklers may include:

• Exterior walls: closer to lot line	• Subdivisions: Nonrated exterior walls, unprotected openings and penetrations
• Exterior walls – more penetrations and openings	• Subdivisions: Adjoining lot setback = 6 ft
• Townhouses: Common wall may be structurally independent	• Egress window in basement may be eliminated
• Townhouses: Common wall reduced from 2 hr. to 1 hr. rating Increased Street grades	• Habitable attic not considered a story
• 2-family: Duplex wall reduced from 1-hr to 30-minute rating	• *And more*

Community Benefits when building with sprinklers may include:

• Firefighter safety and health	• Cost of covering firefighter injury and death
• Residents' safety	• A safer community
• Less infrastructure damage	• *And more*

Environmental Benefits when building with sprinklers may include:

• Less air and water pollutants	• Less disposal of hazardous waste from a burnt house
• Less water usage	• Reduced Carbon footprint
• Less greenhouse gasses	• *And more*

These are only some of the financial and community benefits of building with sprinklers. Further information can be found in Annex B of the 2022 and 2025 edition of NFPA 13D. Further, *NFSA's Guide to Benefits of Fire Sprinklers in the IRC - From 2000 to 2021*, which can be accessed through nfsa.org, provides valuable guidance on benefits found in the IRC when building with sprinklers.

Annex C – Maintaining the Reliability of Residential Fire Sprinklers

Residential fire sprinklers installed in accordance with NFPA 13D are reliable and effective. However, as with any mechanical system, proper inspection and maintenance is needed to ensure that the system is in proper operating condition.

Unlike NFPA 13 and other water-based fire protection systems, however, adherence with NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems* is

not required. In keeping with the unwritten philosophy of NFPA 13D to keep costs low, the inspection and maintenance of these systems are the homeowner's responsibility.

Fortunately, home fire sprinkler systems are relatively simple and well within the capability of the average homeowner. However, most of us do not think of maintaining any system until a problem arises. For example, it is recommended that hot water heaters are flushed once or twice a year. When was the last time you flushed your hot water heater?

While there is either no or limited data to suggest that existing 13D systems are not in good working order, due to the fact that NFPA 13D systems have been installed for more than 40 years, the Residential Committee felt that it may be prudent to periodically perform a more comprehensive inspection of these systems.

The committee was also cognizant of the need to contain costs that the homeowner would be responsible for. However, as it is quite common for homes and their mechanical systems to be inspected at the time of sale, it was felt that this concept could easily be used to ensure that the residential fire sprinkler system also be inspected, by knowledgeable and trained personnel at change of ownership.

Annex C outlines 10 items that should be inspected:

• Ensure valves are open	• Operate valves through their full range
• Confirm tanks (if equipped) are full	• Test pressure reducing valves where present
• Confirm pumps (if equipped) are operational	• Inspect if walls, lights, etc. have been added that may obstruct a sprinkler
• Confirm waterflow devices (if equipped) are operational	• Inspect if any insulation has been moved or removed
• Inspect visible sprinklers for obstructions, damage, paint etc.	• Confirm homeowner has maintenance instructions.

These simple steps will ensure that the fire sprinkler system will continue to provide safety from fire for the new owners.

As this new section is in the annex, it is not a requirement. It was, however, written in mandatory language so that it can be adopted by jurisdictions who choose to do so.

Conclusion:

This article summarizes two of the new annex chapters found in NFPA 13D. While not part of the requirements of the standard, it is important to understand what the inclusion of these annex notes is trying to accomplish. At their core, these new annex chapters are educational and will hopefully encourage more builders to include residential sprinklers in their development plans and to ensure these systems are properly maintained.

As an industry, it is our responsibility to educate others about the benefits of fire sprinklers. If just one house or, even better, one housing development is built with sprinklers based upon the information in Annex B, this effort would have been worth it. The same can be said if one closed valve was found and corrected based upon the information found in Annex C. In either case, lives could be saved.

In the end, these annex chapters are intended to save lives and help ensure that everyone can live in a safe home that is properly equipped with a residential fire sprinkler system, which is a noble and reasonable goal.•

Congratulations,

STEVE ULMER

on receiving the NFSA Golden Sprinkler Award!

Building Great Leaders® | apigroup.com | NYSE **APG**

2024 IBC Allows NFPA 13R in Standalone Buildings up to Four Stories (again)

by Jeffrey M. Hugo, CBO, Vice President of Codes, Standards, and Public Fire Protection

The 2024 updates to the International Fire Code (IFC) and International Building Code (IBC), specifically Section 903.3.1.2, introduce significant changes regarding the application of NFPA 13R for automatic sprinkler systems. These changes allow R-2 occupancies to be protected up to four stories, a notable shift from the 2021 IFC/IBC, which essentially limited NFPA 13R to buildings up to three stories.

IBC/IFC Measurement Criteria for NFPA 13R

The new regulation specifies that the application of NFPA 13R sprinkler systems is limited to the building roof assemblies at or below45 feet in R-2 occupancies. This height increase in the 2024 IFC/IBC will typically allow for a four-story building protected by NFPA 13R. This height is measured from the lowest level of fire vehicle access to the highest point of the roof and exterior wall connection, which can be the eave, the intersection of the wall and roof, or the parapet. The measurement starts at the lowest level of vehicle access and extends upwards along the exterior of the wall to the roof intersection (see Figures 1, 2, and 3). Notably, this measurement only considers the exterior wall/roof connection and does not account for features such as steeply pitched roofs, mechanical equipment shielded by parapet walls, or dormers. This method differs from other previous approaches in the code that often considered the average roof height using the midway point from the eave to the ridge.

Measurement Applications

1. NFPA 13R in R-2 Occupancies:

- New in the 2024 IFC/IBC, per Section 903.3.1.2, the application of NFPA 13R is limited to roof heights of 45 feet.

2. Attic Spaces in NFPA 13R Protected Buildings:

- Per Section 903.3.1.2.3, attic spaces in buildings with roofs greater than 55 feet, protected by NFPA 13R, must adhere to the new measurement criteria.

3. Aerial Fire Apparatus Access Roads:

- According to Section D105.1, the height measurement criteria also apply to the requirements for aerial fire apparatus access roads.

FIGURE 1
NFPA 13R, R-2, BUILDING PER 2024 IBC

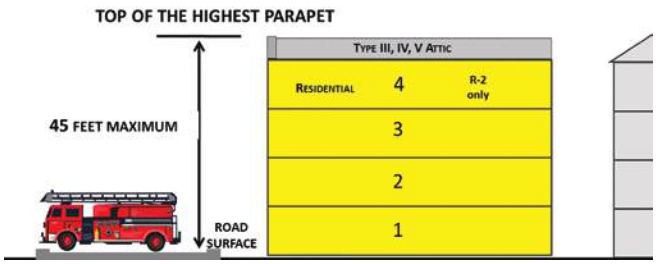


FIGURE 2
NFPA 13R, R-2, BUILDING PER 2024 IBC

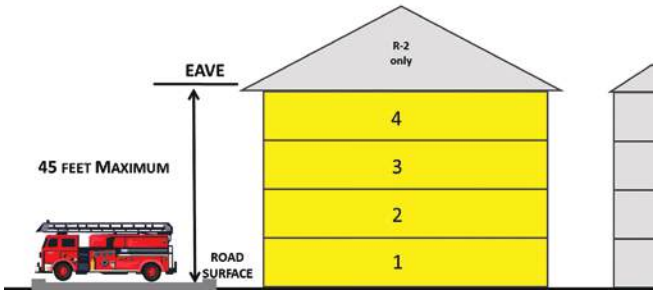
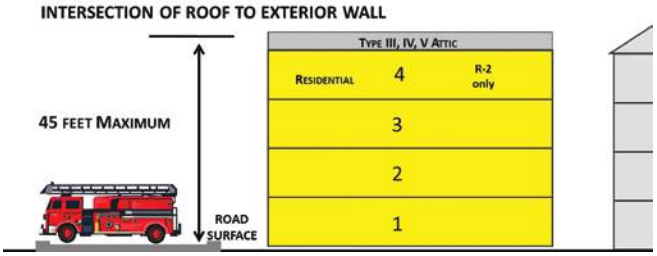


FIGURE 3
NFPA 13R, R-2, BUILDING PER 2024 IBC



continued on page 16

continued from page 15

2024 Edition, R-2 Occupancy Only

The 2024 IFC/IBC change is limited to R-2 occupancies, such as condominiums, apartments, and other multi-family occupancies. The ICC membership restricted the NFPA 13R standard to R-2 because of the familiarity with the building and the nontransient (over 30 days) nature of the occupants. It is important to note that R-2 buildings exceeding the 45-foot measurement would then need to comply with NFPA 13 standards instead of NFPA 13R.

Historical Context and Justification

The approach to measuring building height from the grade plane or fire department vehicle access to the roof edge originated from a 2012 change in Appendix D (Change F231 09/10). This change aimed to improve roof access for aerial firefighting equipment. As detailed in the 2021 IFC Commentary, a properly positioned 35-foot ladder has an effective vertical reach of approximately 30 feet, influencing the standard measurement practice from the grade plane to the roof edge. Despite the practical challenges of direct ladder access up to 45 feet (or 55 feet for NFPA 13R attic spaces), measuring along the exterior wall ensures compliance with historical standards and the intended application of these regulations.

Compliance and Standards

Buildings with average roof heights for gable roofs or parapet wall heights exceeding 45 feet will not be eligible for NFPA 13R. These buildings must comply with different standards, potentially necessitating the use of NFPA 13 instead of NFPA 13R for sprinkler system coverage.

Conclusion

The 2024 updates to the IFC/IBC mark a significant revision in the application of NFPA 13R sprinkler systems for R-2 occupancies, extending allowable protection to four stories and redefining measurement criteria. Understanding these changes is critical for compliance and ensuring the safety and accessibility of multi-story residential buildings.•

NOTES FROM THE Fire Scene

by Vickie Pritchett,
Vice President of Advocacy and Outreach

Aloha from Team NFSA!

Mahalo if you joined us at **NFSA's 2024 Annual Seminar and Business & Leadership Conference** May 8-10, 2024, at the beautiful Wailea Beach Resort in Maui. What an amazing time we had together in Hawaii!

I have found myself thinking of the words shared by Rosa Say in her opening keynote address many times since returning home. I'm not sure I'll ever think of Aloha the same way again, and I say that in a very positive spirit! *Alo – ha*. From breath, to remembering who I am and the ancestors who have made me me... just all-around GOOD energy!

A big thank you goes to the 84 golfers who played the Wailea Golf Club's Emerald Course! What a beautiful day you had, and it was so good to have Common Voices advocate Pam Elliott with us to celebrate the strong work conducted by this group of advocates determined to create a Fire Safe America. As always, the advocates and their stories, inspire us to take action and ensure that fire sprinklers are included in new construction across America!

I'd also like to congratulate the recipients of our 2024 Awards! Each of the recipients are so deserving, and what great fire sprinkler industry leaders we honored! Our **Golden Sprinkler Award** went to **Steve Ulmer** with APi. We thank Steve for his years of service, leadership, and steadfast support of NFSA. **Mark Fessenden** received our **2024 Russell P. Fleming award**, and it was so nice of **Mike Bosma** to accept on his behalf. It was also nice to see Mike present **Kevin Fee** the **IFSA award**, so deserved!

The **2024 Public Safety Leadership Award** went to **Fire Marshal Todd Short**, and it was special to hear his account of the differences made in Washington State and the nation. And, last but certainly not least, a big toast to our **Hall of Fame Class of 2024**. As I shared in our last edition, this Hall of Fame class is extra special to me! **Buck Buchanan**, you are an inspiration with your respect for the history on which we have built not only NFSA, but the fire sprinkler industry. **Gregg Huennekens**, your leadership and "BullDogg" mindset is responsible for so many of the programs that continue today, thank you sir! And, **Jay Livingston**, your dedication, passion, and leadership has made so many differences. I love your family, your passion for the industry and NFSA, and your willingness to advise and counsel so many of us!

As we celebrated all these individuals in the land of Aloha, we were reminded that the fire sprinkler industry is indeed strong, and that together, we are building a safer world! As the memories of our time together linger, we as Team NFSA are already busy planning for a great conference in Nashville, Tennessee next May!

UNTIL NEXT TIME, MAHALO, Vickie

FIRE SPRINKLERS IN ACTION

Editor's note: The following saves were submitted by our members. If you have a save you'd like to see featured, use this QR code or email me at ***genadio@nfsa.org****. Please include photos if available!*

DELAWARE

Fire Sprinkler System Saves Apartment Under Construction

Thanks to the Delaware State Fire Marshal's Office's Duane Fox for sending this sprinkler safe.

On March 19th, mid-morning the Camden, Wyoming FD was dispatched to a structure fire at an apartment complex under construction. In a third-floor apartment, a contractor put a box on the stove. The stove was then accidentally turned on. The sprinkler system activated and kept the damage to the stove and upper cabinet.

FLORIDA

Fire Sprinklers vs. Ferrari

Thanks to NFSA Members Bob Knose and Dan Towler from Ferguson Fire for sending us this great sprinkler save.

Not reported by media! A Ferrari erupted in fire in a service area in Miami, FL. The started in the one vehicle; three #firesprinklers activated and contained the fire, Only the vehicle where the fire originated was lost. Other Ferraris in the service area and the service area itself were unscathed.

"A great reminder that what we do everyday matters and works!" said Dan Towler

A Sprinkler Save, and a Great Job Promoting It!

Thanks to Lake Mary, FL Fire Marshal Lillian Sexton for sending us this sprinkler save and for sharing it as it reads below on the FD's Facebook and Instagram Pages.

Another successful sprinkler save! On March 24th, firefighters responded swiftly to a residential apartment fire, Thanks to the quick action of the fire sprinkler system, the blaze was nearly extinguished upon arrival.

This underscores the importance of having fire sprinklers installed in homes. Not only do they minimize damage, but they also save lives! Thankfully, no injuries were reported, and the property damage was minimized. Let's continue spreading awareness about the life-saving benefits of residential fire sprinkler systems.

Florida Resort Saved by Fire Sprinkler System

Thanks to Reliable's Phil Friday for reporting this sprinkler save.

On May 13th, South Walton, Florida Fire District (SWFD) firefighters responded to a commercial structure fire at a local hotel resort. Crews arrived on-scene around midnight and found an electrical fire had started within a utilities room on the 6th floor.

The room's fire sprinkler system had successfully contained the fire. Firefighters worked with resort staff to gain access to the fire's room of origin, secure the sprinkler system and utilities, evacuate resort guests, and extinguish remaining signs of fire.

No firefighters or civilians were injured during the incident. SWFD emphasized their appreciation for the resort staff and their commitment to ensuring the fire suppression systems in the building were working properly. The activation of the sprinkler system kept the fire in check until firefighters arrived on-scene, in turn preventing significant injuries or loss of life.

IDAHO

Single Sprinkler Saves Apartment Complex

Thanks to Melissa Close, Deputy Fire Marshal of Nampa, ID FD for sharing this great save!

Nampa Fire Dept responded to a report of a fire on the third floor of an apartment complex late the evening of May 9th. A resident had left a fry pan unattended on the stove, which activated both the smoke alarms and one overhead fire sprinkler.

Residents of the third-floor apartment, including three children, along with the rest of the apartment complex residents, evacuated safely. When firefighters arrived, there was no visible smoke and the fire had been extinguished. The fire had been contained to the stove, leaving only some soot on the cabinet panel above stove.

Nampa Fire stayed on seen to assist with water mitigation and clean up. The affected family was assisted by the Red Cross and the Nampa Burn Out Fund. All other residents in the building returned to their apartments that same evening.

ILLINOIS

"The Invaluable Benefits of Automatic Sprinkler Systems"

Thanks to Elk Grove Village, IL Fire Marshal Jason Staidl for this most excellent report of a sprinkler save!

On Monday, March 4, 2024, at 16:53 hrs., the Elk Grove Village Fire Department responded to an activated fire alarm at an apartment complex. Upon arrival, crews observed no visible signs of smoke or fire from all sides of the building, and occupants were already self-evacuating. Crews determined that the alarm activation originated from the third floor.

As crews entered the third floor, they found no visible signs of smoke or fire but encountered moderate amounts of water in the hallway. Due to the water, crews pinpointed the unit from which it originated. Upon entering the unit, crews discovered a small extinguished fire that had originated on the stove top, activating a single (1) fire sprinkler.

The occupant(s) of the unit were not home during the fire; all other residents safely evacuated with no reported injuries. Since the fire was contained to a single unit, only the occupant(s) of that unit were displaced, leaving 79 of the buildings 80 units unaffected.

The presence of this early detection system played a crucial role in preventing a potential total loss of the building and its contents. Thanks to its timely activation, damages were minimized, and the complex experienced minimal disruption to its operations.

The Elk Grove Village Fire Department is proud to share the story of this "Sprinkler Save" incident, showing the invaluable benefits of automatic sprinkler systems in safeguarding lives and property. Following a comprehensive fire investigation, Elk Grove Village Fire Investigators have determined the fire to be accidental in nature.

Single Sprinkler Saves Senior Living Complex

Thanks to Tinley Park, IL Fire Marshal Steve Lorendo for sending us this sprinkler save.

We had another fire sprinkler save at a three-story multi-unit , 55-and-older community development here in Tinley Park.

continued on page 20

continued from page 19

The fire began from unattended cooking resulting in a small kitchen fire. It was held in check by a single fire sprinkler until Tinley Park Fire Department and Mutual aid crews arrived. The fire sprinkler system was put back into service six hours later and the building is back in service with the fire alarm and fire sprinkler systems intact.

The owner of the unit received minor burns and was transported to a local hospital. Another great save by fire sprinkler system in town. That is three since November of last year!

Apartment Kitchen Fire Out, Thanks to Single Sprinkler!

Thanks to Wheeling, IL FD Fire Prevention Manager Robert Niemiec for sending us this sprinkler save!

Wheeling units responded to automatic fire alarm. Crews found alarm system with water flow gong activated on arrival. A building evacuation was in progress. Reported smoke in the hallway on the first floor. Alarm upgraded to smoke in the building by dispatch. An extinguished cooking fire was found in unit 106. A single fire sprinkler in the kitchen extinguished the fire.

The resident went outside and left food cooking unattended on the stove, causing the fire. The fire occurred in a brand-new apartment complex, without the sprinkler system in place the damage would have been much worse.

Single Sprinkler Saves Apartment Complex

Thanks to Itasca, IL FD Lieutenant Brooks Niewarner for sending in this sprinkler save.

Occupant had a dryer fire in their unit. The occupant stated that they smelled something burning. FD received the call as an AFA. Occupant stated they had a fire in the dryer and a single fire sprinkler activated. Fire was out when FD arrived.

The sprinkler did the job and out the fire out in a multifamily building. There where no injuries to any occupants of fire personnel. All residents of the building were able to still be in the apartment building. Repairs for the head were made that night by the sprinkler company that night.

Fire Controlled by Fire Sprinkler at La Grange Park Retirement Village

Thanks to La Grange Park, IL Fire Chief Dean Maggos for sending us this sprinkler save.

On May 1st, at 5:42 pm, firefighters were summoned by the automatic fire alarm system to a six-story independent living building. Upon arrival, smoke was discovered on the second floor. A fire was then discovered in a second-floor apartment.

continued from page 20

Inside the unit, a single fire sprinkler was operating, controlling the fire and nearly extinguishing it. Firefighters searched the unit, finding it unoccupied, and completed extinguishment with a hand-held water fire extinguisher. Firefighters ventilated smoke from the building, and then assisted with clean-up. There were no reported injuries, and most tenants of the building were allowed to remain living in their units.

According to Fire Chief Dean J. Maggos, "This fire is a testament to the vital role fire sprinklers play in protecting lives and property, and in this case, our older adults. The first notification to firefighters of any problem at the facility came from the fire sprinkler system, tied to the automatic fire alarm. In fact, most of the tenants of the building were not initially aware that a fire had even actually occurred." Chief Maggos also notes, "Firefighters did a great job of completing fire extinguishment, and in working with residents and staff to help mitigate the effects of the fire." The MABAS Division 10 Fire Investigators were called to the scene to assist, and at this time the cause of the fire appears accidental but remains under investigation. Damage estimates are still being assessed.

INDIANA

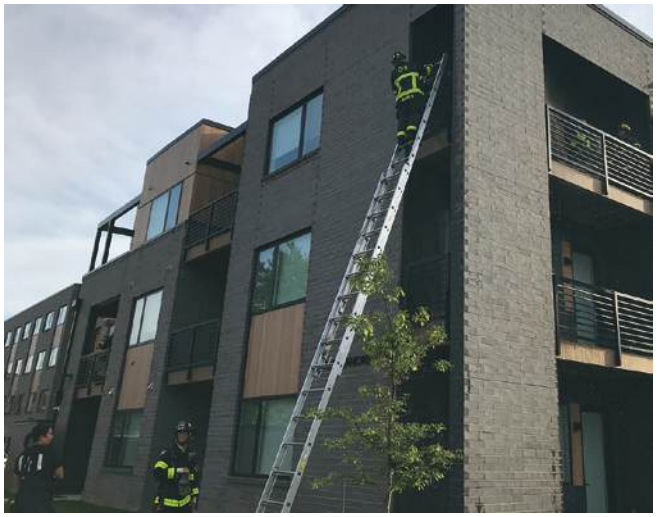
Two Fire Sprinklers Extinguish Fire at Container Management Business

Thanks to Gregg Simpson of the Wayne Township Fire Department in Indiana for sending us this sprinkler save.

This is a warehouse that is full of plastic containers. These folks had a squatter living way back in this small aisle between the stacks. Unsure what started the fire but as you can see the fire was well on its way to burning down this building when the sprinklers activated and saved the building. The fire hit the ceiling right between 2 fire sprinklers, one to the left and right, setting both off.

Sprinkler System Limits Fire Damage at Apartment Complex

Thanks to Captain Michael Wilson of the Columbus, IN Fire Dept. for sharing the photos of this great save.



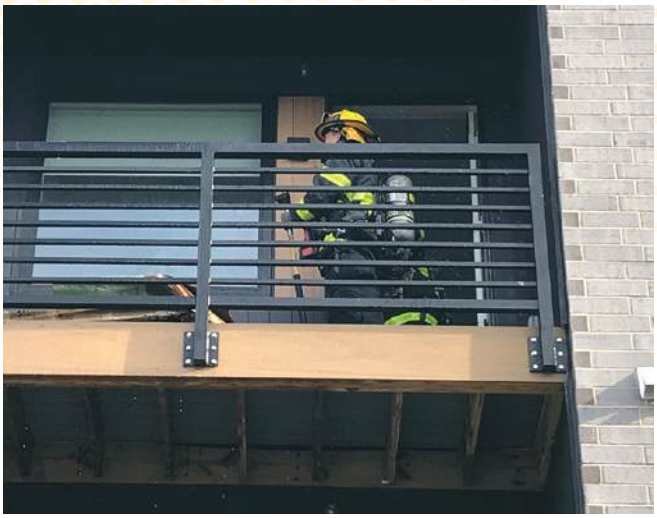
On May 20th, a residential sprinkler system limited fire damage at an apartment complex.

Columbus Fire Department investigators said that the fire was caused by an improperly discarded cigarette, said Capt. Mike Wilson, fire department spokesman.

At about 6:47 p.m., Columbus firefighters were called to the apartments for a fire alarm activation. When the first arriving firefighters arrived on the scene, they reported water flowing from a third-floor balcony.

continued on page 22

continued from page 21



Firefighters used a ground ladder to gain access to the balcony and found an activated sprinkler head, smoldering cardboard boxes and minor fire damage on the exterior of the apartment. Firefighters moved the charred debris to allow water from the sprinkler to extinguish hot spots located within the empty cardboard boxes. When firefighters were sure that hot embers were fully extinguished, firefighters stopped the flow of water from the sprinkler system.

Fire investigators determined that the tenant had been using an empty cardboard box to discard used cigarettes. The tenant told investigators that he believed he had fully extinguished the cigarette before discarding the cigarette in one of the empty boxes. Investigators have classified the fire as accidental in nature as a result of the improper disposal of smoking materials. Damage to the property is estimated at less than $5,000. No injuries were reported.

The fire incident commander, Capt. Dave Dwyer, said that the sprinkler system operated appropriately and helped to avert a more significant fire. “With plenty of fuel and oxygen, the fire could have easily spread to other combustible materials or potentially entered the living space, if not for the sprinkler system,” said Dwyer said. The Columbus Fire Department responded to two fire incidents in the same week that were extinguished by sprinkler systems.

MAINE

"Middle of the Night" Fire Contained by Sprinkler System

Thank you to Fire Inspector Marc Veilluex of the Office of the Maine State Fire Marshal for reporting this sprinkler save.

On March 8th, the South Portland, ME Fire Department responded to Southern Maine Community College (SMCC), having been alerted by the campus’s fire alarm system.

Upon arrival, crews discovered that the automatic sprinkler system had activated, containing a fire in the Sea Wolves Café. Damage to the building was minor, and the fire did not extend beyond the initially ignited contents. The Sea Wolves Café is in the SMCC Campus Center where several student services are located.

According to Fire Chief Phil Selberg, without the activation of the sprinkler system, damage to the building could have been substantial, and the entire campus would have been disrupted substantially. “This fire occurred in the middle of the night when no one was in the building to discover it. The sprinkler system worked as it was designed and saved the Campus Center. Automatic sprinkler systems in commercial and residential buildings continue to save lives and property, and we strongly advocate for their installation."

MINNESOTA

Sprinkler Save at Affordable Housing

Thanks to Martin Nelson – JCI Sprinkler Service Supervisor for sending us this sprinkler save.

Minneapolis, MN firefighters were called to a report of a fire in an affordable housing building. Upon arrival, crews found a stovetop fire completely extinguished by one sprinkler. Water damage was minimal with some cleanup of water in the kitchen and hallway. JCI's service division put the fire sprinkler system back in service that same evening.

The five-story building has 81 units and was built in 2021. It is fully sprinklered. No injuries were reported.

NEW JERSEY

Single Sprinkler Saves Apartment Complex

Thanks to Evesham, NJ Fire Rescue for posting this great account of a sprinkler save on their Facebook page! Give them a like and a share!

In the early morning hours of May 11, Evesham Fire was dispatched for a waterflow alarm in an apartment complex. Upon arrival, fire crews discovered a fire in the kitchen had been controlled in the area of origin by the activation of the fire sprinkler system. Subsequently, the alarm associated with the sprinkler activation generated a full evacuation of the eight-unit apartment build-

ing. No injuries were reported and the fire damage was contained to the area of origin.

This is a great example of a system functioning as designed. One sprinkler kept the fire from growing in size allowing the occupants ample time to evacuate the apartment. Property loss was minimized allowing residents to reoccupy the unaffected apartments immediately upon conclusion of the incident. Damage in the fire apartment is limited to minor water remediation and appliance replacement.

Evesham Fire is an advocate for fire sprinkler systems in all buildings, even if they are not required by building codes. These systems do save lives and reduce property damage!

OHIO

Mixed-Use Building Saved by Sprinklers

Thanks to Powell, OH's Liberty Township FD Fire Marshal Shad Gilbert for reporting this sprinkler save.

On the morning of March 7th, 2024, the Liberty Township Fire Department was dispatched to a two-story commercial occupancy, approximately 20,000 square feet, divided into 11 suites that are business, mercantile, and assembly occupancies.

Upon arrival, crews received an update from the dispatcher advising that the alarm company had called and stated that there was an additional alarm coming in reporting a water flow alarm. A detailed search of property was conducted, and companies discovered water running out of a side door to a restaurant. The companies made entry and encountered smoky conditions in the restaurant and located an activated fire sprinkler in the kitchen.

The fire started as a result of spontaneous combustion of kitchen or bar type towels that were oily and greasy in a plastic trash can that lacked ventilation holes. The fire was quickly extinguished by the sprinkler that was located near the area of origin.

There was minor smoke damage limited to the restaurant, and no fire damage to the structure. The restaurant did a deep clean and was opened two days later.

TEXAS

Single Fire Sprinkler Saves Apartment Building & Sleeping Occupant

Thanks to Farmers Branch, TX Fire Marshal Tim Dedear for sending us this sprinkler save.

On Sunday, March 17, at approx. 6:00am., Farmers Branch Fire Department was dispatched to a structure fire.

Upon arrival, crews found smoke and a small amount of fire inside an apartment that was largely extinguished, held in check by the fire sprinkler system. The small amount of fire found during overhaul was quickly extinguished by the fire crews.

Fire was contained to a bedroom on the 3rd floor. Smoke alarm activated and alerted occupant from her sleep. Occupant observed a small fire at the desk in the bedroom and then called 911. Cause of the fire is accidental (electrical). One sprinkler activated. No reported injuries occurred. •

WASHINGTON

Single Sprinkler Saves Apartment Complex

Thanks to Marysville, WA Fire Department Fire Marshal Tom Maloney, a longtime NFSA member, for sharing this great save!

When Marysville Fire District responded to an apartment fire on March 14th, they arrived to find light smoke coming from a second-floor unit.

A kitchen microwave fire had been suppressed by one fire sprinkler. Firefighters only needed to finish the extinguishment with "minimal use of water" and perform an overhaul to check for any fire extension. No injuries were reported.

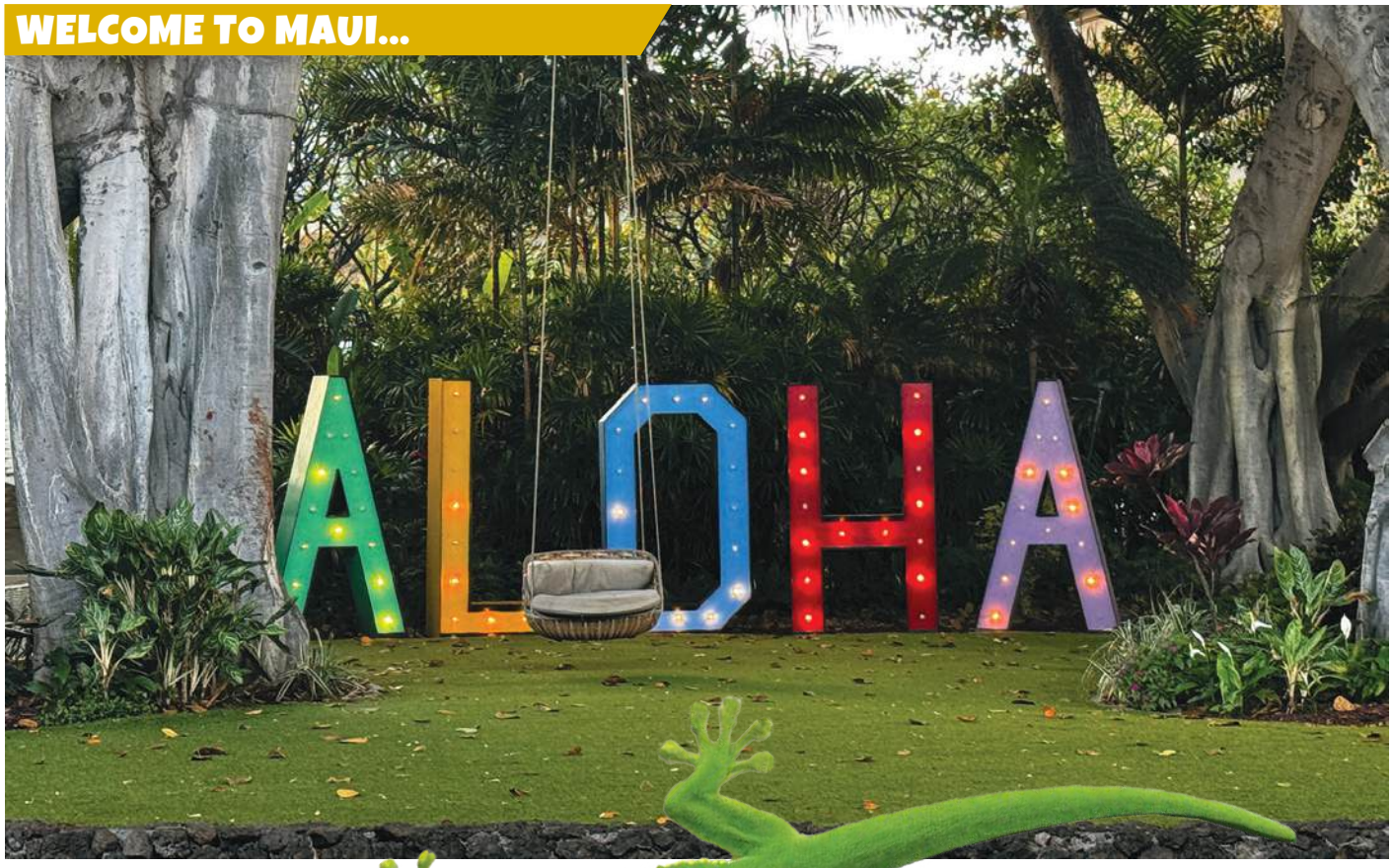
The sprinkler system was credited with containing the damage to the unit of origin with water damage to the unit directly below. Total damage is estimated under $40,000.•


Congratulations
Steve Ulmer
Recipient of the 2024 Golden Sprinkler Award
DAVIS-ULMER
FAMILY OF COMPANIES
POWERED BY APi GROUP
We protect what you value most.

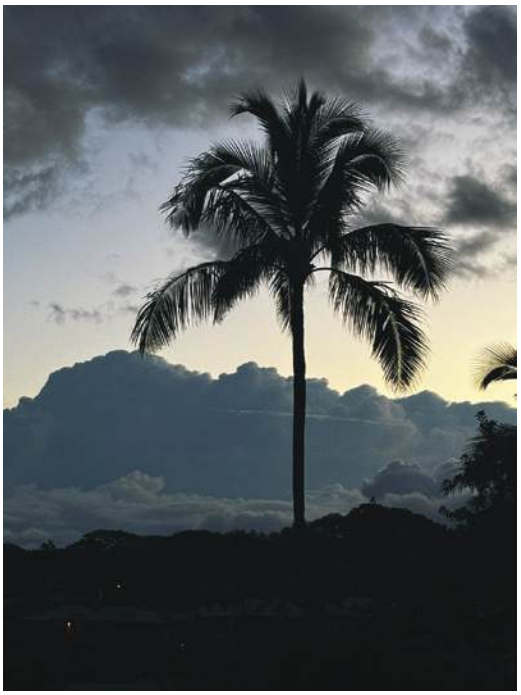
Welcome to Maui

From the minute our planes touched down in Maui, we knew we landed in paradise. The beauty that surrounded us made it impossible to capture it all with a camera. It's something you have to experience for yourself. We know all who joined us felt the same way! ***Let's get our Aloha on!***

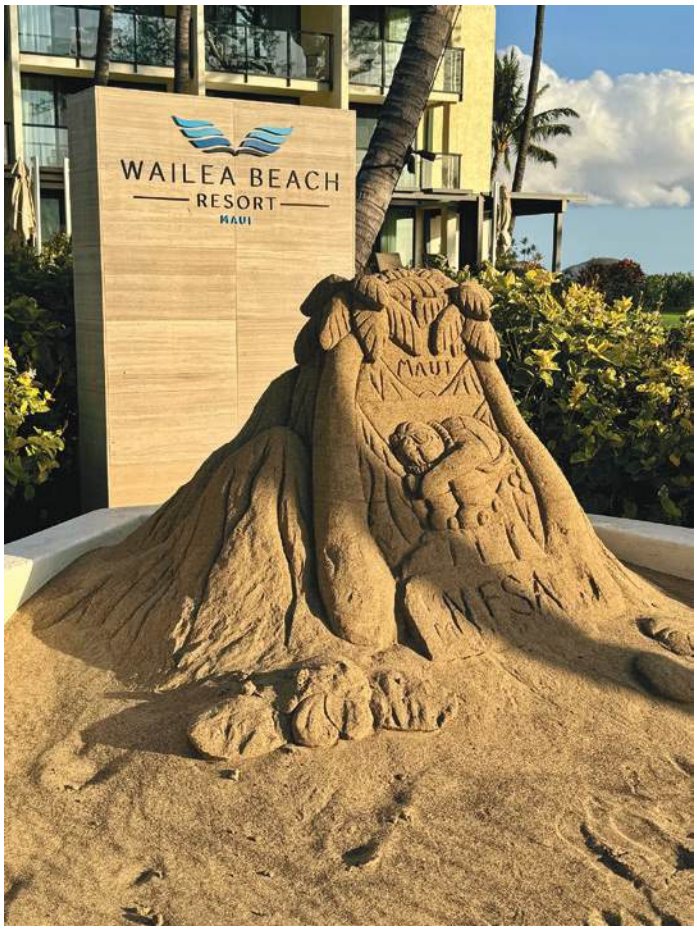
WELCOME TO MAUI...




Aloha
Welcome to Maui

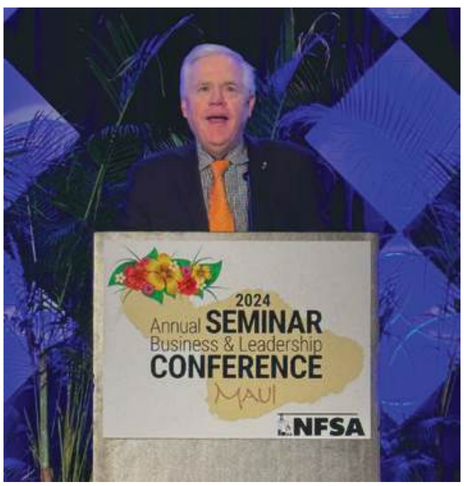


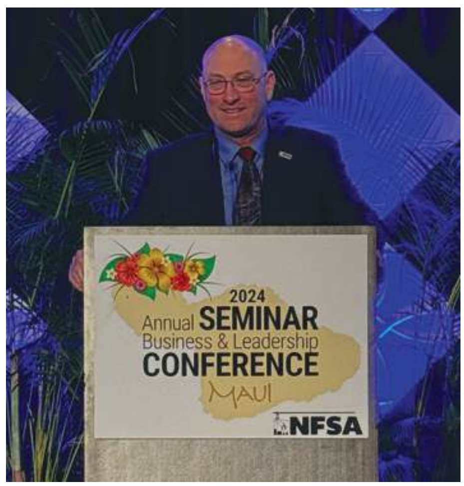
OPENING RECEPTION...

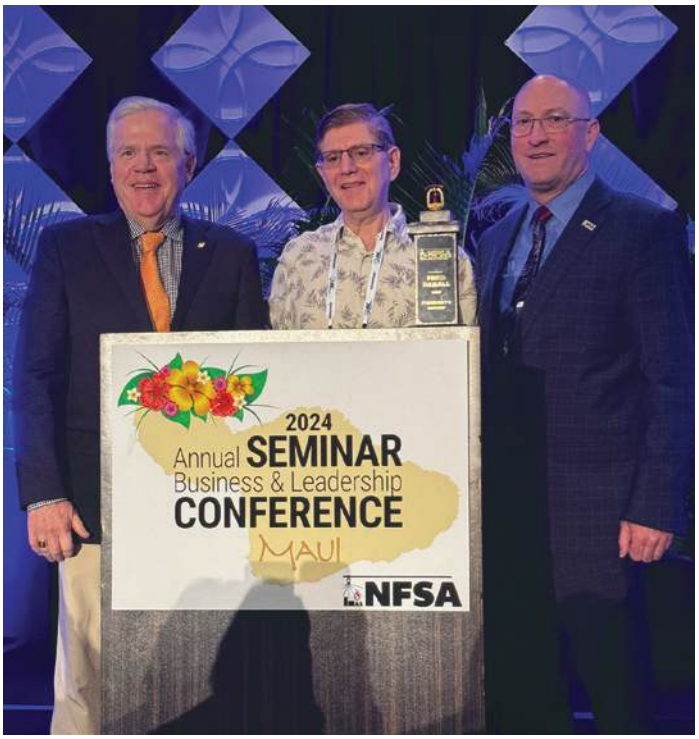


"Great weather and a killer sunset highlighted our opening reception. Oh... and the food? Can you say STONE CRAB!!!"

GENERAL SESSIONS...







Author Rosa Say taught us how to live our Aloha, JP Morgan's Zachary Page gave us an economic forecast tailored to the fire sprinkler industry and we heard of all that's new and upcoming from hardworking NFSA Board Members and staff. We're excited to see the many technical and outreach projects come to fruition in the near future!

SESSIONS...

We're happy to report we've received great feedback from session attendees. The subjects were varied, the speakers were lively and informative and there's no better way to learn and get CEUs!

Welina mai i Maui NFSA!

OUR VENDORS...

Our vendors enjoyed the open-air atmosphere while meeting with our attendees. Their tables were laden with the latest and greatest the fire sprinkler industry has to offer. We hope many new connections were made and all went home with lots of new contacts to add to their database!


VIKING
Trusted above all.™
Victaulic
POTTER


CORROSION-RESISTANT.
DEBRIS-FREE.
Z-COAT.
Wheatland Tube
A ZEKELMAN COMPANY


POTTER


ELIMINATE FLOODING
AGF Manufacturing
Improving the Fire Sprinkler Industry since 1988


BUY NFSA
NFSA


ASC
Engineered Solutions
ASC
Engineered Solutions
ASC
Engineered Solutions


2-WAY-ACTIVATION
REMOTE-BULB
Metraflex
FIRE PROTECTION DIVISION
FIRELOOP
FIRELOOP
PROTECTIVE SOLUTIONS
Metraflex


Johnson
Controls


FERGUSON
FIRE & FABRICATION
FIRE PROTECTION SUPPLIER
• FABRICATION
• ENGINEERED FIRE
• STOCKLISTING
• BUNDLING
• LOOSE MATERIAL
• CUSTOMER SERVICE
• LOCAL SALES ASSOCIATES
FERGUSON


Victaulic
PROUD PLATINUM SPONSOR
2024
Annual SEMINAR
Business & Leadership
CONFERENCE
MAUI
NFSA


VIKING
Trusted above all.™
PROUD PLATINUM SPONSOR
2024
SEMINAR


JOB GROUP
2-WAY-ACTIVATION
JOB
Simply.
More.
Safety.


POTTER
The Symbol of Protection

LET'S NETWORK!...

Old friends got together again, new friendships were forged, and all agreed there wasn't a better or more beautiful spot to do it than at the Wailea Beach Resort!


Johnson Controls
AWARDS BANQUET SPONSOR
2024 Annual SEMINAR Business & Leadership CONFERENCE
NFSA


AWARDS BANQUET SPONSOR
Johnson Controls
2024 Annual SEMINAR Business & Leadership CONFERENCE
NFSA


AWARDS BANQUET SPONSOR
Johnson Controls
NFSA


WELCOME
NFSA 2024 | MAUI, HI
THANK YOU TO
OUR SPONSORS


2024 NFSA ANNUAL SEMINAR AND BUSINESS LEADERSHIP CONFERENCE
MAUI 2024


AWARDS BANQUET SPONSOR
2024 SEMINAR
CONFERENCE


NFSA
Johnson Controls
AWARDS BANQUET


AWARDS BANQUET SPONSOR
2024 Annual SEMINAR Business & Leadership CONFERENCE
NFSA
Johnson Controls

THE COMMON VOICES GOLF CLASSIC

Our golfers couldn't have ordered up a better day to take to the links at the beautiful Wailea Emerald Golf Course!

Here are the results of what was a day filled with friendship, laughter and some great drives and putts!

1st: ***Sean Kostka, Jason Blinkhorn, Tom Field - 58 (Victaulic, ABB Fire Protection, Reliable)***

2nd: ***Daniel Wake, Brendan Tebben, Edwin Frieden, Jordan Vanloon - 59 (Victaulic)***

3rd: ***Caleb Armbrust, Tim Freiner, Bruce LaRue, Andy Kaempher - 59 (Reliable with special guest NFSA)***

The tie for 2nd place was broken by matching the scorecards starting with the #1 handicap hole. They both tied on that hole, but Daniel Wake's team had a better score on the #2 handicap hole which solidified 2nd place for them!

Longest Drive – ***Travis Glime*** *(Nelson Fire Protection)*

Closest to the Hole – ***James Yost*** *(Talco Fire)*

Longest Putt – ***Kevin Marr*** *(Patriot Fire Protection)*

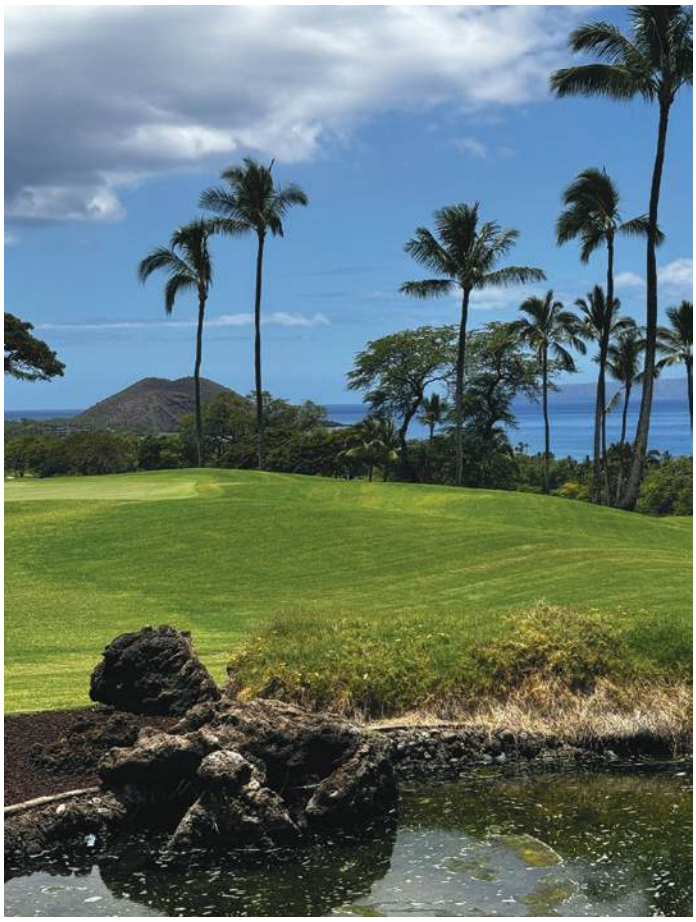
thank you

Friends,

Thank you so much for supporting Common Voices at our 7th Annual Golf Tournament. By participating today you are making it possible for us to simply say, yes! We are able to say yes and send our advocates wherever their voice is needed. Through the sharing of our stories we are making a difference and educating on the importance of fire sprinklers!

If you didn't get the chance to talk with Pam Elliott today, you can learn more about her by visiting www.fireadvocates.org

Common VOICES
Turning Tragedy into Advocacy




ALOHA


KAPA

A special thanks to our sponsors!

Gold

ASC Engineered Solutions
Core & Main Fire Protection
DeWALT
Ferguson Fire & Fabrication
Johnson Controls
Potter
Reliable
Victaulic
Viking
Winsupply

Silver

Dalmatian Fire
Kimble & Company

Beverage Cart

Kauffman Company
Wayne Automatic Fire Sprinkler

Bronze

General Air Products, Inc.
nVent/ CADDY

Tee

Wolverine Fire Protection

In Memory:
Aus Marburger
John Viniello
Rex & Elaine Kimbro
Wayne Gey

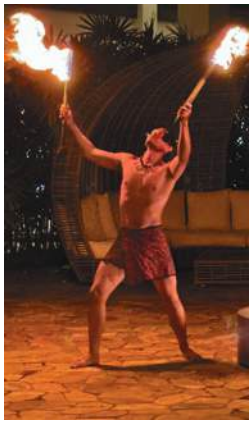
THE SPOUSES EVENT

It was a beautiful day for our member spouses to enjoy a glass of wine and a chance to sport a haku lei! A haku lei, also known as a lei po'o, is a traditional Hawaiian headpiece made from flowers, ferns, and leaves that's worn for special occasions. The word "haku" refers to a lei-making technique that involves braiding or sewing flowers and greenery with the face facing out. Haku leis are known for their intricate craftsmanship and are often worn by brides, graduates, and hula dancers.

Common Voices' Pam Elliott told her fire survivor story to attendees. She is quite the dynamo when it comes to advocating for fire sprinklers!
Thank you, Pam!

AWARDS BANQUET

Rainy weather didn't stop us as we moved our luau inside and enjoyed a wonderful meal and breathtaking entertainment aloha-style as we honored the 2024 class of award recipients!



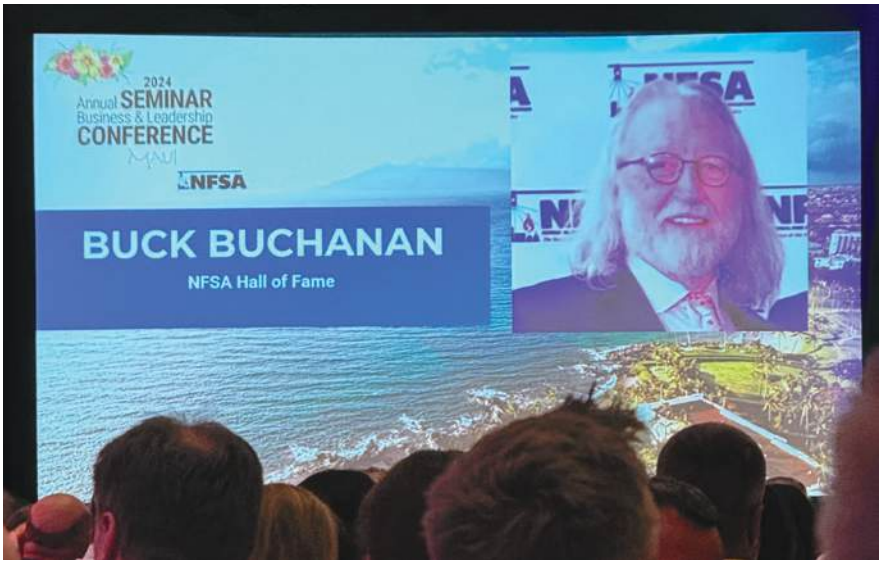

NFSA
CHIEF TODD
NFSA Public Safety Leaders
2024
Annual SEMINAR
Business & Leadership
CONFERENCE
MAUI
NFSA


2024
Annual SEMINAR
Business & Leadership
CONFERENCE
NFSA
KEVIN T. FEE
2024
Annual SEMINAR
Business & Leadership
CONFERENCE
MAUI
NFSA


JIM BOULANGER
PATRIOT


2024
Annual SEMINAR
Business & Leadership
CONFERENCE
NFSA
GREGG HUENNEKENS
NFSA Hall of Fame


2024
Annual SEMINAR
Business & Leadership
CONFERENCE
NFSA
STEVE ULMER
NFSA Golden Sprinkler Award


2024
Annual SEMINAR
Business & Leadership
CONFERENCE
NFSA
BUCK BUCHANAN
NFSA Hall of Fame


MARK FESSENDEN


2024
Annual SEMINAR
Business & Leadership
CONFERENCE
NFSA


LUAU
DANCERS


SPAM

Thank You to our 2024 Sponsors...
We couldn't do what we do without you!

2024 Annual SEMINAR Business & Leadership CONFERENCE MAUI

NFSA

PLATINUM SPONSORS

ASC Engineered Solutions
CORE & MAIN FIRE PROTECTION
DEWALT
FERGUSON FIRE & FABRICATION
Johnson Controls
POTTER The Symbol of Protection
Reliable
Victaulic
VIKING
Winsupply

GOLD SPONSORS

BlazeMaster FIRE PROTECTION SYSTEMS
Safe Signal

SILVER SPONSORS

AF
The Automatic Sprinkler Corp. of PUGET SOUND
NFSA
IAFF
WATTS

BRONZE SPONSORS

Boston Chapter of NFSA
Capital Region Fire Sprinkler Association
Detroit Fire Sprinkler Advisory Board
Eaton
Empire Chapter of NFSA
Hose Monster
Indiana Chapter of NFSA
Metraflex
Michigan Chapter of NFSA
Minnesota Chapter of NFSA
National Foam
New Jersey Fire Sprinkler Advisory Board
Northen Illinois Fire Sprinkler Advisory Board
Quick Response Fire Protection
ServiceTrade
Tennessee Fire Sprinkler Contractors Association
Wisconsin Chapter of NFSA

NFSA
NATIONAL FIRE SPRINKLER ASSOCIATION
The Voice of the Fire Sprinkler Industry

Form NFSA-PROGRAM-AwardsBanquet-2024

Printed in U.S.A.

Living with Fire Sprinklers

by Vince Powers, *Inspection, Testing, and Maintenance Specialist*

Whether you live in a single-family home, townhome, apartment, or condominium equipped with fire sprinklers, the proper care and maintenance of these systems can make a difference. In this article we will discuss the different requirements for proper care and who is responsible for ensuring the systems are maintained.

First, let us discuss the installation guides for residential sprinkler systems.

There are three variations of sprinkler system installation guides. Technically, they are called standards. Although most people refer to them as codes, they are not codes. A code tells us that something must be done and is typically adopted by a jurisdiction which becomes law. A standard tells us how to do something, for example NFPA 13 *The Standard for the Installation of Fire Sprinkler Systems* is a guide to the installation of sprinkler systems.

A very brief description of these three standards are as follows:

NFPA 13 *The Standard for the Installation of Fire Sprinkler Systems*

This standard applies to commercial buildings and high rises.

NFPA 13R *The Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*

This standard applies to apartments, condominiums and other residential occupancies up to four stories in height.

NFPA 13D The Standard for the Installation in One-and Two-Family dwellings and manufactured Homes

This standard applies to single family, townhomes, and manufactured homes.

	NFPA 13	NFPA 13R	NFPA 13D
Extent	Throughout	Occupied spaces	Occupied spaces
Scope	• All occupancies • Property and life safety	• Low-rise residential • Life safety	• 1&2 family • Townhouses • Care facilities • Life safety
Design	Occupancy/Hazard	4 sprinkler design	2 sprinkler design
Duration	Minimum 30 Minutes	30 minutes	10 minutes

The requirements for inspection, testing and maintenance for NFPA 13 and NFPA 13R buildings fall under the requirements of NFPA 25, *The Standard for the Inspection, Testing and Maintenance of Water-Based Fire Sprinkler Systems*.

This standard was developed in 1992 for building owners to ensure to a reasonable degree that the sprinkler system in these types of buildings will work if ever needed. As all other standards, NFPA 25 is a minimum standard, meaning all tasks at the required frequencies must be completed for the building to be compliant with the fire codes.

There are many different requirements with NFPA 25, but we will only touch on one common question. Is the qualified person conducting the inspection of the sprinklers and systems required to enter the individual dwelling units?

The answer, according to NFPA 25, is simple: yes, all sprinklers are required to be inspected at least annually. The issue that inspectors run into is access. Does the inspector have the right to enter someone's home? Permission from the owner is all that is required, but this is where things can get convoluted. Typically, an apartment building is owned by a single company and managed by a property manager. The property manager is the one that would provide permission to enter apartments. In many cases apartments are not entered into because the renter of the apartment does not provide access. When this happens, the system is not compliant with the fire code. Now let us look at a condominium. In these type buildings, an individual typically owns the unit and it is treated no differently than a single-family home or town home. There are laws that protect owners from requiring sprinklers in the unit to be inspected. The only exception to this would be if the HOA agreement has a clause requiring owners to allow inspectors in for the inspection of the sprinklers.

Now for the single family and townhome owners.

A home fire occurs every 90 seconds. There are 363,000 fires in homes each year, causing 2,720 civilian deaths. Residential fire sprinklers are remarkably effective at protecting lives when installed and properly maintained. Like any home system such as heating or plumbing, sprinkler systems must be properly maintained. When a new home is purchased, operation manuals for everything from the refrigerator to the trash compactor are provided,

continued on page 59

continued from page 58

but what is provided when a sprinkler system is installed? NFPA 13R is required to be provided, but often this document is lost in transition from the contractor to the owner.

NFPA 13D is the *Standard for The Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*. This document provides requirements for the installation of residential sprinkler systems. Chapter 12 of this document outlines the requirements for inspection, testing, and maintenance (ITM) of these systems. This chapter does not provide much detail other than stating the system shall be maintained and that the installing contractor is responsible for providing the owner or occupant instructions on how to maintain the system. NFPA 13D annex section A.12.2 provides the homeowner with some guidance on how to maintain the system such as.

- Monthly inspection of valves
- Monthly inspection of tanks
- Monthly testing of pumps
- Testing of waterflow devices every six months
- Visual inspections of the sprinklers
- Inspection of the systems by qualified individuals when ownership changes

Whether these systems are required by local ordinance or installed voluntarily, often they are not given attention by the owner or occupant. The leading reason for sprinkler system failure is a closed control valve. Shutting off the valve to the fire sprinkler systems stops the fire sprinkler system from performing. Little effort is required to verify that if a valve is open and NFPA 13D provides some installation requirements to help prevent a closed control valve. In residential systems without a public water supply or one that is not of material value, there may be a water storage tank and small pump to supply water to the sprinkler system. It is important that these pumps be maintained (monthly per NFPA 13D) regularly to ensure they will operate if needed.

Homeowners who are unsure what to do for fire sprinkler maintenance can research the internet to learn more about their fire sprinkler system, such as **https://firesprinklersbuylife.com/upkeep** or **https://homefiresprinkler.org/its-easy-to-live-with-home-fire-sprinklers-2/**. Qualified and licensed contractors can be found online as well as at the NFSA website https://member.nfsa.org/Directories/Contractor-Directory. Many homeowners know there is required maintenance on heating and air conditioning units as well as other systems in the home and have little hesitation about contacting a contractor to service these systems at least annually; however, the fire sprinkler system which is typically right next to the HVAC unit or hot water heater can often go unnoticed.

There is not much to periodically conducting ITM for a home fire sprinkler system. A home is one of the largest investments many will make in their lifetimes. Sprinklers can help protect these investments and loved ones. It is a good feeling to be proud of our homes and to want all the best stuff, but to ensure the home investment and loved ones are safer, sprinkler systems should be installed in all homes and periodically maintained.•

Sprinklering Maui

by Caleb Armbrust, *Director of Membership*

Thank you to James Yost from Talco for his introduction to Ray and the team from Maui Plumbing and Fire Protection!

During the NFSA conference, NFSA Chief Engineer Michael Joanis, Chris Logan of Fire Sprinkler Podcast and I joined Ray Michaels and Dave Hudson of Maui Plumbing and Fire Protection to see how they "do sprinkler" on the island of Maui.

The island has a 5,000 sq. ft. residential fire sprinkler requirement and there are more than a few homes that meet that threshold. It would be hard to imagine jobsites with better views (might be a good feature in the magazine ***Jobsite Views***) and it was great to see them being protected.

Anytime I get to go on a jobsite I learn a ton, and this was no exception. Walking the house with Michael, Dave, and Chris was fascinating to listen as they discussed each room and the various sprinkler configurations, pipe routes, and challenges to protection. There was a home just up the mountain from Lahaina, and the still very real devastation wrought by that fire, that chose to add a pump and tank in addition to the municipal water supply. This home will also have a loop of fire sprinklers inside the eaves. I could not help but think of NFSA member and innovative company Frontline Wildfire Defense and the value they are trying to bring to wildland fires.

The technical guys talked through the what and why of every single fire sprinkler and stick of pipe and why fewer sprinklers were not used in some cases, not to mention the eave fire sprinklers and creative uses of pumps and tanks. The closing comments were really that so long as the standard is met, what happens beyond that can in many ways be open to the desires of the homeowner.

We concluded our site visits with a walk through some emergency housing being constructed for victims of the Lahaina fire where we saw both standalone and multi-purpose fire sprinklers being installed. Finally, Chris was able to sit down with Ray Michaels, the owner of Maui Plumbing and Fire Protection, for a podcast interview about his background, the company, and how they are working to recruit talent into the trades. I take great pleasure in being able to connect folks with one another in this wonderful industry, so the chance to have Chris Logan join us and get some content to share with the wider industry was a fantastic bonus – Thanks, Chris!•

An example of fire sprinklers being installed in an unconventional manor that exceeds the basic requirements of the standard. This system has a pump and tank backup to go along with what will be fire sprinklers in the eaves.

Fire sprinklers roughed into a living area with a beautiful view!

Visiting some of the emergency housing units and checking out some more fire sprinklers.

L – R Caleb Armbrust, Dave Hudson, Chris Logan, and Michael Joanis on a job site visit with 180 degrees views of beautiful Maui.

Chris Logan interviews Maui Plumbing and Fire Protection for an upcoming podcast – look for it soon

BACKFLOW DIRECT

Shop Fire System Solutions TODAY

Knock out the competition with the shortest, lightest, and only all-stainless steel backflow preventer in the industry.

- **Free shipping** on **ALL** valves
- **24-hour shipping** on select orders

Only at BackflowDirect.com

Understanding the Urgency of Residential Sprinkler Adoption and Why it's Lagging

by Daniel Wake CFPS, *FIre Protection Product Manager, Victaulic*

As I sit down to write this article on May 1, 2024, at least 57 people have died in home fires across the state of Pennsylvania since the year began. Six of the fatalities are children under the age of seven.

For a long time, Pennsylvania has led the nation in catastrophic structure fires with deaths. Many of the issues reported involve aging homes lacking the bare minimum in passive fire protection equipment. Many other times, residential fire-related fatalities are traced back to a system installation error, such as a smoke alarm not functioning. In these cases, there is likely little to no warning when a fire starts. Pennsylvania faces an extremely grim, concerning issue when it comes to protecting people's lives from residential structure fires. But the Keystone State isn't alone.

Depending on the jurisdiction, fire codes and regulations can vary widely from one street to the next. These national codes and standards are the basis for sprinkler design and installation in residential buildings, but not every jurisdiction uses them:

- **The International Residential Code (IRC)** defines minimum regulations for townhouses and one- and two-family dwellings not exceeding three stories above grade level. It requires sprinklers in all new builds.
- **NFPA 13** is the design and installation standard for automatic fire sprinkler systems in all buildings and applications, including residential. It provides guidance for all types of residentially classified occupancies.
- **NFPA 13R** focuses on low-rise residential occupancies, covering sprinkler design and installation for residential occupancies up to four stories in height. It provides layout, calculation and installation guidance for sprinkler systems installed in accordance with this standard.
- **NFPA 13D** focuses on one- and two-family dwellings and manufactured homes. It requires sprinkler systems designed and installed to prevent flashover (total involvement) and to improve the chance for occupant escape or evacuation.

The root of the problem is that jurisdictions have control over which code sections they adopt and reject, and changing a single code to meet even the minimum national requirements can take years. For example, only 15 states require sprinklers in townhomes in accordance with the IRC. Yet, even when local fire codes do mandate measures like sprinklers in residential buildings, how many jurisdictions are required to enforce them? How many years will it take for a change to fully take effect?

The question of whether sprinklers should be required in residential buildings isn't new; it's regularly debated. What's changing is that some governments are stepping in to take action.

Where is legislation changing?

The following are some of the states that have recently made progress in changing laws surrounding fire sprinklers in residential buildings.

In April 2024, state lawmakers in Maryland approved a bill to tighten fire protection requirements in high-rise apartment buildings after the death of 25-year-old Melanie Diaz. The Melanie Nicholle Diaz Fire Safety Act mandates that tenants be notified when their building does not have a fire sprinkler system and provides funding for building owners to install sprinklers.

In January 2024, New Jersey passed the New Townhouse Fire Act to require automatic fire sprinklers in new townhouse constructions. This happened two months after an apartment fire injured ten firefighters and displaced 20 residents.

In June 2021, Minnesota passed a bill to retrofit older residential towers with sprinklers by 2033. The state already required automatic sprinklers in residential high-rises built after 1992 but excluded older structures. The law is a direct response to a 2019 apartment fire that killed five people.

The conflict: Should all governments require sprinklers in residential buildings?

Property owners are one of the most vocal groups we face when advocating for fire code modernization. Especially in older buildings, we hear arguments about the financial toll the change will have on property owners. They're concerned with footing large design and installation bills, long-term maintenance costs, and the inherent complexities of managing a construction project. We need to help them understand the gravity of the situation at hand.

continued on page 64

continued from page 63

As fire protection specialists, we know that sprinklers save lives and that modern homes are at greater fire risk than ever before. According to the National Fire Sprinkler Association, new residential constructions burn **eight times faster** than older homes. Today, the window for people to escape a house fire after a smoke alarm goes off is less than three minutes.

The factors contributing to elevated fire risk in residential spaces are multi-faceted. To start, modern building materials are more flammable than they used to be. However, residents' belongings are also a problem. The products coming into people's houses are made of different materials, and many have higher heat release than in the past. For example, many building codes were approved when most couches were made of natural textiles. Nowadays, synthetic materials used to mass-produce furniture catch fire faster and release toxic fumes. The growing use of battery-powered technology is another important factor. As e-scooters, e-bikes and electric vehicles become more common in the average household, fire load drastically increases in residential structures, whether single-family homes, multifamily buildings or high-rise apartments.

Our duty to protect lives

The civilian death rate per 1,000 reported home fires is ***89% lower*** in homes with sprinklers than in homes without them, according to the National Fire Protection Association (NFPA). Residential sprinklers give occupants a better chance of survival, but updating local fire codes and requirements is a notoriously slow process. How many lives will we lose in the years it takes for each jurisdiction to adopt residential sprinkler requirements (if they ever do)? Proactivity will save lives, and it's our duty to continue advocating for legislative change and educating people about modern fire risks and solutions.•

About the author: **Daniel Wake, CFPS**, is a fire protection product manager at Victaulic, a leading global producer of mechanical pipe-joining, flow control and fire protection solutions for the most complex piping applications. He has 25+ years of fire protection experience and sits on seven NFPA standard committees. Contact him on *LinkedIn* and learn more at *www.victaulic.com*.

Break free from archaic flow testing techniques. The BigBoy Hose Monster® can diffuse up to 2,759 gallons of water per minute through its lightweight, durable frame. Plus, with Pitotless Nozzle technology, debris passes harmlessly without damage. It's the perfect beast for the perfect flow test.

HOSE MONSTER
COMPANY

Virtual Reality Reveals the Speed of Fire and the Power of Fire Sprinklers

Exposure to home fires puts responders at risk from fire, collapse and health hazards. Each new home built without home fire sprinklers makes the community less safe for all.

With HFSC's new virtual reality video you can help decision makers, stakeholders and others in your community understand what you know all too well: today's home fires are fast and deadly.

With user-controlled 360-degree full-room views, they'll experience actual house fires in virtual reality, feeling as if they are in the rooms. They'll see flashover in the unsprinklered room in real time and watch a sprinkler automatically control the blaze in another.

This new resource lets you share your knowledge with convincing evidence of the need to protect new housing stock with sprinklers. It can be watched with 3D glasses/headset for an immersive experience or in 2D on HFSC's website.

Installed home fire sprinklers support Community Risk Reduction. Our new virtual reality video is an effective resource to help you achieve your CRR goals.

Visit HomeFireSprinkler.org/VR.

Scan this QR code with your smartphone to learn more.

AFG Fire Prevention & Safety Grant Program

Fire is Everyone's Fight®

HOME FIRE SPRINKLER COALITION

The Mysteries, Dangers, and Risks of Underground Piping Repair

by Tom Hartel, *President-Valley Fire Protection Systems, LLC*

Underground water piping systems are the veins and arteries of our nation. They transport something that's vital to everyone's well-being and are essential for protecting lives and property from fire and smoke damage.

As with your own internal circulatory system, when problems develop in these piping systems they can cause serious health and safety concerns. Water piping leaks and failures have been known to pose significant hazards for nearby residents, work crews, adjacent infrastructure, motorists and even the local economy.

The tradesmen and women that service these systems and repair breakages do so at great personal sacrifice and risk, often under very trying circumstances. They are the first responders for breakdowns in the nation's water supply system, and, as such, they deserve our respect, consideration, and gratitude.

The state of the nation's piping infrastructure

It's no secret that American infrastructure – both nationally and locally – needs significant maintenance and upgrades. The 2021 Bipartisan Infrastructure Law is helping to address some aspects of the problem, but its reach won't extend into every local community.

In the Chicago area alone, there are numerous industrial parks that were built in the nineteen fifties, sixties, and seventies. The water piping systems in these areas weren't intended to last more than 50 years or so, and they're now at or about to reach the end of their functional lifespan.

It's often true that problems that are visible are prioritized over problems that aren't, and this applies to the water piping infrastructure in many local communities. The age-related deterioration of these systems frequently isn't addressed until a leak develops and literally rises to the surface.

Repairing and replacing piping infrastructure is complex

We're all familiar with seeing work crews along local roadways digging up the ground for one reason or another. It's such a commonplace sight that it seems routine and simple to the casual onlooker.

In fact, in many situations, it's difficult, arduous and often dangerous work. It can also be very complicated.

A typical underground water piping repair doesn't simply involve a handful of "workers." Work crews require several specialized skills, training, OSHA Certification and will often include machine operators, laborers, industrial semi-truck drivers, plumbers and sprinkler fitters.

Their efforts need to be carefully coordinated, almost choreographed, to ensure a successful outcome. Because this work involves several hazards and dangers that will be discussed shortly, it's critical that tasks are performed in the right sequence, with the right attention to detail and with a high skill level.

What most of us do not see as we drive past a work crew are the numerous considerations related to the actual work. For example, there are almost always permits and licenses to acquire, notifications required for nearby residences and office spaces, coordination with the utility location service JULIE, and so on.

There's also the time and effort spent coordinating and communicating with local building, fire and water departments, along with tenants, the building owner, a fire watch provider, the property manager and the insurance carrier.

In addition, it's not unusual for pipe infrastructure issues to develop near hubs of human activity, such as office buildings, railways, highways, and airports. So, repair crews also need to go about their work in ways that minimize the impact on the commercial activity going on around them. Piping repair work can be dangerous.

Again, because the sight of work crews digging up the ground along roadways is so routine, many of us assume there's nothing particularly dangerous about it. In fact, there are a host of hazards and complicating factors inherent in most of these projects that pose significant risks for the work crews and nearby residents.

Here are some of the most prominent dangers these crews regularly face:

Frozen earth

Bitter winter cold isn't simply inconvenient to work in; it can also be life threatening. Crews are often required to work outside all day and night in the type of conditions that prompt weather services to advise the rest of us to strictly limit our time outside.

The presence of snow or freezing rain makes things even more challenging for crews. They must simultaneously try to stay warm, hydrated, keep the machinery clean and struggle withdecreased

continued on page 68

continued from page 67

visibility. (Imagine sharp pellets of hail or freezing rain pelting your face incessantly.)

What's more, extreme cold is very hard on machinery and increases the chances for breakdowns. When those happen, trying to effect repairs in these conditions is even more challenging.

Finally, extended cold can thoroughly freeze the earth six or more feet below the surface. When that happens, the ground develops the consistency of hardened concrete and becomes extremely difficult to both excavate and work in.

Buried power and gas lines

Obviously, it's critically important that crews identify the presence of underground power and natural gas lines before initiating any work. But even when those lines aren't near where the excavation is occurring, they can still pose a significant risk if there are ground disturbances or collapses at the excavation site.

Also, leaks or failures in an underground water piping system mean that there is often running water present at a work site. Clearly, the combination of running water and nearby electrical lines poses a very dangerous combination and a very real threat to work crews.

Ground collapse and subsidence

Ground collapse presents a frequent issue for work crews. Keep in mind that when there's a leak or a failure in an underground water pipe system, it's not always apparent until many days or weeks later when the visible presence of pooling water alerts people to the issue.

Because of all the time that has passed from the initial failure to when the problem is first observed, the work site is often thoroughly water-logged. This makes the ground extremely unstable, exponentially increasing the possibility of excavation site cave-in or collapse. That's why crews are required to use trench boxes and other shoring methods to help stabilize the excavation site, keep themselves protected, and prevent heavy machinery from falling into the hole.

Proximity to nearby activity

Unfortunately, pipe leaks and failures aren't restricted to remote, non-urban areas. Piping systems are there to serve humans, so when they fail there's often considerable human activity nearby. (Imagine a truck terminal with fully loaded semi-trucks constantly pressing the earth as they move around.)

Work crews must coordinate their activities with the activity from nearby hubs, such as office buildings, airports, rail lines, highways and pedestrian traffic. That obviously complicates their efforts to complete the repair. But nearby human activity can also result in ground vibration and other types of disturbance that can contribute to instability at the excavation site. So, work crews have to balance their own safety with minimizing the possibility that their work will impede the commercial activity going on around them.

Other considerations and complications

In addition to the risks and hazards just described, there are a host of other complications and considerations that must be addressed in order for work crews to complete their work safely, efficiently, effectively and in compliance with local and federal regulations.

Here are some of the more common complications:

Age of the affected piping system

If a leak or a failure has occurred in a piping system, there's a good chance that it's an older system. That means that there could be instabilities throughout the system, not just where the leak is occurring. If that's the case, work crews will need to take that into consideration and try to put as little stress on the entire system while they repair the issues.

Leak chasing

It may surprise people to know that once you've repaired a leak in one section of a piping system, leaks may start to appear in other weaker areas of the system. After all, the age and wear-and-tear on the pipe system that contributed to the original leak remain present throughout the system. Additionally, the annual winter freeze and thaw cycle is particularly harsh on underground pipes. The initial leak may have eased water pressure in other parts of the system. But with that leak now repaired, the pressure may build back up and create problems in other, vulnerable parts of the system. In other words, a recently repaired leak has now become the strongest part of the fire loop!

Contamination

You might think that aside from being…well…dirty, the ground surrounding a water piping system would generally be safe. However, it's not unusual for viruses, bacteria, pollutants and other contaminants to be present in the ground around piping infrastructure.

This means that as work crews repair the leak and replace the damaged piping, they must take extreme care to ensure that contaminants aren't introduced into the piping infrastructure and the water that nearby businesses and residents' use.

Boulders

We tend to think of boulders as purely above-ground phenomena, but believe it or not, it's not usual for work crews to encounter huge underground boulders when they excavate. This obviously complicates a job because boulders may be too large to simply lift out of the ground.

They may have to be blasted or jackhammered into more manageable-sized pieces that can then be more easily and safely removed.

Spoils removal

It's not widely known that when a repair crew digs up the ground, they can't simply refill the hole with the dirt they previously removed. In accordance with EPA regulations, excavated soil must be considered as spoils and taken for testing and disposal to an EPA-approved testing site. This clearly adds time, effort and cost to repair projects.

continued from page 68

Necessity of hand digging

Even though heavy machinery performs much of the excavation at a work site, it's also often the case that crews will need to hand dig at the site, which adds time and labor costs. Hand digging is required for a number of reasons, including ensuring that no working sections of the pipe system are damaged during excavation and ensuring that no stones or contaminants are able to enter any newly installed piping. This includes having to work around buried cable TV, electrical, telephone, internet, high pressure natural gas lines and other lines.

Danger from nearby construction

It's not unusual for excavations to occur in areas that are proximate to other types of construction or road repair. In these situations, crews need to be wary of falling slag and other debris coming from those nearby work sites. Each member of an excavation crew must have the complete and implicit trust of every coworker. This is considered to be highly dangerous work!

Ancient artifacts and wildlife

Anyone who's spent time doing excavation work knows that when you dig up Mother Earth, you really never know what you're going to find. It's not unheard of for excavation crews to encounter what may be ancient artifacts or even fossils as they go about their work.

Obviously, when that happens, work is interrupted, and the appropriate experts are called in to assess the finds and determine what they are and how many of them may be present in the work site. Even above ground, work crews sometimes have to contend with wild animals or even hooligans looking to rob the crew or steal tools thereby requiring special precautions to be taken.

The cost of water piping system repair

As mentioned earlier, repairing and replacing piping infrastructure can be very complex. Not surprisingly, that complexity can generate significant costs. Repair crews often include several tradesmen employing a variety of different skills and equipment. The cost of that labor and equipment drives most of the expense for these repairs.

In addition, crews must have continual 24/7 access to fuel, emergency power and lighting. And

due to the hazards related to the work, everything and everyone needs to be insured, which includes Explosion, Collapse and Underground coverage (XCU). Since piping failures don't recognize weekends, there are also labor costs related to overtime and Sunday work. There are also situations where shifts have to extend through the night, since restoring fire protection and potable water is of paramount importance. Nursing homes, prisons, hospitals, and tire storage facilities cannot have their fire protection systems out of service for an extended period. A fire protection system should not be out of service for more than 10 hours, unless 9 specific steps have been taken. (NFPA 25 Section 15.5.1.)

For these reasons, when a piping leak or failure occurs there are often significant costs associated with repairing it. Fortunately, insurance can often cover all or part of the expenses described here.

A case study

Here's a short case study of a repair that occurred during the summer of 2023. A company in the Chicago suburbs called to fix an obvious underground leak that was observed nearby. This case study provides a clear example of the logistical complexity and amount of equipment involved in these types of repairs.

We received a call to repair an underground water pipe leak in an area business park. This was a looped system that served a dozen buildings. Once that happened, we:

- Contacted utility locator JULIE and the U.S. Infrastructure Corp. to ensure accurate assessment of underground utilities.
- Mobilized a repair fleet (dump truck, trailer, backhoe) along with material, stone, supplies, tools, trench box, foreman and crew (approximately $900,000 in equipment).

The leak had been running for weeks and the ground was completely saturated, creating excess mud and generally unsafe conditions. There were also a variety of utilities in the area that we had to work around.

We then:

- Located the main "Buffalo Box" (b-box) water shut off valve.
- Opened the earth.
- Pumped water from the hole.
- Performed additional hand digging so as to not damage the working sections of the pipe.

We had fixed a leak on this same pipe system a year earlier. Our initial inspection found that the section we had previously repaired was holding pressure correctly. The problem was in a different section of the pipe system.

When the leak couldn't be precisely located, we had to call in a specialized leak locating company to assist. We then secured the site with safety fencing and cones, barricades and caution tape.

During the days when this work was performed, the heat index in the area reached 120 degrees. So, the working conditions for the crew were extremely difficult and demanding.

Once we knew the leak's exact location, we excavated, exposed the leak and provided necessary shoring, a trench box and CA-7 stone for bedding.

We then:

- Demolished and removed the leaking pipe section.
- Replaced it with 16 feet of new pipe.

Valley Foreman Rich K. pressure tested the system and concluded there were additional leaks occurring. We had to excavate to expose those leaks and perform repairs similar to those already described. (Imagine a six-person crew working in blazing sun the entire day while wearing full safety gear covered in sweat and grime from head to toe. Mosquitoes were feasting on the crew as well).

Eventually, we were able to confirm that the system was repaired and holding full pressure. We then had to:

- Reset the electric fire pump, jockey pump and fire alarm system.

continued on page 70

continued from page 69

- Load up the dirt and spoils and remove them to an EPA-approved testing site. (multiple trips)
- Set bushes and shrubbery aside for the on-site landscaper to replant.
- Finish grading the area.
- Clean and sweep up the asphalt driveway near the work zone.
- Haul all the heavy equipment, tools, barricades, and fuel back to the shop.
- Notify the building tenants, building owner, property manager, fire, water, and building departments.

This is just one example of what was required to safely and correctly repair these types of underground piping system leaks.

Excavations can serve up surprises

As mentioned previously, when digging up the ground, you never know exactly what you might encounter. Sometimes you uncover not just leaks and aging pipes; you make truly bizarre discoveries.

I'm personally aware of excavations where work crews found:

- An unopened case of vintage whiskey (from the prohibition era).
- Dinosaur eggs.
- A buried safe with money inside.
- An ancient coffin in an unknown graveyard.
- A fossilized mammoth tusk.

It's often said that outer space holds many mysteries. But as you can see, there are some very strange and puzzling mysteries buried below our feet.

Work crews deserve our gratitude and respect

Because underground water piping systems really are the veins and arteries of our nation, it's not overstating things to say that the crews that work on these systems are genuine first responders that we all need to be thankful for. They truly are "surgeons of the earth" who help ensure the health and safety of local businesses and communities, by providing a reliable supply of fresh water.

Similar to doctors or paramedics, there are times when the crews that work on piping repair must be on call. When they're on call, they need to be drug and alcohol free and ready to respond at a moment's notice. Family and personal life must be put on hold. (In other words, if a tradesman is on call, he or she cannot be out of town or enjoy a can of beer at a family cookout).

As mentioned previously, they often have to work in both bitter cold and desert-like heat, along busy highways and around potentially dangerous utilities and chemicals. So, it's critical that they're routinely alert, knowledgeable, and conscientious. They are also far more highly skilled than they are often given credit for. An experienced backhoe operator could "pick a quarter off of your shoulder without you even knowing it." For all of these reasons, we should always treat these crews with respect, admiration and genuine gratitude.

You often get what you pay for

The statement that "you get what you pay for" may be a cliché, but when it comes to underground piping repair, it's also a valid caution that buyers should beware. As noted previously, underground piping repair involves a number of skilled union tradesmen driven by pride plus a substantial amount of costly equipment, so it's never inexpensive. That cost leads some businesses and municipalities to lean toward the lowest bidders when repairs are necessary. The problem is that the rock-bottom bid can sometimes reflect short cuts, quick fixes, poorly maintained equipment, and inferior materials. Having to fix an underground pipe leak is certainly an unwelcome expense, but having to dig up and re-repair a pipe that was recently "fixed" is truly burdensome and a further drain on finances.

Choose wisely and look beyond the cost alone when you need to repair an underground pipe system. Making the right choice can be the difference between "one-and-done" and enduring an underground Groundhog Day. Does your underground contractor offer daily video and photographs of the repair to keep you informed and help with the insurance claim process? Will your contractor be around a year from now to honor a potential warranty claim?

Thank you for taking the time to read this article. Permission is granted to translate, print, share, and distribute this article with the intent to inform and educate the public.•

***Tom Hartel** is President of Valley Fire Protection Systems, an award-winning fire protection contractor that is based in St. Charles, IL. Valley is a full-service, third generation company that also operates a plumbing and backflow prevention division, licensed and perform work in Illinois, Indiana, Ohio, Michigan, and Wisconsin. Mr. Hartel can be reached at: (630) 761-3168. The company website is: www.valleyfire.com. Be sure to follow us on LinkedIn!*

Special thanks to longtime underground surgeons Rich K., Kevin L. and Chris G. for providing factual content for this article.

Please join us in celebrating Valley's 50th anniversary this year.

H2home

NFPA 13D PUMP & TANK SYSTEM

DESIGNED WITH
CONTRACTORS IN MIND

[**NFPA 13D** Residential Pump & Tank Systems]

- All-In-One Unit With Small Footprint
- 425 Gallon Narrow Water Tank (29" Wide)
- Easily Removable Pump Assembly
- Designed & Built For Fast Installation
- Riser Manifold Kit Included
- Digital Pressure Switch Now Standard
- Lifetime Customer Service & Tech Support

As with all of our 13D pump & tank systems, the H2hOme® comes standard with a stainless steel pump and all non-ferrous components to protect against corrosion and ensure longevity.

GENERAL AIR PRODUCTS

generalairproducts.com

BUY NFSA

LOOK FOR THE LOGO

SAM MEMBER

NFSA

NATIONAL FIRE SPRINKLER ASSOCIATION

The Voice of the Fire Sprinkler Industry

Brought to you by the NFSA SAM Council

To see a full list of SUPPLIERS & MANUFACTURERS (SAM) Council Members and product updates, visit nfsa.org/SAM

FIRE SPRINKLERS BUY TIME TIME BUYS LIFE NATIONAL FIRE SPRINKLER ASSOCIATION

@NFSAorg – engage in our #fastestwater conversation!

facebook.com/NFSAorg

Fire is fast. Fire sprinklers are faster.

NFSA
NATIONAL FIRE SPRINKLER ASSOCIATION
The Voice of the Fire Sprinkler Industry

514 Progress Drive, Suite A
Linthicum Heights, MD 21090
(443) 863-4464 • nfsa.org

by Joanne Genadio
NFSM Editor

When a Great Ad Hits Home

There's nothing like a great ad that elicits emotion. While I can live without that annoying gecko from Geico and the even more annoying Liberty Mutual Emu, who hasn't laughed watching those great Progressive Insurance ads with homeowners that are turning into their parents? Genius! Creating new outreach ads is a favorite part of my job. It all started in my P.S. 30 fifth grade class when Mrs. Amico made the class cut out ads from magazines and think of captions for them. I was hooked! So, here I am (not gonna tell you how many years later) getting to do something I truly love.

I never know when the inspiration is going to hit me when it comes to creating an outreach ad. I've woken up with a few ideas, thought of something in the shower and have stopped what I was currently working on to create one.

Creating a great outreach ad requires a strategic approach that combines clear messaging, audience targeting, compelling visuals, and effective distribution. A catchy headline doesn't hurt either! I make sure to create an ad that resonates on an emotional level (think homeowners turning into their parents!). Whether it's happiness, excitement, fear, or empathy, tapping into emotions makes the ad more engaging and memorable, and I think I've covered the bases here with the wide variety of ads now in our arsenal.

By focusing on delivering value, connecting emotionally, and continuously optimizing based on performance analytics, I always try to create ads that not only reach our target audience but also resonates with them deeply and inspire the desired response, whether it be to direct them to the firesprinklersbuylife.com website or the NFSA website to take the time to find out more about why they need fire sprinklers.

Each week, I track the analytics of our social media sites. I'm happy to report that posts that contain our outreach ad are consistently the most widely liked and shared. During Home Fire Sprinkler Week, our ads were shared so many times it was hard to keep count! The ads can be used in both print and digital formats, and we'd love for our members to share them! We can customize the ads with your company logo. They would even make great graphics for retractable banners for trade shows!

Included in this article are just a few of the ads that are available for your use. We have ads about the beneficial relationship between fire sprinklers and firefighters, why fire sprinklers are green, the power of the combination of smoke alarms and fire sprinklers, the need for our senior population to live in sprinklered housing, and many more. I hope you find value in these ads and take us up on the opportunity to share them. Look at what's available under the resources tab on our website. Don't see a subject you think we should include? I love getting fresh ideas for new ads. Email me at **genadio@nfsa.org** with requests or suggestions. I look forward to hearing from many of you! One final thought, remember, you don't need to post 47 photos of dinner at Pam's (if you know, you know)!•

Side-By-Side Demo Filmed for Use in Effort to Educate Students

NFSA was proud to partner with UL's Fire Safety Research Institute in March at the Delaware County Emergency Services Training Center in Pennsylvania for a side-by-side burn demo.

The burn, which was picture perfect on a picture-perfect day, was recorded for later use. The Fire Sprinklers activated in 47 seconds and flashover occurred in under two minutes. This footage will be used to build more fire sprinkler modiules to educate both students and the public.

To see the videos of the burn, visit the "reels" section of our Facebook page, or view on our Twitter feed.

Once the new modules are complete, there will be a new Path called "The Science of Fire Safety," where you'll be able to see the footage captured this week! This footage will also be used to show how fire sprinklers work with an upcoming episode of Military Makeover. So many awesome partnerships that spotlight fire sprinklers on the horizon!

It was a great learning experience for all. Attendees were very appreciative and receptive to the important subject matter. We look forward to the insurance industry becoming true Partners in Progress!

Educating the Insurance Industry

FCCI Insurance Group hosted their annual Risk Control Conference in Sarasota, FL from May 14th to 16th. This event, titled 'Rise to the Challenge,' was an opportunity for 50 of their Risk Control teammates from across five regions to gather, network and learn.

NFSA President Shane Ray was honored to lead a controlled burn with our side-by-side sprinkler valve trailers in the parking lot to demonstrate the benefits of automatic sprinkler systems. A big thanks to the Sarasota County Fire Marshal and Fire Department for their assistance.

Shane was also invited to give a presentation to the risk control group on emerging trends, including the firefighting challenges posed by the proliferation of lithium-ion batteries.

Save the Date!

The **NFSA's inaugural Area 1 Conference** is scheduled to take place from Tuesday, October 1, 2024, at 9:00 am to Friday, October 4, 2024 at 5:00 pm at the Renaissance Boston Patriot Place Hotel, located at 28 Patriot Place, Foxboro, MA 02035.

This highly anticipated event boasts a comprehensive agenda, featuring esteemed speakers from various sectors of the fire protection industry.

continued on page 75

continued from page 74

NFSA Welcomes Jeanna Garrido as Manager of Government Relations

Jeanna M. Garrido serves as the Manager of Government Relations for the National Fire Sprinkler Association (NFSA). Her prior leadership roles include the Executive Director of the Harry S. Truman Little White House, Senior Director of Membership and Philanthropy of the University of Florida Alumni Association and Florida Keys Director to United States Congressman Carlos Gimenez.

Jeanna graduated from the University of Florida and her experience includes various capacities as a political consultant for nonprofit organizations and state-level government. She worked as the recruiter of the College of the Florida Keys as it advanced to a four-year, state accredited college and assisted with the development of the new Basilica High School of Saint Mary's Star of the Sea.

Jeanna played a key role in the fire sprinkler retrofit of Florida's only presidential museum. She was recognized by the National Fallen Firefighter Foundation for her work in developing the 17th Annual Truman Legacy Symposium. This educational conference was added to Congressional Record for its progress in continuing the 1947 President's Conference on Fire Prevention. She currently serves as the treasurer of the Key West Harry S. Truman Foundation, is a Rotarian and member of the Navy League of Key West.

Jeanna is passionate in sharing the mission of NFSA to protect lives and property through the widespread acceptance of the fire sprinkler concept and aims to inspire key constituents to make our world safer.•

PEOPLE

IN MEMORIUM

***Gene Endthoff**, 91, of Galesburg, Illinois, died at 8:08 p.m. Thursday, May 2, 2024.*

Gene was born December 16, 1932, in Ladysmith, Wisconsin, the son of Benton and Clara (Haasl) Endthoff. Gene married Betty Lou Hill on June 17, 1951, in Rochelle, Illinois. He went on to serve in the US Army from January 6, 1953, until he was honorably discharged on January 5, 1955, attaining the rank of Sergeant. Gene worked as a building official for Rochelle, Illinois for many years and later as a building official for Odessa, Texas. He last worked as the Director of Codes for the National Fire Sprinkler Association, retiring in 2005.

Having a mind for design and construction, Gene enjoyed building many different things from homes to model trains. He was passionate about fire sprinklers saving lives and retrofitted two of his homes with fire sprinklers.

Online expressions of sympathy may be sent to the family at www.watsonthomas.com.

CHAPTERS IN ACTION

COLORADO

Rocky Mountain Fire Protection Expo a Success

The Colorado Fire Protection Association held its annual Expo on May 16, for the first time as NFSA's newest chapter. Almost 200 people participated in the event, double last year's attendance! The Expo featured four training tracks, offering multiple opportunities for attendees to gain valuable CEU's. It was a rousing success.

CONNECTICUT

Connecticut Chapter Annual Golf Tournament to Benefit the Connecticut Burns Care Foundation

On May 20th the Sun Gods blessed us with a beautiful day at the Glastonbury Country Club. Following an 1am BBQ lunch, Chapter Chair Ed Carvalho welcomed our 52 golfers and thanked them for attending and helping to raise funds for such a worthy cause. He then gave the nod to hit the links for a shotgun start.

Following a great day of sun and fun we had a great buffet supper and some excellent raffle prizes. We all took a moment to reflect on a dear member who passed away this past year, but was such a big part of our chapter, Bill Phair from Ferguson Fire.

The final wrap-up for the evening was to announce the donation and check presentation of $5,000.00 to the Connecticut Burns Care Foundation.

FLORIDA

NFSA's Florida Fire Sprinkler Association Hosts 29th Buddy Dewar Golf & Skeet Classic

The 29th Annual Buddy Dewar Golf and Skeet Classic, held on March 25th, surpassed all expectations and was a huge success. Boasting 260 golfers, 90 shooters, and over 40 dedicated volunteers, this event marked the largest turnout in the tournament's history. Blessed with perfect weather, it felt like a family reunion for the fire sprinkler industry, as friends, colleagues and industry notables convened from across the nation.

The raffle prizes were nothing short of spectacular. It's a sure bet that those who won were feeling very lucky as every bucket was full of tickets. Thanks to the incredible efforts of the volunteers, the day proceeded seamlessly. The Mission Resort did an outstanding job making the day flow smoothly, and there are not enough words to thank The Gey Ranch and Wayne Automatic Fire Sprinklers for providing shooters with an unforgettable experience.

After golf and shooting,

continued from page 76

participants gathered under the expansive circus-sized tent to enjoy food, celebrate achievements, and simply be in each other's company. There are no competitors on this day, just friends enjoying each other and thankful for an industry that has been so good to us.

Such an extraordinary day wouldn't have been possible without the generous support of our sponsors, who truly made this event one for the history books.

ILLINOIS

Fire Sprinkler Demo in State Capitol

On April 11th, the Illinois Chapter was in our state capitol for a side-by-side burn. In attendance were many state legislators and members of the Illinois State Fire Marshal's Office.

First Responders Expo

On May 18th, the Illinois Chapter was at the First Responders Expo in Gurnee, IL. It was great to see all the fire officials from Lake County. The Chapter performed a fire sprinkler demo in conjunction with the Northern Illinois Fire Sprinkler Advisory Board.

MINNESOTA

Retirement of a High-Rise Retrofit Champion

On April 5th, Jon Gutzmann, the Executive Director of the Saint Paul Public Housing Authority, formally retired after 36 years in that challenging and life-changing position. Jon was a champion of public safety and fire protection in the properties he managed, and he continually worked to make affordable housing "safe and affordable." He led the charge to retrofit all 16 PHA high-rises in the city, update fire alarm systems, install stovetop extinguishers and carbon monoxide detectors, and tirelessly advocated for resident and responder safety. When others debated "cost vs fire safety" needs in public housing, he always said, "It comes down to a choice!" And he always chose fire safety first!

Jon's high-rise retrofit experience and success has been used as a model for other jurisdictions, let to the successful passage of public housing high-rise retrofit legislation in Minnesota, and has been used nationally in legislative efforts and the NFSA Retrofit Manual. Jon is a very humble man, but his work has had powerful, lifesaving impact around the nation!

The Minnesota Chapter wishes Jon a long, healthy, and happy retirement!

NORTHWEST CHAPTER UPDATE

Medford Fire Marshal Chase Browning, Clackamas Fire District 1 Fire Marshal Shawn Olson, and NFSA Northwest Regional Manager Suzanne Mayr discuss the Oregon Fire Sprinkler Coalition business at the recent Oregon Fire Marshal Association Conference.

Many northwest members attended the National Seminar and Business & Leadership Conference in Maui. The Fire Sprinkler Advisory Board of Puget Sound hosted a welcome event for all Northwest members and guests, kicking off the week with a big Aloha welcome. We were proud to see the Northwest's own Todd Short, City of Redmond Fire Marshal, receive the prestigious Public Safety Leadership Award for his years of fire sprinkler advocacy.

Fire Sprinkler Week in May included several events, including the annual Idaho Fire Protection Forum annual burn cell demo with a new twist this year. In his pre-demo talk to attendees, Fire Marshal Ron Johnson highlighted the proportionately high number of garage fires that area fire personnel have responded to. To show the effectiveness of fire sprinklers, Nampa Fire built a burn cell to replicate a garage, complete with a vehicle inside. One sidewall sprinkler was installed, which extinguished the fire before it had a chance to damage the vehicle. The event also featured a typical burn cell demo with a fully furnished room.

continued on page 78

continued from page 77

The Washington Residential Fire Sprinkler Coalition also presenting its first Safety Ambassador awards during Fire Sprinkler Week –see related article in this issue's Area News.

The Northwest NFSA chapters hosted Doug Meyers, Business Development Manager of Special Hazards-West Region at Viking Corporation for its June meetings. The Puget Sound and Columbia-Willamette chapter fall meeting lineup will be posted on the NFSA Calendar of Events. Chapter members should watch their inbox for updates. The Fire Sprinkler Advisory Board of Puget Sound will be teaming up with Local 299 to host the annual Sprinklerman Shootout in July.

Fire sprinkler training continues to be in demand, with the first round of classes with the Washington State Association Fire Marshal wrapping up. If you have training needs, please contact Northwest Regional Manager Suzanne Mayr to set up a training in your area.

TEXAS

NFSA Texas Chapter Shootout

The NFSA Texas Chapter hosted its second annual Texas Fire Sprinkler Shootout on April 26, 2024, in Fort Worth Texas. Texas Shootout funds raised will be used for training and education scholarships.

NFSA Texas Chapter Board Members Brad Anderson, Danna Wells, David Welcher, Mike Showalter, Tate Hitzeman, Dale Payne and Daniel Merritt, Regional Manager Cindy Giedraitis and Membership Director Caleb Armbrust.

Shootout Winners - Aaron Evans, Tyler Augustin, Gar Brammer, with Chapter Chair Tate Hitzeman

Fall 2024 NFSA Texas Chapter Events

Texas AHJ (Authority Having Jurisdiction) & Fire Sprinkler Contractor Forums

September 17, 25 & 26, 2024

It's time to register for our annual NFSA & FSCATX (Fire Sprinkler Contractor Association of Texas) Fire Sprinkler AHJ Forums. These Fire Sprinkler Forums to discuss national, state, and local codes and how Fire Sprinkler Contractors can be best prepared to design, install & inspect/maintain fire sprinkler systems.

Register through the events calendar on the NFSA website.

Contact: Cindy Giedraitis - cindy@nfsa.org
979-324-8934 •

MJ Daly Awarded Fire Protection Scope for National Coast Guard Museum

MJ Daly is pleased to announce they have been awarded the Fire Protection scope for the new construction of the 75,000 sq-ft National Coast Guard Museum in New London, Connecticut. They will be working with AZ Corporation, the general contractor for the project.

MJ Daly will be installing a 750 GPM Fire Pump with a Jockey Pump to feed a wet sprinkler system, and piping for the new fire mains and connections to an exterior Fire Department water source and fire pump test header.

They will also be installing a dry sprinkler system with a nitrogen generator to protect the loading dock, storage rooms, exterior canopy, and atrium landing. The material being used for this will comply with the Build America, Buy America Act (BABA) to help support American made products. The project is projected to be completed in late 2025.

About the Museum

The museum will honor the heritage of the U.S. Coast Guard and provide the public a gateway to discover Coast Guard life. The components of the Museum will reflect the missions of the USCG curated in three themed areas of Safety, Security, and Stewardship explored through story lines: Defenders of the Nation, Enforcers of the Seas, Lifesavers Around the Globe, Champions of Commerce, and Protectors of the Environment.

Valley Fire Protection Systems Recognized for Leadership in Volunteerism

The Institute of Real Estate Management (IREM) presented Valley Fire Protection Systems, LLC, with its prestigious 2024 IREM Cares Award for Volunteerism during its 20th annual PREMIER Awards ceremony that was held at Chicago's historic Drake Hotel on May 10th.

The IREM Cares Award recognizes a company that has provided outstanding contributions to the communities it serves and exemplifies the true meaning of philanthropy and social responsibility.

"It is an honor for us to be recognized by IREM," said Tom Hartel, president at Valley Fire Protection Systems, LLC. "At Valley, we strive to do all we can for the community, and I'm very proud of everything our team does to make a positive difference in the Midwest."

Valley supports a wide range of civic and charitable organizations, including Cradles to Crayons, Marklund Charities, Project Seth, Adventures in Missions, and Make-A-Wish Foundation.

Additional information may be found at: www.valleyfire.com.

Bringing Safety Home Fire Safety Advocacy Award Recipients Announced


Chief David Pendleton

Chief Ryan Schell

The National Fire Protection Association (NFPA) Fire Sprinkler Initiative and the Home Fire Sprinkler Coalition (HFSC) have awarded the U.S. and Canadian Bringing Safety Home awards to **Chief David Pendleton**, Saco (Maine) Fire Department and **Chief Ryan Schell**, Central York Fire Service.

This award honors fire safety advocates in North America who diligently promote the importance of home fire sprinklers and use HFSC educational material, NFPA data, and Fire Sprinkler Initiative resources to educate decision-makers about the importance of home fire sprinklers.

Pendleton was nominated by the Massachusetts Sprinkler Coalition because of his strong advocacy and efforts to educate the public and elected officials about home fire sprinklers. He successfully countered misinformation with facts about the economic benefits to the community. His efforts resulted in the Town Council voting in favor of protecting all new one- and two-family homes in Saco with fire sprinklers.

Schell was nominated by Scott Pugsley, Seneca Polytechnic School of Fire Protection. He is the first Canadian recipient of the award. He was selected because he organized educational events, advocated for sprinkler inclusion in building permit applications, built partnerships and conducted public demonstrations. His efforts increased awareness, debunked myths, and ultimately led protecting an entire subdivision within his jurisdiction with home fire sprinklers.

As Bringing Safety Home Award recipients, Pendleton and Schell will each receive a $1000 stipend to further fire sprinkler advocacy and educational efforts.

ASC Introduces Its New AFCON AF727 Bear Claw Universal Attachment & Swivel

ASC® Engineered Solutions now offers its AFCON® Figure AF727 "Bear Claw" universal structural attachment and swivel. The Made in America AF727 has been designed to attach steel

continued on page 80

continued from page 79

I-beams, flanges, and joists to brace members and rigidly braces fire sprinkler piping systems subjected to horizontal and vertical seismic loads. Use of the AF727 attachment and swivel assembly reduces the total number of braces required, due to its high UL maximum horizontal load rating of 1885 lbs.

The AF727 is a timesaving, innovative solution that can be installed quickly and easily in one step – cutting typical structural brace attachment install time in HALF. It also saves assembly time, as the structural attachment and swivel component come pre-assembled for easy incorporation into a complete bracing system. Set screws provide a built-in visual verification of the required installation torque.

Constructed of Ductile Iron with Carbon Steel Hardware, the AF727 is designed to fit beam thickness up to 3/4" thick and works with brace pipe from 1" through 2" IPS size. This product is both UL Listed and FM Approved and ready for incorporation into your seismic bracing system design. It complies with NFPA 13, ASCE 7, IBC, & MSS SP- 127 bracing requirements.

ASC proudly manufactures the AF727 Bear Claw at our Columbia, PA foundry. It meets Buy American, Buy America, & AIS.

Software Support: The AF727 is now available as a design option in Seis Brace. Using Seis Brace 2.0, ASC's free seismic fire protection calculation software, enables spacing maximization and a reduction in material costs while ensuring NFPA 13 code compliance.

For more information about the AFCON AF727 structural attachment and swivel, and ASC's complete Seis Brace seismic design solution, contact your local ASC Engineered Solutions sales representative, or visit us online at www.asc-es.com.

Fayette Pipe Launches New Schedule 7 EZ- Flow Fire Protection Pipe

Fayette Pipe announced the expansion of its product line with the introduction of Schedule 7 EZ-Flow fire protection pipe. The new American-made product is suitable for welding or roll grooving and is produced in accordance with the latest revision of ASTM A795/A135. It is available in 21-foot lengths and diameters of 1-1/4", 1-1/2", 2", and 2-1/2". Schedule 7 joins the company's Schedule 10, 40, and 80 black steel pipe offerings, reinforcing Fayette Pipe's commitment to providing comprehensive solutions for fire sprinkler applications.

Fayette Pipe's Schedule 7 is produced from high-quality American-made coil and seam welded using Fayette Pipe's high-frequency electric resistance weld (ERW) pipe mill. It conforms to Grade A standards with nominal wall thickness as specified. Fayette Pipe's new EZ-Flow Sch 7 pipe is also 100% hydro-tested and produced from 100% American-made steel. The finished product is coated with the industry-recognized black coating, known for its durability and ease of use, ensuring that the pipe consistently arrives at job sites or warehouses in optimum condition. The interior of each pipe is treated with Fayette Pipe's MIC Defense clear corrosion inhibitor.

www.fayettepipe, www.fayettenipple.com

Fayette Pipe Introduces FayetteGuard™

Fayette Pipe announces the launch of FayetteGuard, an LED UV-cured paint system for black steel pipe exteriors. This innovative coating process, the first in the United States, employs advanced LED technology to ensure enhanced protection, energy efficiency, durability, and long-lasting performance for the rigorous demands of fire protection, plumbing, and HVAC applications. It also offers an attractive black sheen that enhances the aesthetic appeal of installations. The LED UV-curing technology that Fayette Pipe employs uses high-intensity electronic ultraviolet (UV) light to solidify photo-reactive substances used in the FayetteGuard paint instantly. This method differs from traditional drying methods, which rely on evaporation or absorption to solidify chemistry.

Samples of the new FayetteGuard coating on select Fayette Pipe products are available upon request through the company's website at www.fayettepipe.com.

The Reliable Automatic Sprinkler Co. Inc. Receives Finalist Award For "Coolest Thing Made In SC" Competition.

Reliable Automatic Sprinkler was recently recognized as one of four finalists in the South Carolina Manufacturers Alliance 2024 competition, "The Coolest Thing Made in SC". Advancing from a field of 166 nominated products, Fire Sprinklers advanced through four rounds during the month of March. Over 218,000 votes were cast during the competition. Each of the four finalists were invited to the State Capitol where they were presented their award by South Carolina Governor Henry McMaster. The SC State Senate has also passed a resolution, which was sponsored

continued on page 81

continued from page 81

SC Governor Henry McMaster, Reliable Senior Vice President of Corporate Sales Kevin T. Fee, Jr.

John Corcoran (Reliable), Jennifer Kouyoumjian (Reliable), SC Governor Henry McMaster, Kevin Fee Jr. (Reliable), SC Senate President Thomas Alexander, Ashley Teal (Reliable), Nathan DeShong (Reliable)

by Senators Rice and Alexander, recognizing Reliable as "…a manufacturing company that brings great pride to the State of South Carolina." "

This was a win for our industry by bringing awareness of fire sprinklers to the people of South Carolina," noted Reliable VP of Human Resources Ashely Teal. "Our employees and industry partners all got behind the competition and had a lot of fun with it," she continued. "And as an employer in a competitive labor market, the visibility shines a nice spotlight on fire sprinklers as a 'cool' industry!" To learn more about the "Coolest Thing Made in SC" competition, visit: https://scmanufacturingmadness.com/ To read the full Senate Resolution, visit: https://www.scstatehouse.gov/sess125_2023- 2024/bills/1207.htm

General Air Products' Vapor Pipe Shield Earns c-UL Listing

General Air Products is pleased to announce its patented and UL-Listed Vapor phase Corrosion Inhibitor (or VpCI®) delivery system, Vapor Pipe Shield, is now c-UL Listed and available for installation across Canada. Applying the same technology that has protected and extended the shelf life of many familiar metal products, including metallic car parts, oil pipelines, and steel bridge cables, Vapor Pipe Shield from General Air Products is a game-changing development in the prevention of damaging corrosion in dry and pre-action fire sprinkler systems.

Vapor Pipe Shield went through rigorous testing in order to receive its UL Listing and c-UL Listing. Testing included evaluation in categories such as high ambient temperature stability, temperature cycling stability, toxicity, and corrosion rate, among others. Failure in any of the tests during the UL evaluation process would have prohibited Vapor Pipe Shield's listing. For a full summary of the UL evaluation, our Agency Assessment is available to view on our website.

Piped directly in-line between the air compressor and dry pipe valve, Vapor Pipe Shield is as easy to install as an Air Maintenance Device. Once installed, the VpCI® molecules are dispersed throughout the piping using the airflow provided by the dry or pre-action system and then adsorb to the metal surface of the piping system. There, these molecules form a one-molecule thick barrier — or protective shield — on the metal that repels corrosive elements from contacting the pipe directly, stopping corrosion in its tracks. And because VpCI® molecules can also penetrate any standing water in the piping network, it doesn't matter how much oxygen or moisture is in the sprinkler system — oxygen and moisture are rendered irrelevant.

Vapor Pipe Shield from General Air Products makes corrosion mitigation and prevention in any dry or pre-action sprinkler system simple, efficient, and highly cost-effective — and now that it is c-UL Listed, customers can have confidence that this technology is made with the same standards of safety, quality, and dependability General Air Products is known for.

For more information on the Vapor Pipe Shield, contact General Air Products Director of Marketing Jim Doherty at jdoherty@generalairproducts.com or visit www.generalairproducts.com.

AGF Manufacturing Preassembled Fire Sprinkler Solution with Model 8511Z Sprinkler Floor Control and Zurn ZW5004 Press Reducing Valve

AGF proudly announces the integration of its renowned, domestically made Model 8511 Sprinkler Floor Control manifold with the Zurn Model ZW5004 adjustable pressure reducing

continued from page 81

valve, offering unmatched efficiency and reliability for the fire sprinkler industry.

The AGF Commercial RiserPACK Model 8511Z is meticulously crafted in the USA using high-quality schedule 10 pipe, ensuring superior durability and performance. This assembly incorporates the AGF Model 2511 TESTanDRAIN valve with a pressure relief valve and drain trim, flow switch, pressure gauge, and AGF Universal 3-way gauge valve, along with a 2 ½" hose valve. The 8511Z manifold was designed specifically for floor control applications where a downstream drain outlet, capable of full flow is required for Pressure Reducing Valve acceptance testing and future inspection and testing requirements.

The integration of the Zurn ZW5004 Valve adds another layer of functionality and versatility to the AGF solution. The ZW5004 Valve is a 2-1/2" Pressure-Tru® Valve featuring an angle body and grooved connections. Certified as a floor control valve, an indicating valve, and a check valve in automatic sprinkler systems, it is also listed as a standpipe valve for CLASS I and CLASS III systems. With the ability to regulate pressure under both FLOW and NO-FLOW conditions, the ZW5004 Valve offers unparalleled precision and control. Field adjustments are made effortlessly thanks to its low torque design, requiring only 9 ft lb of torque. Despite its compact profile, the larger handwheel ensures smooth operation, even in tight spaces.

The combined features of the Model 8511Z Sprinkler Floor Control and Zurn ZW5004 pressure reducing valve make them ideal for a wide range of applications, including retrofit projects and new installations. Their compatibility and superior performance ensure optimal flow performance, making them indispensable assets for any fire protection system.

For more information about AGF's integrated fire protection solutions or to find a distributor in your area, visit AGFMFG.com.

New Tyco® NG-2 Nitrogen Generator Offers Easy-To-Use, Advanced Corrosion Control For Fire Sprinkler Systems

Johnson Controls announces the new Tyco NG-2 Nitrogen Generator. Available in stand-alone or wall-mounted models, the NG-2 Nitrogen Generator is engineered to replace the oxygen inside a sprinkler system with nitrogen, helping stop pipe corrosion and extend the life of dry pipe and pre-action fire sprinkler systems. It leverages a combination of enhanced data management and simplified controls to allow for faster, easier and smarter installation and operation.

Johnson Controls optimized the Tyco NG-2 Nitrogen Generator with an internal redesign, expanded capacity and a suite of both new and enhanced features while maintaining the core advantages of the legacy model (NG-1). The core of these updates is the interactive human machine interface (HMI) touchscreen display. It serves as a single point of access to view and manage operations, maintenance, and diagnostic insights.

With real-time information at their fingertips, users can perform regular operation tasks, alarm management, pressure readings and maintenance scheduling with ease, while also viewing historical data and quickly performing tasks like installation, setup and condensate management.

The Tyco NG-2 Nitrogen Generator features a more efficient and robust internal design that allows for faster installation and minimizes connections in the cabinet to reduce complexity and maintenance.

It has a total system capacity of up to 6,500 gallons (24,605 litres) and uses a new Tyco oxygen removal vent controller that monitors and controls the venting process for two or six dry pipe and pre-action sprinkler systems. With a wet pipe air vent and nitrogen inerting vent kit, the generator features a unique "fill and purge" breathing method that removes corrosive oxygen and introduces 98% purity nitrogen throughout the entire fire sprinkler system. In addition to corrosion control benefits, the generator design allows for oxygen removal vent installation directly on the riser for faster, easier installation. It also eliminates the need for a nitrogen tank and reduces the overall equipment footprint.

By greatly reducing corrosion risk in sprinkler systems, the NG-2

continued on page 83

continued from page 82

helps extend the useful life of fire sprinkler systems, minimizes business interruption, and enhances long-term ROI. It joins the broad Johnson Controls portfolio of fire sprinklers, valves, fire grooved and other fire sprinkler system products. The NG-2 is ideal for a variety of facilities, including data centers, cold storage facilities, warehouses, museums, parking structures, mission-critical manufacturing, healthcare buildings, stadiums and libraries. Tyco NG-2 Nitrogen Generators are FM approved, CE certified and UL 508A listed.

For more information and tips on selecting the right nitrogen generator for your project, visit: https://www.tyco-fire.com/products-and-solutions/corrosion-solutions.

SFPE Foundation Publishes Report on The Integration of Building Information Modeling with Fire Protection Systems, Software, and Workflows

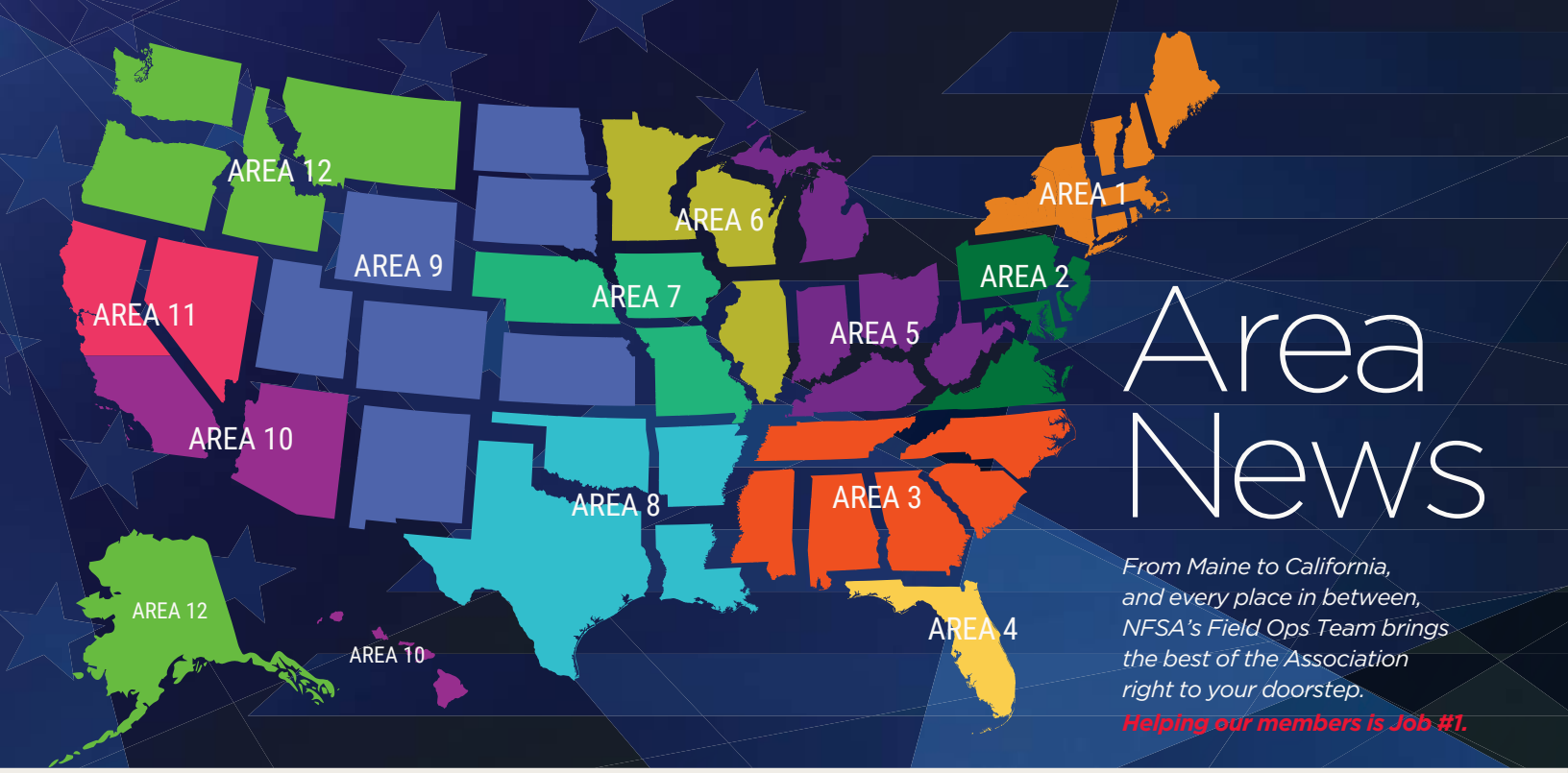
The SFPE Foundation announces a new report that examines Building Information Modeling, commonly known as BIM, in relation to the fire engineering landscape.

The Integration of Building Information Modeling with Fire Protection Systems, Software, and Workflows is the culmination of a year-long research project led by Stephen B. Roth, PE, President and Chief Technology Officer of Carmelsoft. When the Foundation awarded a research grant to Roth, he set out to investigate BIM software tools and schemas available to fire engineers (FEs).

Through interviewing over 40 stakeholders, Roth learned that improvements could be made to software, data, and interoperability to enhance the design experience and expand BIM adoption amongst FEs. Roth's recommendations include that equipment manufacturers design more usable Revit families and that updates be made to the IFC (Industry Foundation Classes) schema for better interoperability. The report also explores the future of BIM in fire engineering, which includes adoption of artificial intelligence tools and digital twins of physical buildings for smarter firefighting.

Accompanying the report is a supplementary User Guide that includes expectations and recommendations on overcoming some of the workflow bottlenecks that occur when fire engineers are using FE-related software tools. Readers who wish to focus on the practical application of the research should check out the User Guide first.

Access the full report and user guide on the SFPE Foundation website.•



Area News

From Maine to California, and every place in between, NFSA's Field Ops Team brings the best of the Association right to your doorstep.
Helping our members is Job #1.

AREA 1

CONNECTICUT, MASSACHUSETTS, MAINE, NEW HAMPSHIRE, NEW YORK, RHODE ISLAND, VERMONT

Massachusetts Department of Fire Services Side-By-Side Trailer Gets a Rebuild

The Boston IP Board funded a Side-by-Side Trailer for the Massachusetts Department of Fire Services several years ago. After many years of burns, wear and tear and weathering it needed an overhaul. We were very fortunate to get Z-B Construction/Deck-It to volunteer their expertise to evaluate and rebuild the trailer.

Once the carpenters from Deck-It began the project, they determined that the unsprinkled side needed a full rebuild and the sprinkled side would just need an exterior repaint. The arrangements were made to have the trailer delivered to the Deck-It work site and within a couple weeks the trailer was rebuilt and ready to go just in time for its first burn of the spring at the Western Mass Fire Chief's Legislative Luncheon.

On behalf of the Department of Fire Services, the Mass Residential Sprinkler Coalition and NFSA we would like to thank Patrick and Jake the owners of Deck-It, both former firefighters, and their team. Originally, they were donating their time. When I contacted them about an invoice for materials, they said it was part of the donation.

Fire Sprinkler Week

We wrapped up Fire Sprinkler week in Massachusetts with a Side-by-Side Burn in Lakeville. This burn was Live streamed via Facebook.

The burn was so impactful that we had the head of the small

continued on page 85

continued from page 84

private Catholic school approach us who wants to sprinkle all their buildings, even though they don't have to because of square footage and other rules. We gave her some information and had conversation with the Deputy Chief about being able to accomplish the mission.

AREA 2

DELAWARE, MARYLAND, NEW JERSEY, PENNSYLVANIA, VIRGINIA, DISTRICT OF COLUMBIA

The Life-Saving Impact of Home Fire Sprinkler Systems: A Spotlight on NFSA Mid-Atlantic Team's Efforts

In the realm of home safety, few innovations have the potential to save lives and protect property as effectively as home fire sprinkler systems. Despite their proven benefits, these systems are often overlooked in residential settings. However, the NFSA Mid-Atlantic Team is on a mission to change that. Through dynamic live burn fire sprinkler demonstrations across New Jersey and the Philadelphia area, they are highlighting the critical importance of fire sprinklers in safeguarding homes and families.

Why Home Fire Sprinklers Matter

Home fire sprinkler systems are designed to control or extinguish fires before they can cause significant damage. Unlike smoke alarms that only alert residents to the presence of fire, sprinklers actively fight the flames, providing crucial time for occupants to escape and minimizing property damage. According to the National Fire Protection Association (NFPA), the presence of fire sprinklers in homes can reduce the risk of dying in a fire by 80% and reduce property loss by about 70%.

The NFSA Mid Atlantic Team's Demonstrations

The NFSA Mid Atlantic Team has been tirelessly working to demonstrate the effectiveness of these systems through live burn demonstrations. These events vividly show the stark difference between homes equipped with fire sprinklers and those without. By simulating real fire scenarios, the team illustrates how quickly a fire can spread and how efficiently a sprinkler system can contain it.

Promoting Widespread Acceptance

The primary goal of these demonstrations is to foster widespread acceptance and adoption of home fire sprinkler systems. The NFSA Mid Atlantic Team emphasizes that while the initial installation cost of sprinklers may be a consideration, the long-term benefits far outweigh the expenses. Enhanced safety, potential insurance savings, and peace of mind are compelling reasons for homeowners to invest in these systems.

Moreover, the team is advocating for updated building codes and incentives for installing fire sprinklers in new constructions. By working with local governments and community organizations, they aim to make fire sprinklers a standard feature in all new homes, similar to smoke detectors.

A Call to Action

As the NFSA Mid Atlantic Team continues their efforts, it is crucial for homeowners, builders, and policymakers to recognize the life-saving potential of home fire sprinkler systems. The team's live burn demonstrations are not just educational events; they are urgent calls to action. By embracing this technology, communities can significantly reduce the devastation caused by residential fires.

In conclusion, home fire sprinkler systems represent a critical advancement in fire safety. Thanks to the relentless work of the NFSA Mid Atlantic Team, more people are becoming aware of their importance. As we move towards a future where every home is equipped with fire sprinklers, we take a significant step in protecting our loved ones and our properties from the ever-present threat of fire.

continued on page 86

AREA 4

FLORIDA, PUERTO RICO

Do You Know What We Have Been Up To?

Do you know that we have done five Tagging for Success Events allowing close to 400 Water-based Inspectors to get their required training at a fun hands-on learning event?

Do you know that we had a conference in Daytona Beach for contractor license holders that offered all 32 CEUs required by the state with 60 contractors attending and learning from some of the best of the best in our industry?

Do you know that we have had four ITM for the Fire Sprinkler Industry classes with three more scheduled?

Do you know that we have held four contract classes (in house classes where we come to you) at four different companies?

Do you know that we work in an industry that we need to brag about? Do you know that we have kicked off a campaign called Do You Know? At the recent tagging we polled our inspectors and were surprised at what they did not know. Each attendee got a small set of Legos with instructions on building a sprinklered home and ask them to share pictures of using these to educate their families. It is important that we encourage members of our industry to showcase fire sprinklers not only in their workplaces but also proudly share their knowledge with their communities, their families, their kids. We believe in spreading the message that fire sprinklers save lives. We will be sharing posters and other materials as well as a contest or two to help you share what you know – fire sprinklers save lives. See just a few who have share what they know with people they love.

AREA 6

ILLINOIS, MINNESOTA, WISCONSIN

Illinois News

House Bill 4578 (Representative Michael Kelly) was brought in front of the House Revenue Committee on Thursday May 9, 2024:

Amends the Illinois Income Tax Act. Creates an income tax credit for taxpayers who have an approved NFPA 13D residential fire sprinkler system installed in a new or existing residential dwelling in the State during the taxable year. Provides that the credit shall be in an amount equal to 50% of the total cost of the installation but not to exceed $10,000 per taxpayer in any taxable year. Provides that the credit is exempt from the Act's automatic sunset provisions. Effective immediately.

- Limits credit amount to 50% of cost of fire sprinkler system.
- Caps tax credit at maximum $10,000.
- Limits number of credits awarded annually to 2,000.
- Limits total credits awarded annually to $8.0 million; and
- Delays effective date to 2026 tax year (for taxes filed in 2027) – will have zero fiscal impact to FY25 state budget.

State Rep. Kelly said, "Providing an incentive for homeowners to protect their family and property from injury, total loss, and even death, as well as adding another layer of protection for our first responders, is a higher value than the estimated cost of HB 4578" (Kelly).

llinois House Resolution 561 (State Representative Michael Kelly) and Illinois Senate Resolution708 (State Senator Patrick Joyce) declares the week of May 12-18, 2024, Home Fire Sprinkler Week in the State of Illinois. Passed both chambers unanimously.

continued from page 86

NFSA Trains Twin Cities Area Firefighters

NFSA President Shane Ray conducted a four-day training program with firefighters from around the Minneapolis-Saint Paul area in April using a combination of classroom instruction and hands-on training with NFSA'S Live Fire Sprinkler Demonstration Training Unit. More than 100 Firefighters from 25 different departments heard Shane's Fire Sprinklers and Firefighters-Partners in Progress and Significant Fires and Operating in Fires in Sprinklered Buildings.

Shane's wealth of fire service experience and involvement in nearly all fire research projects over the last quarter century gave attendees a unique perspective on tactical considerations for fighting fires in sprinkler-protected buildings, an increased awareness of building contents and configurations, and a better understanding of fire sprinkler and standpipe systems encountered in the field.

Shane was assisted by NFSA staff members Brian Biggs, Joel Hewitt, Jon Nisja, Tim Butler, and Tom Brace. Thank you to Chief Andrew Slama and the Edina Fire Department for arranging the training and facilities and for hosting NFSA's live-fire demonstrations back in September. Thanks also to the NFSA Wisconsin Chapter for the loan of the Training Unit for these classes.

AREA 8

ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS

Upcoming Events in Texas

September 17, 2024 - **Houston Fire Sprinkler AHJ Forum**, Houston, TX

September 23, 2024 – **Lithium Ion/Energy Storage**, Dallas, TX

September 24, 2024 - **Design Advantage & the IBC**, Dallas, TX

September 25, 2024 - **Mass Timber & Tall Wood Buildings**, Dallas, TX

September 25, 2024 – **Central Texas Fire Sprinkler AHJ Forum**, Austin, TX

September 26, 2024 – **DFW Metroplex Fire Sprinkler AHJ Forum**, Dallas, TX

September 26, 2024 - **Fire Service Mains**, Dallas, TX

September 27, 2024 - **Rough & Final Inspections**, Dallas, TX

November 6, 2024 - **Panel Discussion on the Installation & Winterization Fire Sprinkler Systems in Areas Subject to Freezing**, San Marcos, TX

December 4-6, 2024 – **Association of Career & Technology Educators**, San Antonio, TX

February 3-7, 2025 - **NFSA Master Class - Estimating and Proposals for Fire Sprinkler Installation & Project Management**, Dallas, TX

Registration for these events can be accessed through the events calendar on the NFSA website.

Texas State Fire Marshal Discussion Series

Join the Texas State Fire Marshal's Office for three upcoming 2024 open forum discussions between the State Fire Marshal's Office & industry partners. For more information or to register, please visit the Texas State Fire Marshal website: **Fire Marshal Discussion Series**.

Upcoming discussion series dates:

- September 18, 2024 – Lubbock
- December 18, 2024 – Rio Grande Valley

Oklahoma Boondoggle 2024

Vince Powers teaches Inspection Testing & Maintenance to the OFSA Boondoggle!

The Oklahoma Fire Sprinkler Association hosted its annual Boondoggle April 3-5, 2024, at the Hard Rock Casino in Tulsa Oklahoma! NFSA taught Inspection Testing and Maintenance/NFPA 25 Training to over 30 inspectors and provided a vendor information table at the event!

Vince Powers and Michael Phillip assist at the NFSA Vendor Table.

continued from page 87

Oklahoma Legislation 2024 – Bills of Interest

NFSA is monitoring the following Oklahoma Legislative Bill moving forward in the 2024 Oklahoma Legislative Session.

SB 1572 is an Electrical Licensing Law. Class 2 and Class 3 circuits shall be exempt from the requirements of electrical licensing of either an electrical contractor or a journeyman electrician, provided the work is performed in accordance with the National Fire Protection Association 70 requirements for Class 2 and Class 3 circuits.

Area 8 – NFSA South Central Regional Manager
Cindy Giedraitis, cindy@nsfa.org/979-324-8934

AREA 9

COLORADO, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, UTAH, WYOMING

NFSA Debuts Successful Valve Trailer Event in Commerce City, CO

The National Fire Sprinkler Association thanks the South Adams County Fire District in Colorado for hosting NFSA's valve trailer April 2nd -4th. All the fire department's on-duty crews were able to attend the in-class and hands-on training. Three sessions were scheduled each day. This allowed not only SACFD employees to attend, but members of at least 14 other departments.

The highlight of the sessions occurred when – by a fortunate coincidence – about two dozen firefighting cadets were able to attend as they took a break from their other scheduled duties. The cadets represent several area departments who use SACFD's facilities for a combined training academy. As they begin their careers in the next few weeks, they will bring with them a sprinkler perspective their future firefighting brothers and sisters probably do not have.

Several training officers and chiefs from various area departments also attended. Almost every one stated that the presentation would be of great value for their own departments.

The trailer will remain in Colorado until the Rocky Mountain Fire Sprinkler Expo on May 18th. It will be highlighted at the Rocky Mountain SFPE Symposium on May 8th. NFSA is also working with a south-Denver fire department to reprise this event in the future. It will be opened to surrounding departments as soon as details are settled.

Rocky Mountain Fire Protection Expo a Success

The Colorado Fire Protection Association held its annual Expo on May 16, for the first time as NFSA's newest chapter. Almost 200 people participated in the event, double last year's attendance! The Expo featured 4 training tracks, offering multiple opportunities for attendees to gain valuable CEU's. It was a rousing success.

Farewell to Area 9

From Field Service Coordinator **Rob Geislinger**: This will be last roundup as Field Services Coordinator for Area 9. I will be retiring by the end of June. I expect to stay on with NFSA in a more limited, part-time capacity but it is time to move on to my third and final retirement. I expect to stay very busy travelling, visiting kids and grandkids, and serving with Baptist Disaster Response. It has been a blessing to work with this fine organization!

continued from page 88

AREA 12

ALASKA, IDAHO, MONTANA, OREGON, WASHINGTON

Washington Residential Fire Sprinkler Coalition leaders Todd Short, left, and Tracy Moore, center, award Kimberly Allen, right, first Safety Ambassador award at a fire sprinkler safety week event. Also receiving a Safety Ambassador award is former mayor Rosemarie Ives (not shown). Short is the fire marshal of Redmond and Moore is the owner of Moore Fire Protection.

Washington State Fire Sprinkler Coalition recognizes two outstanding Safety Ambassadors

As part of Home Fire Sprinkler week, the Washington State Residential Fire Sprinkler Coalition presented its first Safety Ambassador awards to two longtime city of Redmond sprinkler advocates.

The Safety Ambassador award is given to residential fire sprinkler advocates that have demonstrated a willingness to approve local or state codes that require sprinkler installations. This award recognizes the courageous efforts of elected officials that have voted in favor of mandates or key officials that have provided proactive support of legislation, ordinances, or requirements for residential fire sprinkler codes. The Ambassador award is supported by the National Home Fire Sprinkler Coalition and the National Fire Protection Association who directly work with state fire sprinkler coalitions to determine the recipients of this annual award.

The city of Redmond was the first jurisdiction in the state of Washington to adopt an ordinance requiring fire sprinklers in all new built homes, gaining State Building Code Council (SBCC) approval for the ordinance on April 13, 2007. Prior to the ordinance passing, an extensive effort to educate the city's elected officials took place, including an actual house fire demonstration that proved the incredible benefits of residential fire sprinklers to more than 100 attendees

The first two Ambassador Awards for the State of Washington were given to Rosemarie Ives and Kimberly Allen.

Ms. Ives was the mayor of the City of Redmond from 1992 to 2007 and a key contributor to the city's historic residential fire sprinkler ordinance. Ives recognized that fire safety data indicated that residential fire sprinklers increased safety for citizens and firefighters. She ensured the Council and citizens were informed about the long-term benefits of residential fire sprinklers. Ives provided the public an opportunity to voice their support or concerns about the fire sprinkler ordinance, and she extended the public hearing over several meetings to insure all would be heard.

Ives participated in each step of the approval process, including the SBCC hearings. The award committee believes that the Redmond ordinance would have never moved forward without Mayor Ives willingness to face the opposition head on with the benefits achieved by a fire sprinkler ordinance.

Ms. Allen served as a Redmond City Council Member eleven years, and chairing the Public Safety Committee Chairperson in 2006 and 2007. Allen was instrumental in shepherding this ordinance through the local approval process. She showed her willingness to be educated on the benefits of fire sprinklers, and then voiced those benefits in the code approval process. Allen also was an active participant in the SBCC process, which included a reconsideration hearing after an initial failure to secure enough votes. Allen showed her belief in the effectiveness of fire sprinklers by donning bunker gear and SCBA to go inside a fire involved structure during a live fire sprinkler demonstration. Allen represented the City of Redmond at the national code hearings in Minneapolis, speaking in favor of the proposal to require residential fire sprinklers in the International Residential Code, which passed in 2008.

At the May 18 award ceremony, Fire Marshal Short also acknowledged members of the Redmond City Council, including council members Richard Cole, Nancy McCormick and Jim Robinson all who voted yes on the ordinance. He also extended a special note of thanks to former Redmond Fire Chief Tim Fuller for his leadership and vision.

Redmond Fire also hosted the Washington State Fire Marshal Office fire sprinkler demonstration trailer as part of its festivities. The event was featured on Facebook Live.•

The Truth Burns

Common Voices advocates set the stage for why a focus on the impact of fire is worth a glance. Pause and think about our instinct to survive and ask yourself why do we become complacent when it comes to fire safety? The myth "it'll never happen to me"... sometimes, the truth burns.

Common VOICES

An Advocate's Coalition Determined to Create a Fire Safe America

In 2022, Common Voices launched a bold plan to capture the stories of all Common Voices advocates. The dream/plan is to have these stories provide the inspiration for a streaming service to create a Docu-series and/or a documentary called "The Truth Burns." We believe that these stories are courageous, and that they can make a difference and prevent others from suffering similar tragedies. We hope you will join us in our efforts, share the links via all social media platforms, join our coalition with a donation. Working together, we can save lives, and we thank you for believing in our cause, supporting our advocates, and joining our movement for a Fire Safe America.

Our landing page for *The Truth Burns* can be found here:
https://fireadvocates.org/the-truth-burns/

Courageous stories that can make a difference and prevent others from suffering similar tragedies...

CommonVoices1

CommonVoices1

fireadvocates.org

Fire Sprinklers Save Lives

https://fireadvocates.networkforgood.com/projects/125513-main-giving-page

One Tells You It's Time to Get Out... The Other One Gives You The Time to Do It

LIKE THIS AD?
Your Association has some great ads that can be customized for you – ***FREE!*** Contact NFSA Marketing Manager Joanne Genadio at **genadio@nfsa.org** for more information.

Give fire the one-two punch! The combination of smoke alarms and home fire sprinklers reduces the risk of dying in a fire by 87%.

The more you know, the more you'll ask for *#fastestwater.*

FIRE SPRINKLERS BUY TIME TIME BUYS LIFE
NATIONAL FIRE SPRINKLER ASSOCIATION

Fire is fast.
Fire sprinklers are faster.

@NFSAorg
NFSA.org
National Fire Sprinkler Association

#fastestwater

NFSA
NATIONAL FIRE SPRINKLER ASSOCIATION
The Voice of the Fire Sprinkler Industry

514 Progress Drive, Suite A
Linthicum Heights, MD 21090
(443) 863-4464 • nfsa.org

NFSA FIELD OPS CONTACT INFORMATION

TERIN HOPKINS
Manager of Public Fire Protection/Capital Region
CAPITAL REGION/MARYLAND
EMAIL: THOPKINS@NFSA.ORG
MOBILE: 443.745.4142
PHONE: 443.743.3858

BRIAN BIGGS
Southeast Regional Manager
ALABAMA, GEORGIA, MISSISSIPPI, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE
EMAIL: BIGGS@NFSA.ORG
PHONE: 615.642.9717

LORRELL BUSH
Florida & Puerto Rico Regional Manager
FLORIDA, PUERTO RICO
EMAIL: BUSH@NFSA.ORG
PHONE: 352.589.8402
MOBILE: 954.275.8487

RON RITCHEY
Field Service Coordinator/Great Lakes
INDIANA, MICHIGAN, OHIO, WEST VIRGINIA, KENTUCKY
EMAIL: RITCHEY@NFSA.ORG
PHONE: 765.412.6707

ERIK HOFFER
Executive Director NIFSAB
ILLINOIS
EMAIL: HOFFER@NFSA.ORG
PHONE: 708.749.5460

DAVE DAVIS
New Jersey State Coordinator
EMAIL: DAVIS@NFSA.ORG
PHONE: 866.226.6006

FRANK ELLIS
Pennsylvania State Coordinator
EMAIL: ELLIS@NFSA.ORG
PHONE: 866.226.6006

TIM BUTLER
North Central Regional Manager
EMAIL: BUTLER@NFSA.ORG
MOBILE: 507.403.2264

K.J. SPURLOCK
Missouri State Coordinator
EMAIL: SPURLOCK@NFSA.ORG
PHONE: 314.834.0952

STEVE HOWARD
Wisconsin State Coordinator
EMAIL: HOWARD@NFSA.ORG
CELL: 262.613.0546

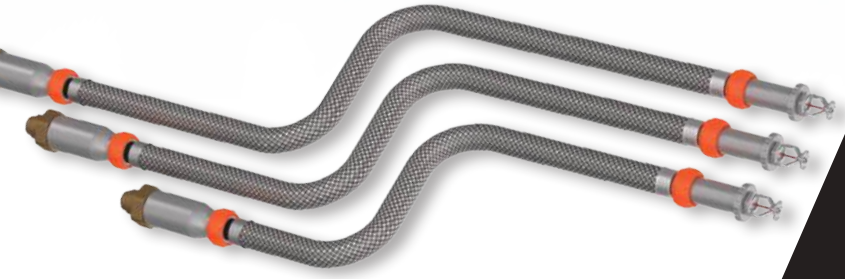
TOM BRACE
Minnesota State Coordinator
EMAIL: BRACE@NFSA.ORG
PHONE: 651.644.7800

CYNTHIA GIEDRAITIS
South Central Regional Manager
ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS
EMAIL: CINDYG@NFSA.ORG
PHONE: 979.324.8934

SUZANNE MAYR
Northwest Regional Manager
ALASKA, IDAHO, MONTANA, OREGON, WASHINGTON
EMAIL: MAYR@NFSA.ORG
PHONE: 253.208.8467

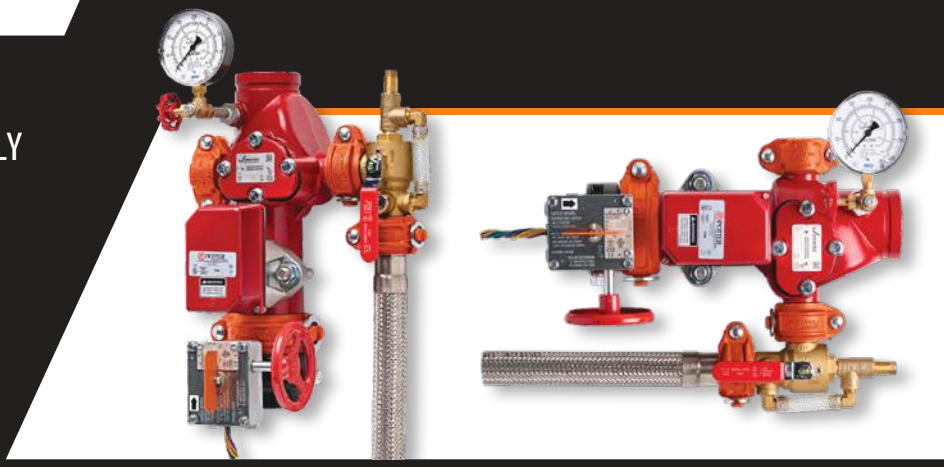
#fastestwater
Fire Sprinklers Save Lives!

EXPLORE THE ULTIMATE RESIDENTIAL FIRE PROTECTION CATALOG



VICFLEX™ SERIES VS1 FLEXIBLE DRY SPRINKLER

- Allows for simple installation that meets or exceeds NFPA 13 installation requirements
- Protects balconies & breezeways when paired with the Style VB1 bracket
- 2” cULus bend radius



SERIES UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY

- Compact design saves space in tight-quarter installations such as hallways and stairwell landings
- Includes all necessary premounted components per NFPA
- Field configurable to both floor control and shotgun riser assemblies

COMPREHENSIVE SPRINKLER CATALOG

- Pendent | K3.0, K4.9, K5.6, K6.9
- Concealed Pendent | K4.9, K5.6
- Horizontal Sidewall | K4.2, K4.4, K5.6
- 1” cover plate adjustment available

SCAN TO VIEW OUR FULL RESIDENTIAL SPRINKLER CATALOG

FERGUSON
FIRE & FABRICATION

SPRINKLER PIPE, PRE-SORTED

SCAN TO LEARN MORE

Spend less time searching for the pipe you need. Our proprietary pipe bundling program sorts and identifies project materials before they hit your jobsite, so your fitters can skip the sorting step and jump right into installation.

VISIT US ONLINE AT **FERGUSON.COM/FIRE**