

National Fire Sprinkler Magazine

September - October 2019
No. 216



The Flagship Publication of The National Fire Sprinkler Association

A pair of hands is shown tearing a white piece of paper, revealing a vibrant, fiery orange and red background with glowing embers. The text 'MEMBER TAKEOVER ISSUE' is written in large, bold, yellow capital letters across the center of the fiery area.

MEMBER TAKEOVER ISSUE

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**Benefits of UL Listed Antifreeze in
Fire Sprinkler Systems**
page 36

**Importance of Continuing Education
in the Fire Protection Industry**
page 40



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ON THE COVER

NFSA proudly presents its second annual Member Takeover issue. Thanks to all who took time out of their busy schedules to contribute!

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NFSM (ISSN 1050-4958) (USPS 524-010) is published six times a year (February—April—June—August—October—December) by the National Fire Sprinkler Association, Inc., 514 Progress Drive, #A, Linthicum Heights, Maryland 21090.

Telephone: (443) 863-4464.

Subscription free to all NFSA members and member companies.

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Second-Class postage paid at Mahopac, NY.

POSTMASTER: Send address changes to:

**NFSA, 514 Progress Drive, Suite A,
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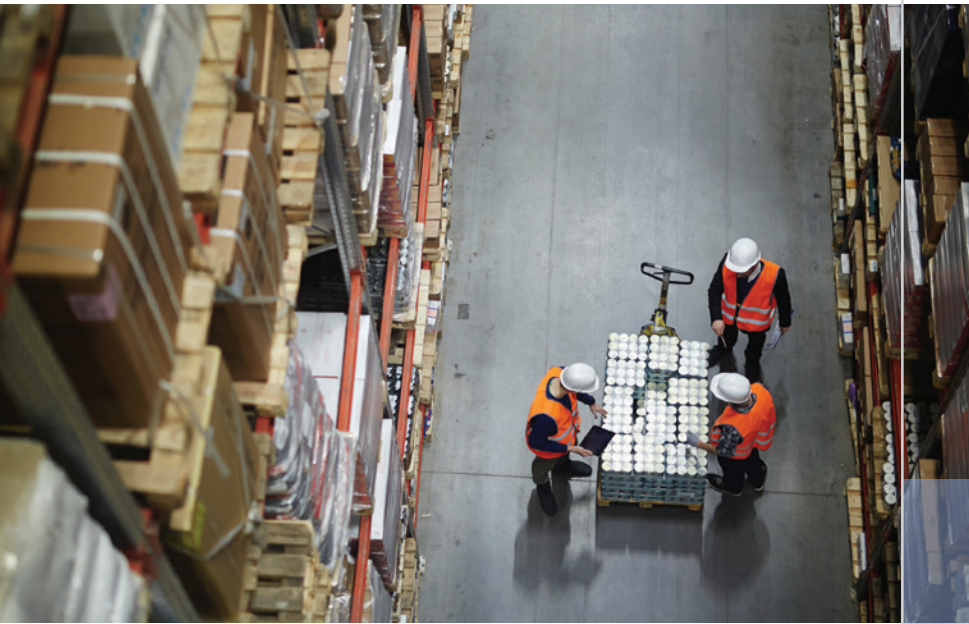
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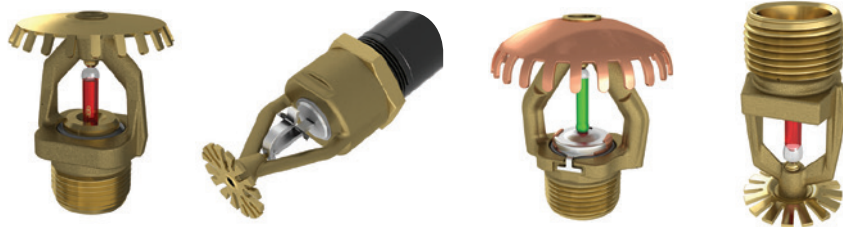
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9/10/2019

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9/11/2019

NFPA 13, 13D, 13R Update 2016 Seattle, WA

9/12/2019

NFPA 13, 13D, 13R Update 2016Spokane, WA

10/2/2019

Sprinkler System Plan ReviewBeaverton, OR

10/8/2019

Inspection and Testing for the Sprinkler IndustryElmira, NY

10/14/2019

Layout Technician Training Class: Fundamentals and Practicum . Baltimore, MD

10/21/2019

Layout Technician Training – In Class Practicum Baltimore, MD

10/22/2019

Understanding, Applying and Enforcing NFPA 25Northbrook, IL

10/23/2019

Inspection and Testing for the Building Owner (4 hours)..... Champaign, IL

10/24/2019

Understanding, Applying and Enforcing NFPA 25Oak Brook, IL

11/15/2019

NFPA 13, 13D, 13R Update 2016 Sayreville, NJ

12/11/2019

Hydraulics for Fire Protection Dover, DE

12/12/2019

Hydraulics for Fire ProtectionConshohocken, PA

12/11/2019

Design Advantage Indianapolis, IN

2/25/2020

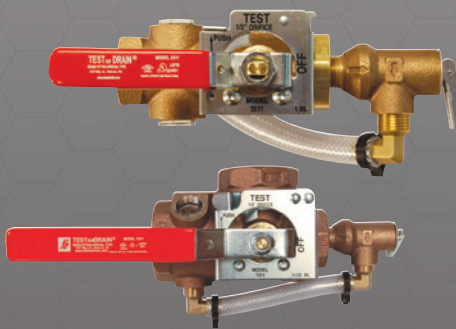
Sprinkler System Plan Review Tucson, AZ

2/27/2020

Rough and Final Inspections of Fire Sprinkler Systems Tucson, AZ

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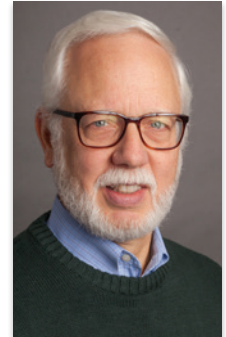
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An International View of Fire Sprinklers

The NFSA has a rich history, including many great leaders in the past. Respect for past leadership is important to our Association, and I can state that I greatly appreciate the years of dedication and service that Russ Fleming provided for NFSA. His work in the fire sprinkler industry continues today within the U.S. and around the world. Russ continues to manage the IFSA and he assists the NFSA by remaining a trusted advisor to our leadership team. Periodically, he also assists our Engineering Department with answering EOD questions. He has always provided me with background, history, and legacy information that has proven valuable as decisions were made during our transition. NFSA is building today on a strong foundation, and much credit for that should be given to Russ Fleming.

For our "Takeover Issue" I'm happy to report that our former President, Russ Fleming, is sharing his latest thoughts. Thank you Russ, for your leadership, service, and continued support.
-Shane Ray

IFSA, the International Fire Sprinkler Alliance, was formed by the NFSA leadership in 1999 to promote international recognition of the effectiveness of fire sprinkler systems, and is now celebrating its 20th anniversary. Over the years it has served as a source of monetary grants in support of organizations and programs outside the U.S and Canada that it believed would move the industry forward. As might be expected, IFSA is mainly supported by product manufacturers and product approval organizations, both of which are active in the international arena. Installing contractors and suppliers tend to get involved at the regional or national level, which is a reason that a primary IFSA strategy has been to help form national associations around the world that can carry out work similar to that of NFSA, advancing the use of fire sprinkler systems in cooperation with fire and building officials who see the big picture.



The world is getting the message and has been moving toward greater use of fire sprinkler systems. At the time the IFSA was formed, U.S. sprinkler manufacturers enjoyed a fire sprinkler market outside the U.S. and Canada equal to about 40 percent of the market in the United States. Twenty years later, that export market is roughly the same size as the U.S. market. And that doesn't count the contributions of many other sprinkler manufacturers around the world. About 3 years ago the global industry passed a milestone of sorts when the number of sprinklers installed per year began to exceed the number of new babies born into the world each year.

Obviously the IFSA is not responsible for all the growth of the fire sprinkler industry around the world. During those same 20 years the percentage of the world's population living in extreme poverty has declined by about two-thirds, and when people don't have to be worried about where their next meal is coming from, they can start to address concerns higher in the hierarchy of human needs. The next step up from basic physical needs are safety and security needs, and fire sprinkler systems play a big role in fire safety. Nowhere is this more true than in China, which in the past decade replaced the U.S. as the country that installs the most fire sprinklers each year.

But growing the fire sprinkler market is not sustainable unless fire sprinkler systems continue to do their job, which is why the IFSA has focused recently on the need for sprinkler and related product certification. Too many counterfeit and other non-certified products are being found in the marketplace in Latin America, Asia, Africa and the Middle East. A 6-minute video on the subject in English, Spanish Portuguese, and Mandarin Chinese is available at the www.IFSA.global website, with Arabic and Turkish versions in production.

A population that is aware of safety also starts to demand adoption and enforcement of codes and standards. In 2015 the Colectiv nightclub fire in Bucharest, Romania, resulted in 64 deaths and 146 injuries. Within a week, tens of thousands of Romanians were protesting in the streets when it was revealed that fire protection regulations had not been properly enforced. The protests led to the arrest of Bucharest District Mayor Cristian Piedone and the resignation of Romanian Prime Minister Victor Ponta.

Competence is just as big a concern as corruption. When NICET took the position years ago that it was not interested in an expansion of its technician certification program into Latin America, IFSA helped support the development of a similar testing and certification program by AMRACI, the Mexican fire sprinkler association. Known as the CETRACI program, it

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From the Former Chairman's Desk

Larry Thau

Messages

And here's...Larry!

So, it's that time a year again when we turn it all over to you - the members - and we get the chance to hear what you have to say for a change. That being said, I can't think of a better member to take over for me this issue than my predecessor, Larry Thau.

Now there is no doubt Larry is much more gifted at penning something eloquent than I am, so I know you will enjoy what he has to say. There is also a much, much greater chance that you'll have to grab for your thesaurus as you scroll down (although there must be an app for that) then you will have to in the issues following when I'm back at the helm.

Larry continues to be an active Board member, still continues to mentor yours truly, and heck, I've missed reading Larry's articles, so I assume you have as well. Take it away big guy & here's hoping you all enjoy the issue.

*Respectfully yours,
Kent Mezaros*

I'm very grateful to have been given the opportunity to speak to you again! After giving it some thought, below is a list of messages to various NFSA groups which you may find interesting, surprising or motivating:

To our members... Thank you for your support! In every gathering of our Board, Councils or Committees, your interests are foremost. "Membership value" is a test we constantly apply to our decisions. We consider your continued support a matter of earning and maintaining your trust and the most important pillar supporting NFSA. In the last few years, we have added processes to track and measure how NFSA investments are made and how effective they are in achieving greater growth and stability for all of us as we install, design, fabricate, manufacture and sell fire sprinkler systems. I urge you to participate at the regional level to better understand all that is currently underway to achieve this objective where you live and work. Your voice is always welcome and needed.

To "not yet" members... NFSA hears many reasons for your not participating as a member. Some of you are confused by the apparent redundancy of "All the "FSAs", some figure we're getting the benefits anyway so why spend the money, others hear stories about membership being restricted to certain types of businesses etc., etc. The only possible reason to delay membership is if your business is in a real struggle for survival. We get this, but it's temporary and many of us have been there. For the rest of you, NFSA is the single best business growth investment you can make to speak to the public, influence code development, train your staff, keep up with the latest technological developments, improve your business practices, resolve disputes and product issues and mobilize our industry. We are the only contractor-based industry association solely dedicated to growing acceptance of the fire sprinkler concept with a balanced Board of Directors. Whether you're a contractor with 50 fitters or 1,000, or a multibillion-dollar global manufacturer we make decisions together at one table with one vote each.

To NFSA staff... You're the main reason for our progress and I thank you for your continued efforts. You're both the face of our organization as well as a key contributor to developing strategies and tactics for your region and the nation. One of our great strengths is thinking locally and acting nationally, this is impossible without your participation. As employees, we have worked to mutually make your NFSA a better workplace and have implemented changes ranging from our new office facilities to filling our staffing needs, to seeing you more frequently at our events and meetings around the country. I look forward to seeing you again soon!

To my fellow Board members... We have been given the stewardship of an organization which is making a significant and durable contribution to public safety and the preservation of property. We need to remember that during these times of relative success, it's easy for us to get complacent. We can forget that goal measurement looks much different depending upon our reference point. If we judge progress based upon year over year incremental improvement, we're doing fine. However, if we judge our progress based upon a national market where all possible risks are sprinkler protected to the extent necessary, we've got a long way to go, but a very exciting future. I also see that as we continue to act on our strategy of "turning adversaries into allies" we can use a new set of tools in our toolbox... organized and accessible data. Simply put, NFSA needs to be the collector, custodian and source for the



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From the Former President's Desk

Russ Fleming

continued from page 7

is being made available to the industry in other Spanish-speaking countries and, with IFSA assistance, translated into Portuguese so that it can be utilized in Brazil as well.

The appreciation of the value of fire sprinkler systems and the development of the infrastructure to sustain an effective industry evolved in the U.S., England, and many other countries over a period of more than a century. These same things are taking place elsewhere in the world on an accelerated basis. The IFSA is helping to bring the lessons of the past to the forefront, from the need for basic legal adoption of building codes to the more recent appreciation of the value of public side-by-side burn demonstrations, recognizing that a world consensus of the value of fire sprinklers helps the fire sprinkler industry everywhere.

Information on IFSA programs and membership is available at www.ifsaglobal.com.

Best regards,

Russ

From the Former Chairman's Desk

Larry Thau

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information with which we need to address our adversaries. We do a reasonable job tracking our own progress but on matters of influence for insurance companies, municipal officials, the heroes of the fire services, business owners, water purveyors, architects and individual citizens, we need historically based factual support. I ask your help in acting for the future. We need to acknowledge this current limitation to better prepare for the future.

To our friends we haven't met yet ... (the italicized list beginning with insurance companies directly above) The casual risk analysis you often perform when evaluating installing a fire sprinkler system is likely based upon misinformation. Alarms and smoke detectors make noise, sprinklers put the fire out... passively; without human intervention, without waiting for hoses to be attached, consuming minimal amounts of water, with a reaction time effective with today's high volatility furnishings. Business owners: the real damage from fire is not always property loss. Interruption to your business is historically more harmful. The fire events depicted by Hollywood where all heads activate simultaneously causing a flood are false, misleading and dangerous as they create false anxiety about sprinkler systems. Fire sprinklers have been in use for over 100 years with an installed base of over one billion units. Trust us, if "Hollywood systems" were the norm, we couldn't survive. Most fires are controlled with two or fewer heads and whether you're hearing impaired, mobility impaired, responsible for an unoccupied business facility or responding to a structure alarm at midnight with your Scott pack® on you back, fire sprinklers will keep you and your property safe.

At your service,

Larry

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Working with Architects

Editor's note: Stuart Zisholtz comments on New York State law.

Almost every project has an architect preparing the plans and reviewing the work. Sometimes the architect maintains a limited role in a project and is hired to only to draw up the plans. Other times, the architect takes a more aggressive approach on a project and is involved in the day-to-day aspects of the project, determines certain disputes, approves change orders, etc.

Recently, in a decision decided by the Appellate Division, Second Department, a contractor sought to recover from an owner \$100,000 for work performed and materials furnished.

Within the contract between the contractor and the owner, there contained a clause requiring the contractor to obtain written acceptance of its work from the architect prior to final payment. This acknowledgment, according to the owner, was a condition precedent to receiving final payment.

According to the contractor, all of the work was completed and the tenant had moved into the premises. Neither the owner, nor the tenant, requested the architect's certification, nor was there any indication that any of the work was inferior. In addition, according to the contractor, the architect played practically no role in supervising any of the work and was simply operating as a conduit to the owner.

Both parties moved for summary judgment. The lower Court granted the owner summary judgment finding that the failure by

the contractor to obtain written acceptance from the architect was a requirement that was not waived and, as such, it could not collect the outstanding balance due and owing.

The Appellate Division, Second Department, reversed and found that there were issues of fact that needed to be determined at trial as to whether the owner waived the right to insist that the contractor obtain written acceptance from the architect prior to final payment under the contract.

I am once again emphasizing the importance of reviewing your contracts and understanding the terminology and requirements that are contained within it. If the contract requires that you receive architectural certification before final payment, you must do so or the possibility exists that you will not receive your final payment. You can argue that the clause was waived by the owner, etc., but you may be stuck in a battle with the owner. On the other hand, you can review your contract, modify the clauses that do not pertain to you or are waived, and proceed accordingly. I would not recommend that you simply sign the contract because you think it's "a good job" without reviewing or understanding the terms of the contract.

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An aerial photograph of a university campus, showing several large, multi-story buildings with green roofs, a central tower, and a large green lawn. The image is slightly darkened to serve as a background for the text.

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Air Compressors—When Did the Rule Become the Exception?

by Cary Webber

As the normal author of the Technically Speaking column, I want to introduce Cary Webber, who has authored the article for this Member Takeover Edition of National Fire Sprinkler Magazine. Cary is a 41-year veteran of the fire sprinkler industry. Cary is the Director of Technical Services at Reliable Automatic Sprinkler Company and previously worked for Patriot Fire Protection, Inc. Cary has a Bachelor of Arts Degree in Business Administration from the University of Washington and an Associate Degree in Applied Sciences in Mechanical Engineering Technology from Spokane Community College. He is a Senior Engineering Technician (SET) certified by NICET, CFPS certified by NFPA, and is a member of the NFPA 13, 15, 16, and 25 Technical Committees. Most of all, Cary is an active member of the NFSA Engineering and Standards Committee. In addition, Cary contributes to the NFSA and its members in many ways. We are grateful for his efforts, especially his volunteering to write this article.

—Mark Hopkins, P.E., NFSA Vice President of Engineering



When called on to diagnose operational issues with dry pipe and preaction systems, there are several “usual suspects” to investigate. The most common culprit is an improperly designed and installed compressed air supply. NFPA 13 language regarding automatic air supplies has not substantively changed over time; the rule in the NFPA 13-2019 edition section 8.2.6.6.1 is “Unless the requirements of 8.2.6.6.2 are met...the air supply shall be from a dependable plant air system or an air compressor with an air receiver, and shall utilize an air maintenance device specifically listed for such service...”. The exception to the rule, section 8.2.6.6.2 states “Where the air compressor supplying the dry pipe system has a capacity less than 5.5 ft³/min (160 L/min) at 10 psi (0.7 bar) an air receiver or air maintenance device shall not be required.”

So, when did the exception become the rule? To be fair, there are likely many more compliant than noncompliant installations. We do not hear about them (*because they work!*), so the question is asked somewhat rhetorically. The skewed reporting, however, results in the perception of a trend toward tankless air compressors, presumably for cost-saving reasons. Please do not misunderstand—when properly sized and installed in accordance

with NFPA 13, I have no issues with tankless compressors, but is it a best practice? And what happens when air supplies are not properly designed and installed? Second question first.

Common Improper Installations

1. ***Tankless compressor is too large, and no air maintenance device is installed.*** In addition to maintaining pressure, the other function of the air maintenance device is to limit the amount of airflow into the system. Dry pipe systems and their cousins, double interlock preaction systems, both require the discharge of air pressure to activate the dry pipe or deluge valve. Air compressors with the capacity to deliver more than 5.5 cfm at 10 psi *directly* into the system can negatively impact the operation time of these systems; therefore, this installation is not allowed by NFPA 13. If the dry valve or deluge valve is tripping slowly—or not at all—when air pressure is dropped, this is a likely suspect.
2. ***Tankless compressor is too large for air maintenance device.*** Tankless compressors below the 5.5 cfm at 10 psi threshold do not require an air maintenance device, unless the compressor is not provided with a pressure switch. In this case, the air maintenance device includes the pressure switch and a simple restricted orifice to control airflow into the system. With properly sized compressors, airflow through the restricted orifice does not affect operation of the pressure switch. Compressors that exceed 5.5 cfm at 10 psi, however, may suffer from “short cycling,” a condition where the small amount of piping between the pressure switch and the restriction is quickly filled, satisfying the pressure switch and stopping the motor. Air then bleeds through the restriction, reducing pressure on the switch, telling the motor to restart. This on-off cycling can occur within the space of a second or more depending on the mismatch of components, and typically results in a reduced life expectancy for these compressors.
3. ***Tankless compressor with incorrect air maintenance device.*** A more common installation error is the mismatch of a tankless air compressor with an air maintenance device that incorporates a mechanical regulator. This often occurs when the tankless compressor incorporates a pressure switch and

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(while the intention is noble) an air maintenance device with a mechanical regulator is also installed. By design, mechanical regulators create a pressure differential across the inlet and outlet. In addition to controlling pressure, the device regulates air flow into the system. The maladies of this installation—short-cycling—will mirror those experienced in #2 above as the compressor attempts to maintain system pressure across a heavy restriction that causes the pressure switch contacts to open and close in rapid succession.

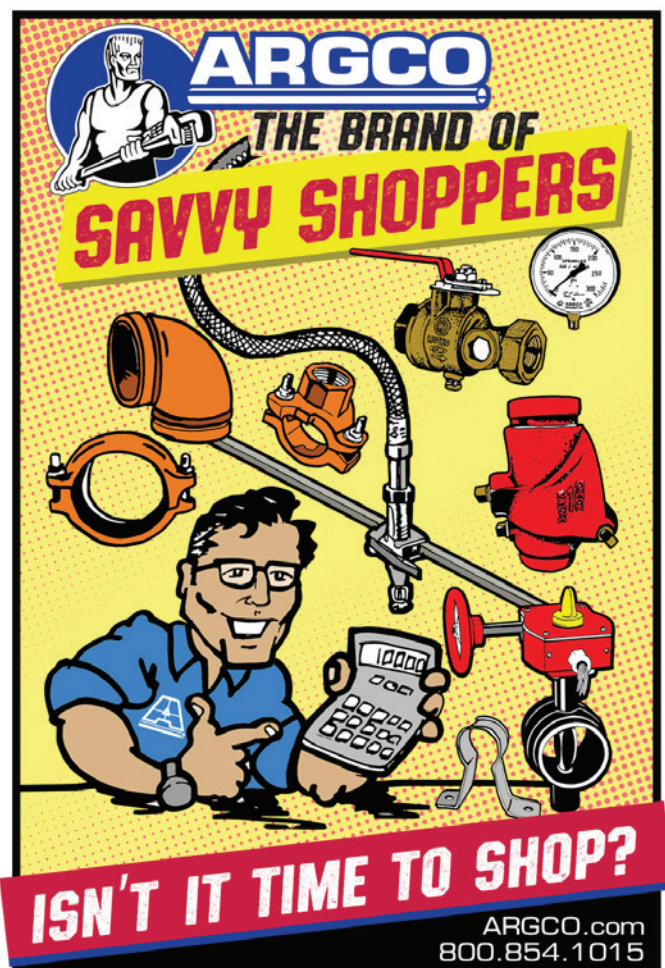
Best Practice?

Virtually all modern dry-pipe and preaction systems incorporate an automatic system to maintain pneumatic pressure in the event of temperature fluctuations and leaks; for compressed air this is commonly a tank-mounted compressor and a listed air maintenance device with a mechanical regulator, or a tankless compressor controlled by a pressure switch. If the compressor has a capacity not exceeding 5.5 cfm at 10 psi, neither the tank nor listed air maintenance device is required. When properly designed, both are acceptable, but which arrangement would be considered “best practice?”

1. **Power outage.** A tank-mounted compressor provides a reserve supply of air in the event of a power outage. The amount of air within the tank will depend on the tank pressure (Boyle’s law). The length of time the reserve air can maintain the system will depend on (a) leakage rate and (b) temperature change (Charles’ law). A tankless compressor either has power or does not and provides no maintenance during a power outage. One could argue that a power outage may last longer than the reserve air supply in a tank-mounted system. This is absolutely true, and owners should be trained on how to properly respond to this situation. But how about the more common short-term outage?
2. **Accelerator.** Mechanical accelerators allow compressed air to move slowly between chambers to compensate for minor pressure changes due to leakage and temperature change and are sensitive to sudden changes in pressure. This sudden change is usually a decrease in pressure due to a fire sprinkler opening, but sudden *increases* in pressure (such as that from a tankless compressor starting) can also result in accelerator operation. A mechanical regulator that restricts flow into the system and maintains pressure at a single set point does not create the drastic pressure changes necessary to trigger an accelerator. One could argue that accelerators are used mainly on large systems where the fill time requires a tank-mounted compressor with a mechanical regulating device. In general, yes; but we often see cases where large tankless compressors are used in violation of the standard, and how often is an accelerator installed only after the system fails to meet water delivery times, when a tankless compressor is already installed?
3. **Compressor run frequency.** The amount of compressed air needed to maintain system pressure is unaffected by compressor selection; however, the frequency of compressor operation is reduced when using tank-mounted compressors.

They may run longer but will not run as often. So what? One could argue that the compressor is always located in a mechanical room and we don’t care how frequently it runs. Always? Even so, how about the condominium owner whose master bedroom is over the mechanical room? Again, best practice requires we consider the needs of all stakeholders and avoid generalities.

Different contractors make profit in different areas, but I would argue that installing a tank-mounted compressor with a listed air maintenance device that includes a mechanical regulator—an acceptable arrangement for all systems—is a simple and wise decision that should become standard practice. The first time you respond to a service call that involves a questionable air system design that you do not get (or must fight to get) paid for, the small added cost of the tank-mounted compressor system will suddenly seem like a cheap insurance policy. •





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Bridging the ITM Gap Between Fire Sprinkler Service Providers and Building Owners and Representatives

by Jason Hugo



This month's Code Corner member takeover goes to NFSA SAM Member, Jason Hugo, co-founder and President of Quick Response Fire Supply (QRFS). QRFS was founded in 2010 to expand knowledge and provide equal, easy access to fire suppression equipment—so contractors, facility managers, and building owners alike can find the right parts they need, quickly and affordably. Access our knowledge

base at <https://www.qrfs.com/blog> or reach out to us at 888-361-6662 or support@QRFS.com.

Fire sprinkler inspection, testing, and maintenance (ITM) contractors are often the main source of knowledge for building owners or managers who have a fire sprinkler system. In many cases, a contractor comes in only once a year to do ITM work and fix any deficiencies . . . before coming back and doing it again a year later. But commercial fire sprinkler systems often require more attention than that. And, depending on the complexity of the system, may require a lot more according to *NFPA 25: Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*.

This gap in knowledge and prescribed ITM presents an opportunity for contractors to expand their services by training building owners and their representatives on the tasks required in shorter inspection timelines—if they aren't contracted to do it themselves. It can also increase service calls when deficiencies are spotted between longer ITM visits and make those visits easier. And training achieves everyone's main goal: getting closer to the 100% compliance that ensures that buildings and people are always protected by fire sprinklers.

Who's qualified to do inspections?

The 2017 edition of NFPA 25 is very clear that property owners and their designated representatives are responsible for ensuring that their sprinklers work. But it only specifies that ITM should be done by "qualified personnel." Who, exactly, is qualified?

3.3.34 Qualified. A competent and capable person or company that has met the requirements and training for a given field acceptable to the AHJ. [96, 2014]

NFPA makes this definition pretty vague for a few reasons. First, NFPA 25 does not require licensing of an individual or company performing the work because many jurisdictions do not require licensing, and licensing laws vary considerably from one jurisdiction to the next. For example, some local laws only require licensing for individuals who are "engaged in the business of providing this service for a fee." This stipulation means that licensing is not needed for in-house work on properties that have a qualified maintenance staff. As a result, NFPA 25 requires an inspector or service provider simply to possess the appropriate knowledge and experience needed to perform the work.

Second—and based on the above—NFPA 25's *intent* is that the owner or their designated representative(s) *perform* many of the required inspections. In many cases, professional contractors are not going to be hired to look over fire pumps every week, for example, and they certainly aren't going to make sure that wet pipes are climate-controlled to above 40 degrees every day during the winter. And while a visual inspection of sprinklers is only required every year, teaching the owner and/or representative to spot issues during more frequent inspections might help uncover problems early—and generate a service call to a contractor that keeps the building safe.

All that's required for most routine ITM tasks on shorter timelines is a little education—knowledge that contractors can provide and build into their services.

Examples of inspections that could be done by trained onsite staff

Gauges

NFPA 25 stipulates monthly inspections of gauges for wet, dry, and preaction systems, the latter two when the gauge is not in a "constantly attended location." If attended, the interval jumps to every quarter.

13.2.7.1.1* Gauges shall be inspected monthly to verify that the gauge is operable and not physically damaged.

13.2.7.1.3 Gauges monitoring air or nitrogen pressure shall

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be inspected monthly to verify that normal air or nitrogen pressure are being maintained.

The requirements are pretty simple, though gauges for dry or preaction systems with special components or those protecting freezers have additional checks:

13.2.7.1.3.1 The gauge on the quick-opening device, if provided, shall indicate the same pressure as the gauge on the system side of the dry pipe valve.

13.2.7.1.4* For dry pipe or preaction systems protecting freezers with an air pressure gauge(s) on the air line(s) between the compressor and the dry pipe or preaction valve, the air pressure gauge near the compressor shall be compared monthly to the pressure gauge above the dry pipe or preaction valve.

All these inspections are relatively easy and, again, most building owners don't call in a contractor on a monthly basis. Since many owners only hire an ITM contractor once a year, even quarterly inspections of attended gauges aren't completed. Contractors can recommend more frequent professional inspections—but if that's outside of an owner's budget or they otherwise refuse, owners and representatives can be easily trained to look at gauges on the required timelines.

Here is an important point that can make the case with some building owners: Insurance companies might require *weekly* inspections of the gauges.

Control valves

Closed control valves are the Achilles Heel of fire sprinklers. The NFPA 13 Handbook reports that “approximately one-third of system failures are attributable to closed or partially closed sprinkler system control valves.” Thus, the weekly inspections (that jump to monthly if the valve is locked, or quarterly when electronically supervised) are necessary, as are the quarterly inspections of valve supervisory alarm devices:



From the 2017 Edition of NFPA 25

13.3.2 Inspection.

13.3.2.1 All valves shall be inspected weekly.

13.3.2.1.1 Valves secured with locks or supervised in accordance with applicable NFPA standards shall be permitted to be inspected monthly.

N 13.3.2.1.2 Valves that are electrically supervised shall be permitted to be inspected quarterly.

13.3.2.1.3 Control valve supervisory alarm devices shall be inspected quarterly to verify that they are free of physical damage.

These are pretty simple inspections that any qualified onsite personnel can do, of course. But will an in-house inspector necessarily know that a post-indicator valve “is commonly used as the valve operator for automatic fire sprinkler and standpipe systems, where the system main valve is located underground outside the building”? Or whether the facility has the appropriate wrench to manipulate it? This might require some basic instruction:

13.3.2.2* The valve inspection shall verify that the valves are in the following condition:

- (1) In the normal open or closed position
- (2)* Sealed, locked, or supervised
- (3) Accessible
- (4) Post indicator valves (PIVs) are provided with correct wrenches
- (5) Free from external leaks
- (6) Provided with applicable identification

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Visual inspections of sprinklers ... especially those that can't be done annually, in one shot

NFPA 25 requires an annual visual inspection of sprinklers from the floor level for obstructions, orientation, and various forms of damage:

From the 2017 Edition of NFPA 25

5.2.1.1.1* Any sprinkler that shows signs of any of the following shall be replaced:

- (1) Leakage
- (2) Corrosion detrimental to sprinkler performance
- (3) Physical damage
- (4) Loss of fluid in the glass bulb heat-responsive element
- (5) Loading detrimental to sprinkler performance
- (6) Paint other than that applied by the sprinkler manufacturer

This lines up nicely with the frequency that many professional contractors visit the building. But what if it's logistically difficult for a contractor to see them all during a single visit?

A large multi-family residential property like a high-rise condo is a great example. It can be extremely costly and challenging to schedule access to dozens or over a hundred units in one or two days every year. One solution is to train the owner or onsite maintenance representative on what to look for, and they can then conduct the inspections in batches that match up with other routine unit maintenance, such as changing air conditioning filters.

This requires some communication with the local AHJ, and it would also need to be clarified in the sprinkler contractor's scope of work (e.g., the contractor could specifically be tasked with inspecting common areas and performing system tests each year).

While it's fairly simple, there are elements of the visual inspection that require some training. For example, how do you spot an appreciable loss of fluid in the glass bulb? What constitutes enough "loading" to warrant replacement? And, of course, onsite inspectors should understand that any quantity of aftermarket paint on a sprinkler requires replacement, and a call to the contractor to do that swap.

Fire pumps and beyond sprinklers

Pumps are a great example of system components that should be frequently inspected and tested but often aren't—with the pump house condition, piping, gauges, various readings, and numerous other items requiring weekly maintenance according to Chapter 8 of NFPA 25.

Many additional sprinkler components, combined standpipe/sprinkler systems, and those of other fire protection systems must also be inspected on an ongoing basis according to NFPA and the International Fire Code. Examples include:

- Monthly checks on the exterior condition of any water tanks as well as the water level on unsupervised tanks (NFPA 25: 9.2.1.2).

- Maintaining the accessibility of fire department connections (IFC: 912.4) and the fire-pump and sprinkler-riser room (IFC: 509.2).

- Making sure the right wrench for replacing sprinklers and adequate spare sprinklers are on the property (NFPA 25: 5.4.1.5.5) at all times.

- Checking whether fire department connections have plugs or caps in place, and that they are undamaged. This is a quarterly requirement, but vandalism or theft can happen at any time (NFPA 25: 13.8.1).

And, well, the list goes on.

Many of these items are simple but require basic awareness and knowledge to complete. Others call for a higher level of expertise—exactly what to look for—that may require training from a professional fire safety contractor or the AHJ.

A training program model for contractors

The 2019 edition of *NFPA 13: Standard for the Installation of Sprinkler Systems* doesn't have much to say about training, other than that the installing contractor should provide the building owner a copy of NFPA 25. While purchasing and providing the standard used to be an added expense for contractors, now you can just provide a link (www.nfpa.org/25), tell the owner how to access the standard, and instruct them to read the requirements. But as anyone who has flipped through NFPA model codes and standards knows, they're not exactly easy to understand without some context.

This is where providing dedicated training and a checklist of items for the owner or their designated representative come in. Educating these folks on the extent of ITM that is required should lead to a more compliant and reliable system, including the actual completion of ITM guidance before the contractor sets foot on the property quarterly, bi-annually, or as infrequently as annually.

Here are some suggested elements of owner/representative training:

1. Instruction should be provided on the basics of how the system operates. This should minimally include procedures to turn the system off in the event of an unintentional discharge, and perhaps involve teaching owners and facility managers how to use a Shutgun or other tools that aid in restoring a system in a timely fashion. These instructions would of course conclude with "contact the fire sprinkler contractor" to fix the system and bring it back online.
2. Education on documentation preservation: what documents need to be maintained, where should they be kept, and how long should they be maintained? All design documents (blueprints, hydraulic calculations, changes, etc.) and inspection/testing/maintenance reports are to be maintained

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for the life of the building. These documents are required to be stored and made available to the AHJ upon request.

3. Education for the owner on what they should be inspecting on a weekly or monthly basis. As mentioned above, these items are primarily gauges, valves, and elements of fire pumps, but may include many other items.

Training should include a walk-through with the building owner and/or representative to show them each valve and gauge that is to be inspected. Education on what a “normal” range is for the gauges is essential as well as the fact that a qualified service provider should be contacted as soon as an abnormal reading is spotted. Also demonstrate the correct position, function, and location of the valves, as well as which valves should be shut in the event of an unintentional discharge.

Contractors can provide either paper forms or a digital template to record weekly, monthly, or other inspections. These docu-

ments should be branded with the contractor’s logo, contact info, and perhaps bullet points or reminders on system maintenance requirements.

Training should be a standard component of fire sprinkler contractor services

Contractors should make themselves available to provide education on the fire sprinkler system—and it’s a service that can be built into any request for proposal (RFP) and scope of work provided to the building owner.

The complexity of modern fire protection systems requires more than just a yearly look. And by bridging the gap between the responsibilities of the owner and the work typically done by ITM contractors, these systems can get closer to 100 percent compliance—protecting property, creating work opportunities for contractors, and saving owners from costly deficiencies and fire code violations. •



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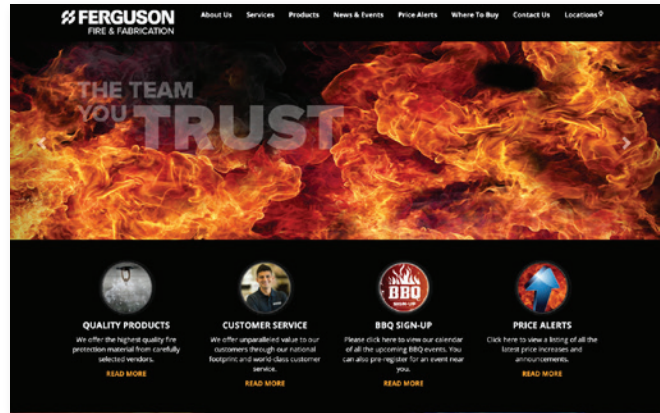
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Branch Trade Show Tour

Our Ferguson Fire & Fabrication Trade Shows are a premiere opportunity to engage with our core customer base and grow relationships! Rolling out as a national program for its third year, the 2019 Fire & Fabrication Trade Show season is a fun and informative opportunity, with consistent messaging and execution at every branch. Our associates, vendors and customers are enjoying this spring through fall at 15 Fire & Fabrication locations across the country, educating on products and new product technologies, and engaging customers, associates and vendors through face-to-face interaction, product displays and demonstrations.

One customer said "Ferguson staff made it a point to directly welcome us and make sure we were enjoying ourselves. The event was well organized, and everything looked professional and inviting."

Join us for a Ferguson Fire & Fabrication Tradeshow for a chance to win a Coyote® Asado Cooker or a Yeti® Cooler Prize Pack! •

continued on page 25

The Suppliers' Showcase feature is available to any NFSA Supplier and/or Manufacturer member in good standing. If you are interested in having your company featured here, please contact Joanne Genadio at genadio@nfsa.org or 845.878.4200 x118. Features will be published on a first come, first serve basis.



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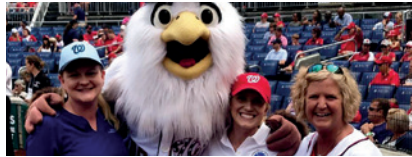


FOX & friends

abc GOOD MORNING AMERICA



by Jenna Pritchett



Growing Up Looking Up



To say that I'm proud of this young lady is an understatement! Jenna, my 28 year-old daughter, has long-time been referred to by many as a "mini Vickie"....but, I say she is so much MORE! The fact that she chose a career in the fire service makes me smile, and I love seeing the ways she makes a difference for the National Fallen Firefighters Foundation and Common Voices. She has also been involved with us on NFSA projects, and even helped us out at our conference in Nashville this year (many of you may have met her at registration)!

Her smile lights up a room, and her enthusiasm for fire sprinklers and #fastestwater makes this Mama extra happy! She's a keeper for sure, it's an honor for me to introduce you to my "takeover" writer, Jenna Claire Pritchett! —Vickie Pritchett

I often get asked how I ended up in the fire service and I simply answer, "I grew up in the fire service." Most people then assume that one of my parents was a firefighter, and while that's not true in a traditional sense, my mom was a fundamental part of my hometown volunteer fire department. She would help write grants, plan fundraisers, assist with political issues, involve the community, and so much more.

I can vividly remember the excitement around the Pleasant View Volunteer Fire Department Annual Picnic. There was a softball tournament, food and fellowship, entertainment, and educational pieces. I also loved that it would bring the families of other firefighters out. I can remember me and another firefighter's daughter sitting in the fire prevention trailer just to cool off. After all it was a hot Tennessee July! The picnic brought the entire community and the fire department together, and my mom were at the heart of it.

My mom was also at the heart of the creation of the Common Voices Advocates Coalition. I was introduced to this group when I was in high school. The powerful stories of these incredibly strong women would ultimately be what made me go all in with my plans of a future in the fire service. Looking up to make sure fire sprinklers were present was no longer just a fire prevention message to me. Looking up was a promise to the Common Voices advocates that I heard their stories, learned from them, and would not them be told in vain.

One of the funnier memories that sticks out to me was when I was selecting on-campus housing during my first year at the University of Tennessee-Chattanooga. The stories of Gail, Bonnie, and Donna stayed with me. They all lost children in campus fires and there was absolutely no way I would stay in an un-sprinklered dorm. The campus tour was one that no one in my group would soon forget.

All new campus dormitories were sprinklered and it was said that older dorms were retrofitted during the summer. The first dorm we toured was the one I had my heart set on, but guess what? I immediately looked up and realized there were no fire sprinklers. I asked the tour guide where they were, and he pointed at the smoke alarms and then to the fire extinguisher. To say there was inadequate fire sprinkler knowledge was an understatement and my mom and I quickly started educating the entire group. By the end of it we were shown the sprinklered dorms and no one on my tour was going to be staying in the un-sprinklered ones. My mom might have been accused of being a fire marshal, but the stories we shared from Common Voices made a difference to every person on the campus tour that day.

Making a difference in the fire service and in the community didn't fall far from the tree. I knew once I graduated that I wanted to pursue a career in the fire service. I graduated, moved to South Carolina, and immediately started working in the newly created Community Risk Reduction section at the State Fire Marshal's Office. We worked with every department in the state and would assist with community smoke alarm blitzes, fire prevention education, and side-by-side burn demonstrations. This was a great starting place for me, and I'm forever grateful to my South Carolina friends who became like family.

While I'm no longer "boots on the ground" in South Carolina, I know that my work with the National Fallen Firefighters Foundation (NFFF) is not only making a difference to the families of fallen firefighters, but also to fire departments nationwide. The NFFF's 16 Firefighter Life Safety Initiatives provide a framework that guides firefighters in best practices. To say that Initiative #15 is my favorite is an understatement, in that it highlights the importance of codes and the installation of fire sprinklers in one- and two-family dwellings. My work today allows me to champion for something that I love (fire sprinklers) with a group of people that I look up to and respect. Chief Ron Siarnicki is a leader who leads by example, and his fire sprinkler requirement in Prince George's County Maryland (where he served as Fire Chief prior to becoming Executive Director of NFFF) speaks volumes of his proactive vision for America's fire service.

So, to all my NFSA friends, thank you for creating resources that "raised me right," and also for a mission and vision that others (like me) can believe in too! I love #fastestwater and I hope it shows in all that I do and all that I am. And, to Mom, thanks for being a role model that inspires me every day. It was fun to take over your column!

—Jenna

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Sign Up for Fire Sprinkler Training Classes at General Air Products Training Facility in Pennsylvania – Get Hands-On, Get CEUs and Get Smart About Your Trade!

by Ray Fremont, Jr.

For the member take over edition of National Fire Sprinkler Magazine I asked General Air Products to submit an article. There are several reasons for my choice, such as their commitment to the sprinkler industry and great support as an NFSA member. General Air has one of the best tech support departments I have had the pleasure of calling. They have recently built a great valve training center. As you will read in the article written by Ray Fremont Jr., their commitment to the industry is outstanding. I was lucky enough to be included in their inaugural class in their new training facility which includes several types of air supplies, multiple dry systems, and a few wet risers. They are always willing to jump in and support the industry. For instance, they donated a nitrogen system for the NFSA's live fire sprinkler demonstration/training valve trailer. If you have not had a chance to visit their facility, you should reach out to them and schedule a tour. —Vince Powers



If you take your technicians out of the field for training, you are losing money that day. If you put your technicians in the field without training, you are losing money every day.

All the successful fire sprinkler companies that I know have training built into the fabric of their company culture. We at General Air want to partner with those companies. In order to achieve that goal, we have put together a training facility at our manufacturing facility in Exton, Pennsylvania that is designed as a national destination with full-day and multiple-day training on all types of fire sprinkler equipment.

Our fire sprinkler system training facility hosts a 40 seat, non-traditional classroom that offers a dynamic yet relaxed learning space. Adjoining the classroom, our “sprinkler lab” currently offers seven live dry pipe valve risers from all variety of major manufacturers. This is a fairly unique set up in that most riser training rooms offer equipment from one manufacturer. Our thought is that contractors will see all variety in the field, so they should have the opportunity to get familiar with all variety in our facility. We are very grateful to the device manufacturers for their help with that vision.

This wide variety of equipment available for hands-on training continues with the wet system valves that we have installed, as well as a variety of backflow preventors. Further, through a great relationship with our neighbors at AGF Manufacturing, we are proudly showcasing their entire line of products. At this time, we are actively working on the installation of a fully functional fire pump brought to the space by SPP Pumps.

Last, but not least, the equipment that General Air Products manufactures for the sprinkler industry is installed and ready for more hands-on training – riser and tank mounted air compressors, nitrogen and dry air generators, and 13D pump and tank systems. Additionally, we have installed two unique areas for training on air maintenance device regulators and pressure switch adjustment.

Each manufacturer will send a product expert to present on their equipment and we will work to offer as much variety in equipment and subject matter as we can come up with. For that we invite your input as well – if you have a class you would like

continued on page 30



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to see or equipment you would like to get to work with in our facility, simply contact us.

You can view available classes and register at our website, www.training.generalairproducts.com.

We will be adding more and more classes in the months to come so make sure to stay plugged in to our email news and social media.

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in making travel arrangements.

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About the author

Raymond M. Fremont Jr. is the Marketing Director for General Air Products, Inc. General Air Products, founded in 1936, is the leading manufacturer of dry pipe and pre-action system filling technologies in the fire sprinkler industry. Raymond has been working in the industry for nearly 20 years and educating NFSA members on air compressors, dry air and nitrogen for 10 years.





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The Dismantable Sprinkler System

by John R. Waters, EFO, MA, MS

At the Valley Forge Casino, in the middle of the parking lot, surrounded by 5 bollards, sits a fire hydrant. It rises out of the asphalt, not even on a parking island. Its location makes little sense, until you know its story.



The year was 1993... before becoming a casino, this was the Valley Forge Convention Center. The previous owner developed a business plan that was quite interesting. He wanted to enlarge the convention center, but he stated this would not be possible unless he was given permission to construct a seasonal structure for a period of 5 years. His plan was to construct a “temporary” structure, in the parking lot, for the convention season, about 6 months per year at the time, deconstruct the building at the end of the convention season and to reconstruct the building the following year. At the end of 5 years of this process, his plan was to then construct a permanent addition to his convention center.

As the Chief Fire Official for the community, I wanted this “temporary” structure protected with sprinklers. The property owner, and his lawyer, declared it was “... a temporary structure, and sprinklers are not required.” Those who are old enough will remember “The Haunted Castle Fire (11 May 1984),” will also remember the debate about sprinklers in a “temporary” structure. Although that fire occurred 9 years before this proposal, I was determined to assure that such a tragedy would not be repeated under my watch. The issue came before our elected officials as a land-use issue and my statement to them was that “...although it might only be up for 6 months per year, it will be in-place for 2 ½ years over that 5 year period and should be protected with sprinklers.” My elected officials agreed and, as a condition of approval, required fire sprinklers.

The developer asked me to work with him to bring this project

to fruition and he contacted Bill Oliver, of Oliver Sprinkler, to develop a concept. Mr. Oliver’s proposal was unique, at least to me. He proposed a system that could be installed, dismantled and re-installed each year that the “temporary” structure would be needed.

The original structure was a 27,784 ft² aluminum-truss framed, Kevlar-fabric building. It measured 302’ x 92.’ The sprinkler system was calculated as an Ordinary Hazard Group 1 (a moderate quantity of low combustibility contents whose storage height would not exceed 8’) but, given the nature of its use, it was decided to provide 0.2 gpm/2000 ft². The system would require 232 – 212° heads.

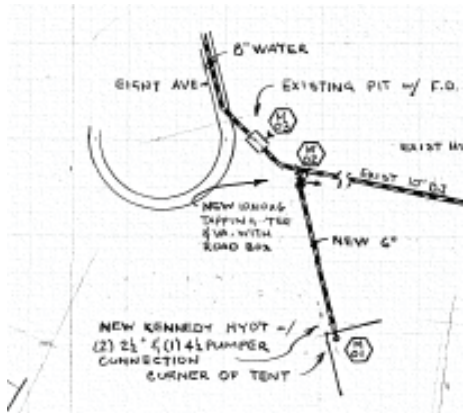


The hydraulics required:

- 456.4 gpm for the sprinklers;
- 250.0 gpm for the hose allowance, resulting in:
- 706.4 gpm at 124.42 psi at the base of the riser.

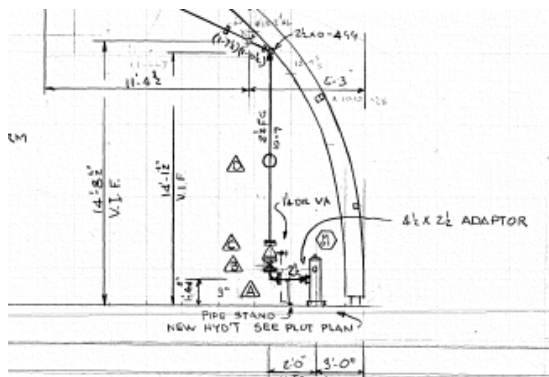
The challenge was to provide a water supply in the parking lot to feed this system. Bill Oliver’s solution was to install a dry-barrel hydrant (this type of hydrant is used in areas subject to freezing and is standard for our area) along a new 6” supply line that extended from an existing 10” main in the rear of the property; testing of that 10” demonstrated a strong water supply, evidenced by:

- A static pressure of 150 psi
- A residual pressure of 148 psi with 567 gpm flowing

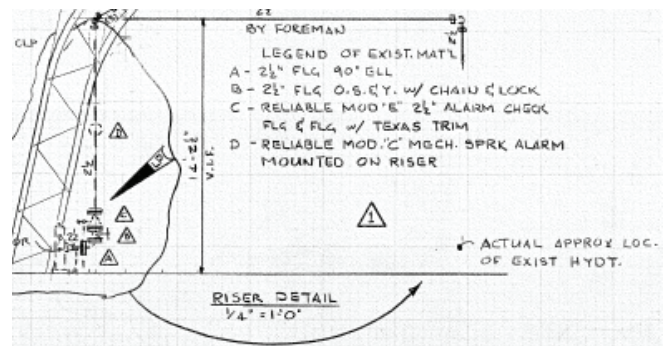


His plan was to use the “steamer” connection (4 ½”) on the hydrant, a Keystone Model E, as the water supply for the system. It was to be in northeast corner of the tent.

From that steamer connection, Oliver installed a 2 ½” 90° supply pipe and then constructed a full, NFPA 13-compliant valve and appurtenances tree, including O, S & Y valve, alarm check valve, retard chamber and water-motor gong.



resulting in 31,702 ft² of area. The hazard and density remained the same, but the new configuration required 274 uprights and 24 sidewalls all with an operating temperature of 212°. The hydrant was again used as the water supply, but that hydrant was no longer in the corner, but about 20’ inside the tent. Much of the original piping was also re-used.



At the end of the 1993 convention season, the system was dismantled, and the valves and piping stored until the following year.

When the 1994 convention season was approaching, the convention center owner wanted even more space, so the configuration of the tent changed. This one measured 262’ x 121’



That’s the reason there’s a fire hydrant in the parking lot at the Valley Forge Casino, the tent was constructed in this section of the parking lot with its northeast corner within 20’ of the spot where that fire hydrant is still located.

Economics and the construction of the Philadelphia Convention Center precluded the owner’s business plan and the permanent addition was never built; but the hydrant remains. It stands as testimony; testimony to a locality that was, and is, committed

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to the fact the firefighters and fire apparatus are only a part of a community fire protection plan; and to a company, Oliver Sprinkler (now Oliver Fire Protection & Security), who had the imagination to design, install, test, commission, uninstall, store and then reinstall, test and commission a full NFPA 13-compliant sprinkler system in a rebuildable structure. I don't know if this concept has been used before, or hence, but it was quite different to this author. •


NOTE: when I proposed this article to David Oliver, current President of Oliver Fire Protection and Security, he searched his company's archives and provided the drawings and photos from the original project, over a quarter a century ago. I am grateful for his cooperation. While attending our North American Fire Sprinkler Expo in Nashville in May, I observed that Mr. David Oliver is the 5th President of Oliver Sprinkler with whom I've had the pleasure of working over the last 36 years. •

About the Author


John Waters currently works for the National Fire Sprinkler Association as a Field Service Coordinator. He started with NFSA in April of 2018, after a 35-year career with Upper Merion Township's (Montgomery County, PA) Fire and Rescue Services, where he served as Chief Fire Official for 29 years. He holds a Bachelors Degree in Fire Science from the University of Maryland (1990), is a graduate of the National Fire Academy's Executive Fire Officer Program (2000) and holds two Masters Degrees, one from Grand Canyon University (2009) and the other from the Naval Postgraduate School (2013). He joined his volunteer fire company, where he still serves, in 1971. •



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The Benefits of UL Listed Antifreeze in Fire Sprinkler Systems

by Manny Silva, *Chief Engineer, Fire Suppression Products, Johnson Controls*

Introduction

Antifreeze has long been a cost-effective freeze protection method for fire sprinkler systems; however, antifreeze is not without challenges, creating issues such as leaking and corrosion. After a fatal fire event in 2009 attributed to highly concentrated antifreeze in a system, the National Fire Protection Association (NFPA) announced restrictions and new requirements for antifreeze use, which included a mandate that antifreeze solutions be agency listed. The UL 2901 test standard for antifreeze was introduced and its rigorous requirements created significant barriers to obtaining a listing. The first and only current solution specifically listed for fire sprinkler systems is TYCO® LFP® antifreeze from Johnson Controls.

Freeze Protection and Antifreeze Requirements

Freeze protection is required for fire sprinkler systems subject to freezing that cannot be maintained at or above 40°F (4°C) by NFPA Standard 13-2019 section 16.4.1 (as well as by NFPA 13D and 13R). NFPA 13, 13D, and 13R require that all new antifreeze systems use an agency listed solution. NFPA 25 mandates that by 2022, all existing antifreeze systems be drained and a listed antifreeze installed (if a system needs to be drained prior to 2022, it must be refilled with a listed solution). The guidelines also state that antifreeze solutions follow specific concentration requirements.

A UL Listing, obtained through UL under UL 2901 Outline of Investigation, is currently the only third-party listing for antifreeze. UL 2901 tests antifreeze solutions to evaluate, among other properties: solution stability, corrosion rate, resistance to leakage, material compatibility, toxicity, firefighting effectiveness, and combustibility when exposed to fire. The Standard Technical Panel (STP) for UL 2901 recently passed a ballot to issue the proposed draft to be recognized for ANSI and SCC approval.

Balancing Freeze Protection with Safety

While unlisted antifreeze products might provide adequate freeze protection, their freeze protection ingredients—either glycerin or propylene glycol—are combustible at certain levels. NFPA Research Foundation testing showed danger with antifreeze solutions containing higher than 50% glycerin or higher 40% propylene glycol, leading the NFPA to place limits on the

percentage of these ingredients with an additional reduction of two percentage points as an added safety factor. The final NFPA guidelines require limits of 48% glycerin and 38% propylene glycol for antifreeze used in fire sprinkler systems. Johnson Controls formulated its glycerin-based LFP® Antifreeze with a design that meets percentage safety restrictions while also providing a dependable minimum use temperature of -10°F (-23,3°C). The solution was further tested for fire-fighting effectiveness and exposure to fire limitations by UL to meet its safety requirements to be UL Listed.

Mitigating Leaks and Corrosion

A common issue with unlisted antifreeze is solution leaking through threads on system piping and fittings. The properties of glycerin and propylene glycol make them more likely to seep through threaded connections on pipes and fittings than water, causing antifreeze systems to be more prone to leaking. Over time, as the system leaks antifreeze, water from the supply source may enter the piping through a backflow device, diluting the antifreeze and raising the freeze point of the combined solution in sections of the system piping, as water freezes at a higher temperature than antifreeze solutions. If any sections do not have the proper freeze protection, the risk of damage increases. A burst pipe will cause property damage and insufficient fire protection. During rigorous high-pressure testing in both thermoplastic and metal piping materials, UL testing demonstrated LFP® Antifreeze to have equivalent leak resistance compared to water.

Corrosion is another common issue in antifreeze sprinkler systems. As glycerin and propylene glycol antifreeze solutions degrade over time, they produce acidic byproducts which corrode fire sprinkler system piping materials. This can lead to weakened pipes, pin-hole leaks, or plastic softening in Chlorinated Polyvinyl Chloride (CPVC) piping materials. NFPA restricts the type of antifreeze used in CPVC sprinkler systems to solutions with United States Pharmacopeia (USP)-grade glycerin (USP-grade means a chemical meets a sufficient purity level to be acceptable for use in food or drugs). When low-quality glycerin is used in antifreeze, it breaks down CPVC, causing it to droop and eventually crack over time. LFP® Antifreeze uses USP-grade ingredients to ensure compatibility with thermo-plastic piping to reduce the risk of plastic softening, cracking, or other failures. In addition, testing

shows that LFP® Antifreeze has a lower corrosion rate than many types of municipal water.

Formula Stability

The ingredients in glycerin- and propylene glycol-based water solutions have a tendency to separate over time, with gravity causing the denser glycerin and propylene glycol to settle out into the lower parts of the sprinkler system and drops. This creates a potentially dangerous situation where a sprinkler activation discharges mostly glycerin or propylene glycol onto a fire. It is important to use an antifreeze with a stable formula, made with high quality ingredients, that is not prone to separation or drift in solution properties.

Annual system inspections are recommended per NFPA 25 guidelines to verify the solution meets test requirements. In addition to formula separation over time, other antifreeze solutions currently available on the market which are not specifically designed and tested for fire sprinkler systems, will also have a drop in pH (a measure of acidity or alkalinity in a substance), making the solution acidic. UL accelerated life testing has ensured that the pH level of LFP® Antifreeze (as well as other properties, such as specific gravity, viscosity, and freeze point), maintains a similar level after high temperature exposure and temperature cycling. This type of stability is intended to make the antifreeze less likely

to be detrimental to sprinkler system materials, including CPVC and PEX, than other antifreeze solutions.

Conclusion

The use of a UL Listed antifreeze helps to meet the intent of NFPA freeze protection requirements and the requirement of utilizing an agency listed antifreeze in both new (*effective as of 2012*) and existing (*effective in 2022*) systems. The market gap in this product offering meant that since 2012 installers have resorted to either more costly freeze protection methods or used unlisted alternatives when installing new systems. LFP® Antifreeze fills this gap with an antifreeze that has passed rigorous UL testing and been proven to meet freeze protection needs while also exceeding the properties of unlisted alternatives. •

About the author

Manny Silva is Chief Engineer/Fellow—Fire Suppression Products at Johnson Controls

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Code Consultants, Inc. November 2012

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Cosco Supports Vancouver Firefighters' Fundraising Event

by Chelsea Goldhammer

Cosco Fire Protection (Portland) was proud to support the 10th Annual Vancouver Firefighters Local 452 Annual event, "Fire in the Park." The Annual fundraising event features activities for families to learn about fire and life safety, bike safety, water safety, first aid, and better understand what firefighters do to serve and work in their community. While Local 452 is the primary organizer, many firefighters from different fire districts in the area participate to make this a successful event for our community. It is a day of fun with a firefighter challenge, pipe and drum band, kids events and a variety of safety and awareness programs.

As an official "Teddy Bear Sponsor," Cosco's donation helped support a popular activity, the first aid learning station. Cosco volunteers provided children with their very own teddy bear for use as a mock patient at the American Medical Response booth where they learned to bandage and treat their bears for injury.

"We were excited to have an opportunity to support both the community and our local firefighters. This event is a great way to give back to the community," said Cosco District General Manager, John Berres. Berres also serves as the Columbia-Willamette NFSA Chapter Chairman. "Next year we hope to expand on the residential fire sprinkler education theme with the state's burn trailer."

Volunteers from Cosco participated in the event planning committee and during the event to help educate children and parents alike on the benefits of fire sprinklers, how they are installed, operate and how they help save lives and property when installed and maintained properly.

It was a great joy to participate in this year's Fire in the Park event. I loved speaking with the children and was amazed at their curious minds about how fire sprinklers work to save lives. This is a fantastic event that encourages safety and awareness in children, and also helps to engage the community with the people who proudly and diligently serve it. •

Chelsea Goldhammer works in Fire and Life Safety Inspection Sales at Cosco.





Mac n' Cheese for the Soul

by Miaishia McKenzie, [Accounting Services](#)

Nourishment of the body heals the heart, comforts the soul and calms the mind. It creates moments and memories we hold dear. The kitchen is one of the most important meeting spots in in my family, as with many families around the world. No matter your culture, preparing and serving food is a sign of togetherness and expressed love. The kitchen brings us together and provides us with a space to enjoy each other's company and express all that's on our hearts and minds.

The kitchen has always been a staple in our family. It has always been the place in my life where I was shown love or have given it without ever needing to speak the words "I love you." It's shown with the care it takes to prepare the food, the anticipation of the meal, as well as the presentation of the prepared plate. Love is expressed best by simply stating "Did you eat today? Here look what I prepared for you." Take a moment, sit back, and think about all the memories that you've experienced whether in celebration, sadness or just coming home to your family after a long day.

For me, one memory that is everlasting is the night before my sister passed away on March 5th, 2010. My sister died in a house fire in Baltimore City. It was a beautiful Wednesday night. My sister and I had hung out the entire day. I was finishing washing the dishes and cleaning up the kitchen from our normal routine, we had tacos with homemade taco shells. Lakeisha went to plant good night kisses on her nieces, my daughters, and came back to the kitchen as normal with me to sit and chat. We sat, talked and laughed for about an hour. Then she said she had to go, but before she did, she took out what she wanted for dinner the next day. She took out an oven stuffer and requested that I make my family favorite, macaroni and cheese.

Little did I know that would be the last time that she would request a meal, that I held her hand and hit her shoulders as we laughed and cried about the world, laughed out loud, and saw her smiling face across from me at my kitchen table. This is a memory that I will forever hold dear. I feel her in my kitchen every day. The kitchen was our meeting spot. I feel her with me every day. In celebration of her on her birthday and the anniversary of her passing we always have an oven stuffer, macaroni and cheese, and greens. Macaroni and cheese was always her favorite dish and for that I make this dish with pride, love and joy. I do hope you enjoy the recipe and make memories in the process. •

In Memory of LaKeisha Troy Harrison.

INGREDIENTS:

1lb. Dried elbow pasta
 ½ cup salted butter
 ½ cup of all-purpose flour
 1 cup of whole milk
 ½ cup of heavy whipping cream or Half & half
 6 cups grated cheese (*sharp cheddar, extra sharp cheddar, pepper jack & mozzarella*)
 ½ Tbsp. Salt
 ½ tsp. black pepper
 ¼ tsp. Paprika

DIRECTIONS:

1. Preheat oven to 325 degrees F and grease a 3 qt baking dish. Set aside.
2. Bring a large pot of salted water to a boil. Add dried pasta and cook 1 minute less than the package directs for al dente.
3. While water is coming up to a boil, grate cheeses and toss together to mix, then divide into three piles. Approximately 3 cups for the sauce, 1-1/2 cups for the inner layer, and 1-1/2 cups for the topping.
4. Melt butter in a large saucepan over MED heat. Sprinkle in flour and whisk to combine. Mixture will look like very wet sand. Cook for approximately 1 minute, whisking often. Slowly pour in about 2 cups or so of the milk/half and half, while whisking constantly, until smooth. Slowly pour in the remaining milk/half and half, while whisking constantly, until combined and smooth.
5. Continue to heat over MED heat, whisking very often, until thickened to a very thick consistency. It should almost be the consistency of a semi thinned out condensed soup.
6. Stir in spices and 1-1/2 cups of the cheeses, stirring to melt and combine. Stir in another 1-1/2 cups of cheese and stir until completely melted and smooth.
7. In a large mixing bowl, combine drained pasta with cheese sauce, stirring to combine fully. Pour half of the pasta mixture into the prepared baking dish. Top with 1-1/2 cups of grated cheeses, then top that with the remaining pasta mixture.
8. Sprinkle the top with the last 1-1/2 cups of cheese and bake for 15 minutes, until cheesy is bubbly and lightly golden brown.

The Importance of Continuing Education in the Fire Protection Industry

by Ellen Davis

The fire protection industry is ever-evolving to keep people and property as safe as possible. But with an ever-evolving industry comes many professionals who need to stay in the loop.

Most licenses and association memberships require continuing education for their members, but training shouldn't be looked at as something to pursue only for credit. Continuing education keeps professionals up to date on the latest code changes and best practices in the fire protection industry.

Changes in Code

Associations, like the International Code Council (ICC) and the National Fire Protection Association (NFPA), develop codes and standards that are regularly updated to align with the most recent industry research and best practices.

These changes can be hard to navigate sometimes, or even just easy to miss. Plus, every jurisdiction has its own timeline for adopting codes, and its own set of amendments and standards. Taking continuing education courses detailing general changes to applicable codes, or even specific changes for your geographic area, will keep you knowledgeable and compliant.

Even if your geographic area hasn't adopted the newest code edition, it's good trade practice to be aware of the latest guidelines to know what's coming down the line.

Product Innovation

Codes exist to create safe and effective systems and to keep them operational. The quality of products used to build the system and the maintenance requirements can vary significantly based on the products chosen for the system.

Many companies, like AGF Manufacturing, design and manufacture products that streamline the installation and maintenance process to save labor expense and better serve your sprinkler system. AGF's personnel closely monitor industry trends that may result in code changes, current methods that seem to experience consistent shortcomings, and feedback from those in the field to create products that are reliable, versatile, and code compatible.

Training sessions are a great way to gain in-depth knowledge about existing and new products, especially those that address

new code requirements, like air vents for wet sprinkler systems.

The Different Forms of Training

Continuing education doesn't have to mean sitting in a classroom or taking a test. It comes in many forms that can be adaptable to your schedule. Like most of the major manufacturers of sprinkler system products, AGF Manufacturing, Inc provides free training for industry professionals. The recently created AGFUniversity program has been designed to offer a number of different learning options for both individuals and groups, such as:

Webinars

Webinars, which can be "attended" from your computer, are a great way to brush up on new products or topics without having to schedule time away from the office. Webinars are offered both live and as recordings to accommodate busy schedules.

Live webinar attendance allows participants to ask presenters questions right as they pop up. If scheduling conflicts prevent live attendance, recorded versions are an option. Most presenters are happy to respond to any follow up questions. AGF also knows time is precious, so webinars usually run about twenty minutes.

Presentations

Live presentations are one of the most common forms of continuing education, and sometimes have an edge over webinars, because the in-person element often results in better group interaction, a free flow of ideas, and hands-on experience with some of the products being covered.

AGF realizes the value of the different professional associations related to the sprinkler industry and therefore gladly accepts invitations to come to chapter meetings and address specific topics. We are also available for quick lunch & learn presentations if something in the office during the workday is more convenient.

Training Centers

If a more formal, out-of-the-office "classroom" style presentation to earn CE credits is preferred, one of a number of training centers

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throughout the country may offer the best outcome. These centers have classroom spaces, and some offer live fire protection industry products installed so your team can get proper hands-on, “field simulated” experience.

Sessions at training centers can encompass more than a typical presentation, because multiple presentations can be combined into a full day of training. AGF, for example, has a training center in Exton, Pennsylvania along with General Air Products that includes active displays of AGF and General Air products along with products from all the major head and device manufacturers. This training center can accommodate up to 40 people and covers topics such as dry system filling solutions, air venting and corrosion, dry system freeze protection, backflow preventers, and more. General Air Products and AGF Manufacturing are happy to make this facility available free of charge to industry associated groups.

In Conclusion

Although continuing education is required to hold most licenses or association memberships, it shouldn't be something to do just for credit. The fire protection industry is all about keeping people and property safe and staying up to date on the latest safety codes and best practices.

AGF Manufacturing, Inc. is recognized by the National Institute for Certification in Engineering Technology (NICET) as a Training Provider, as well as being a preferred education provider for ICC. To schedule a free training session via webinar, at your location, or at our Exton, Pennsylvania training center, contact Ellen Davis at edavis@testandrain.com or 610-240-4900. •

Ellen Davis is AGF Mfg's Director of Marketing.

FUTURE DATES FOR NFSA ANNUAL SEMINARS AND BUSINESS AND LEADERSHIP CONFERENCES

April 29–May, 2, 2020

JW Marriott Desert Ridge, *Phoenix, AZ*

May 1-4, 2021

Cosmopolitan, *Las Vegas, NV*

May 3-6, 2022

Sheraton Sand Key, *Clearwater Beach, FL*

May 3-6, 2023

Marriott Marquis, *Washington, DC*

May 7-10, 2024

Wailea Beach Resort, *Maui, HI*

www.nfsa.org/annualseminar

My New Friend in Tallahassee

by Greg Toledo

In March of this year the FFSA members walked the halls of Tallahassee. Each board member had a Senator and House Representative to visit. We had an agenda to present and an opportunity to speak with them and perhaps get to know them better. In both cases, with the Senator and House Representative, our time was extended, and the connections were incredible. Especially with House Representative Anthony Rodriguez, and not only because I voted for him. He was a very relaxed and friendly person to speak with. We immediately related as we were both from South Florida. I believed he felt like a piece of home was there in Tallahassee. Beside topics related to our industry, we spoke about common things and we made a point to meet for lunch once we were back in Miami.

A few months went by since our meeting in Tallahassee and we finally had an opportunity to meet. We met in a little Cuban restaurant located in Miami. We had a great conversation in which he learned and understood more about the issues pertaining our industry. I invited him to participate in one of our Board Meetings and he accepted the invitation. He hopes that he will attend our Board Meeting to participate in topics and get to know other FFSA members next year in Tallahassee.

My biggest lesson out of all this is that our politicians are normal people like you and me. We can all work together, not only on fire sprinkler issues, but in general. I gave him my word that I would work with him. We truly agree on many topics. He has shown me that he is a man of principal and integrity. I honestly can say I have a new friend in Tallahassee.

We need more politicians like Anthony Rodriguez in Tallahassee. He has my full support and vote. •

Gregory Toledo is President of Epic Fire Systems and 2nd V.P. for the Florida Fire Sprinkler Association



These Incentives Improve Community Safety and Provide Developer Savings

In exchange for installing home fire sprinklers in entire developments, authorities having jurisdiction can offer locally negotiated trade-ups as incentives to developers. These incentives may include:



- Street-Width Reduction
- Longer Dead-End Streets
- Tee Turnarounds Permitted
- Increased Street Grades and Building Setbacks
- Additional Units Permitted
- Expansion of Existing Water Supply May Not Be Needed
- Increased Hydrant Spacing
- Subdivision Single Access Point
- Gated Communities

HOME FIRE SPRINKLERS PROTECT THE ENVIRONMENT*

Reduce greenhouse gas emissions by 98%

Reduce fire damage by up to 97%

Reduce water usage to fight a home fire by as much as 91%

Reduce water pollution

* Environmental Impact of Automatic Fire Sprinklers, FM Global, 2010



For more information about home fire sprinkler incentives, including case studies, video testimonials, fact sheets and NFPA 13D information, visit our website at HomeFireSprinkler.org/crr.

Home Fire Sprinklers: A Win-Win for Your Entire Community

Home fire sprinkler incentives can reduce construction costs, while protecting residents and firefighters, and help to protect the environment.

United States Alliance Fire Protection Featured on Lifetime's Designing Spaces Show

The USAFP team completed a residential retrofit for the Oscar Mike Foundation Home

United States Alliance Fire Protection (USAFP) completed a 9,000 sq ft residential retrofit for the Oscar Mike Foundation Compound. Oscar Mike, which is military jargon for “on the move,” is a fully accessible compound to assist disabled veterans with getting involved in adaptive sports, located in Poplar Grove, Illinois. This project was done as part of the home improvement show, Designing Spaces, airing on Lifetime.

In 2011, Noah Currier founded the Oscar Mike Foundation after he was tragically injured in a car accident just three days after returning home from Iraq. The accident left him paralyzed from the neck down.

This project wasn't easy, as it was a true retrofit. We had to minimize soffits and exposure, cover all pipe back up with drywall and work around the residents, staff, and a television show crew. The fire sprinkler system was donated through a combined effort of USAFP, the National Fire Sprinkler Association (NFSA) and the Northern Illinois Fire Sprinkler Advisory Board (NIFSAB).

USAFP President Chad Huennekens was interviewed for the show sharing the benefits of fire sprinklers, which aired June 6th on Lifetime.

“The number one reason why our team got involved is to ensure the Oscar Mike compound is safe. The fire sprinkler system we installed can put the fire out in a minute or two, protecting those who live and use the compound and help prevent property loss or damage,” said Chad Huennekens, President of United States Alliance Fire Protection.

This was a three-part series with USAFP included in the first segment. All episodes are available online at <https://designingspaces.tv/>.

The retrofit was a collaborated effort thanks to USAFP team members: Jen Peterson, Pat Suvanich, Jeff LaForge, Brian Styles, Randy Marsceau, Tim Quirke, Jim Winzentsen, and Amy Hall. •



Bold Innovation— Exceptional Solutions

by Scott Howser, [Vice President, Victaulic](#)

The evolution of technology leads to faster, safer and more efficient ways of working, and companies that actively advance industry technology have the potential to enormously impact the world.

In some periods of history, there is a concentration of new ideas that collectively bring about immense change. In the early years of the 20th century, engineering and scientific advancement led to widespread mechanization, and innovations in physical metallurgy allowed steel to begin replacing iron in construction, railroads, and shipbuilding. Radar and Sonar were introduced, the first electrocardiogram was used to test for heart disease, commercial radio broadcasting was born, and plastic began to make its way into manufacturing.

It was during this time that Lieutenant Ernest Tribe of the British Royal Engineers began a collaboration with Dr. Henry Selby Hele-Shaw that resulted in the development of a mechanical pipe joining solution called the Victory Joint. Awarded with a patent for the first mechanical coupling on April 4, 1919, the partners laid the foundation for The Victory Pipe Joint Co., which today is known as Victaulic.

From Inception to Implementation

The visionaries who created this method of joining pipe with bolted mechanical grooved couplings immediately saw how this technology could be applied in a range of industries and set about making iterations of the original design to develop new industry-specific products.

Over the next two decades, some enormous infrastructure construction programs incorporated the new mechanized coupling. Victaulic technology was used in the construction of the Hoover Dam and the Panama Canal as well as other landmark projects funded by the US Government Public Works Administration and Works Progress Administration.

During World War II, Victaulic couplings were used in the construction of Victory Ships in the United States, enabled emergency workers in London to quickly assemble temporary water lines to put out fires while the city was under siege and allowed Allied troops in advance positions to be fueled via portable pipelines.

Manufacturing innovations at Victaulic in the 1950s led to a new way of grooving pipe using cold forming, which opened

a previously untapped market for thin-wall aluminum pipe, extending use of the company's patented designs to farm irrigation, flowlines on oil fields, and a range of mining applications.

Recognizing the value of focused research and development (R&D), Victaulic formally established its R&D group in 1957, laying the foundation for more rapid technology advancement and over time introducing more than 100,000 products and more than 2,000 patented designs.

Some of these designs were used over the ensuing decades in landmark civil structures, including Seattle's Space Needle, more than 20 Olympic sites, professional sports stadiums, the Bourj al Arab Hotel in Dubai, and the Hudson Yards project, one of the largest and most innovative real estate developments in New York City since Rockefeller Center.

Furthermore, Victaulic solutions have been employed extensively belowground. Mining companies began utilizing mechanical pipe joining products because they are easy to assemble, disassemble, move and reuse and can be installed in tight spaces with less labor and equipment than conventional joints. In time, Victaulic couplings became the standard method of joining lines and today are installed in five of the world's 10 deepest mines.

Innovation and Fire Safety

In addition to enabling productivity in aboveground and underground construction projects, Victaulic products have been instrumental in improving safety and impactful on fire safety history.

Nearly 70 years ago, the New York City Fire Department and civil defense planners demonstrated the value of Victaulic couplings in emergency urban firefighting capacity using a New York fireboat to pump water from the Hudson River through 1,000 feet of 8-inch lightweight pipe assembled by rookie fire crews in a little more than 20 minutes. The following year, Underwriters' Laboratories (UL) approved Victaulic's couplings and fittings for use in fire protection systems. By 1955, Vic-Easy roll grooving tools were providing fire protection companies with portable, light wall steel pipe grooving capabilities for solutions that were more economical and easier to install than traditional alternatives.

In the 1970s, Victaulic led the way in gaining UL and FM approval of a thinner-than-standard 0.19-inch wall thickness

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Victaulic further revolutionized small diameter connections with the introduction of the FireLock™ IGS Style V9 Sprinkler Coupling.



View from above the Hoover Dam on the Colorado River in Boulder City, Nevada. The Victaulic Stainless Steel grooved system provided ease and speed of installation allowing the project to be completed on time.

steel pipe for fire protection services, which reduced costs in the industry. The company also introduced the Fast Installation Tee, making it possible to use plain end, light wall and standard-weight steel pipe on fire protection branch lines that could directly accept sprinkler heads and threaded drops. In the 1980s, Victaulic rolled out its FireLock™ portfolio, a line of lighter and more compact valves and fittings for use in fire protection systems that delivers the same flow performance as standard Victaulic parts. Next, Victaulic pioneered Installation-Ready™ technology in the 2000s with the introduction of the FireLock EZ™ Rigid Coupling, eliminating the need to disassemble couplings before installation.

In the last decade, Victaulic led the industry with innovations introduced in special hazards fire protection, flexible connections and small diameter solutions. The Hybrid Fire Extinguishing System, Victaulic Vortex™, combines water and nitrogen to both absorb heat and reduce oxygen to extinguish fires in areas with sensitive computer equipment or other assets that could be damaged by traditional sprinkler systems. The VicFlex™ product line, featuring an industry-leading bend radius, allows for unprecedented installation ease, and continues to solve for new installation challenges. The most notable installation challenges are low-profile spaces, unconditioned areas like balconies and parking garages and temporary protection. And finally, Victaulic revolutionized small diameter connections with the introduction of the FireLock™ Innovative Groove System | IGS™, the Style V9 Sprinkler Coupling and the Style 109 Installation-Ready™ One-



The 1951 New York City civil defense test showcased the firefighting and fire protection capabilities of Victaulic products, helping Victaulic enter the market in 1952.



During World War II, Victaulic couplings enabled emergency workers in London to quickly assemble temporary water lines to put out fires.

Bolt Coupling, enabling both efficient and consistent grooved installation.

And looking toward the future, Victaulic has recently acquired Globe Fire Sprinkler Corp, joining two leading, century-old companies as of July 2019. This 105-year-old manufacturer of sprinklers and valves is known for developing the earliest lever-fulcrum dry pipe valve, Globe Save All center strut sprinklers, and for being the first US company to use 5-mm and 3-mm glass bulbs in commercial and residential sprinklers. Globe's heritage as a leading sprinkler manufacturer is reflected in the introduction of its model RCW, UM, UMC valves other products developed to meet the demands of a dynamic world market. Now combined, these two respected companies will have the resources and capabilities to continue their legacies of bringing exciting new solutions to the fire protection industry.

By including Globe's assets into its already extensive product line, Victaulic broadens its offering of fire safety solutions, and with the addition of industry working knowledge, the company increases its engineering and R&D resources as well.

Setting Standards of Excellence

Driven by a commitment to push the limits of today's technology, the company is investing in bold innovation, introducing both products and services that simplify job site variables and improve operational safety in the most demanding operating conditions. •

by John Corcoran

I gladly relinquish my column this issue to my friend John Corcoran. John's quick wit, intelligence and fine writing style make it an honor to have him stand in for me. Thank you, John! It has been a pleasure working with you for many years, and I look forward to many more to come! —Joanne Genadio

Two Fathers



“I’ve felt like a child, born of those two fathers.”

Hands up – who remembers that line from Oliver Stone’s 1986 Vietnam film, *Platoon*? In it, U.S. Army volunteer, Chris Taylor (Charlie Sheen) describes how he was shaped by the radically different influences of Sergeants Barnes (Tom Berenger) and Elias (Willem Dafoe).

Whether you remember the line – or have ever seen the film for that matter – the concept expressed is elegantly simple: we are the product of those “fathers and mothers” that shape us in our lives – both personal and professional.

Stop for a moment, look at yourself, your family, your company, your colleagues... and reflect on the confluence of events and those key people that have led you to this place.

How did I start a 25+-year career in the fire sprinkler industry? Most folks assume with the name Corcoran that I’m one of the Wolverine Corcorans from Michigan, Corcoran Pipe Systems, or Corcoran Fire Protection.

Great guesses... but I am not one of those Corcorans.

Truth is, I answered a newspaper want ad for a Marketing Manager in the Milwaukee Journal-Sentinel in 1993. Sprinklers? What the heck – I’m a new college graduate – I’ll give it a shot!

I had no idea that I was about to be bitten by the bug that gets us all... and the reason so many of us get into this industry, and the reason that so few of us leave: we understand that what we do changes the world – every day.

Fathers, you ask? Just getting to that – but there were more than two.

Jim Smyrl was the VP of Sales and Marketing for Star Sprinkler in 1993, looking for a grunt to run trade shows, customer events, advertising... and whatever else needed doing. My first sprinkler industry father. Jim taught me the basics of the business.

Before we left for our first trade show together, Jim cautioned me, “these aren’t the kind of people you’re used to dealing with in graduate school.” He was right. They are so much better.

From those first days at Star, then Tyco, Victory, Globe, and now RASCO, I’ve had the honor to serve and learn from the best minds in our industry. It didn’t feel so remarkable at the time, but taking a look back I cannot believe my great fortune at learning at the feet of this group.

Buck Buchanan taught me to speak little and listen attentively; the key to understanding others comes from what they say... and don’t say.

James Golinveaux demonstrates by example that everyone in our industry needs to be a cheerleader. Whether in front of a codes and standards committee, a political body, or speaking one-on-one to the builder of your home... James is ready to slip into “sprinkler advocate mode” in a heartbeat.

Victor C. Weigand, Jr. taught me the importance of carefully developing, working, and measuring a plan... especially important



for procrastinators!

Stephen Meyer taught me that great ideas don’t just happen between 8 and 5, Monday through Friday. There is nothing so inspiring as a Steve call on a Sunday afternoon (unless you’re in the middle of a family dinner). His unbridled energy and never-ending questioning of “why?” is infectious.

The late Robert C. Worthington, P.E. transformed our industry through hydraulic calculation education before I was born. What a pleasure to work alongside he and son Steven and learn that you can be as vibrant and relevant at 80 as you are at 30.

Kevin Maughan showed me that patience and plain-spoken English are a teacher’s best tools.

As a 29-year-old attending my first trade show in 1993, I was pleasantly surprised to be welcomed to the industry by competitor FJ Fee III. Then, FJ III, and now, his brother Kevin and next generation FJ IV and Kevin Jr., never hesitate to underline the point that family extends beyond the confines of genetics and companies: that all of us that devote our lives to this industry serve a common cause.

Who made you who you are today... who are those fathers and mothers that shaped and continue to shape your life? Take the time to thank them... and never stop growing!

John Corcoran is the Digital Marketing Manager at Reliable Automatic Fire Sprinkler Co., Inc. He has worked in Marketing and Commercial Operations roles in the Fire Sprinkler Industry since 1993.

Team NFSA at Tennessee Public Fire Safety Association Meeting

NFSA President Shane Ray, Director of Outreach and Government Relations Vickie Pritchett, and Director of Public Fire Protection Jeff Hugo enjoyed presenting at the Tennessee Public Fire Safety Association meeting held in conjunction with the Southeastern Fire Chiefs Association Conference in Murfreesboro, Tennessee. Also in attendance were Director of Field Operations Gary West and Southeast Regional Manager Brian Biggs. This was a great opportunity for us to share Fire Team NFSA with our AHJ members.



Jordan Clark Joins NFSA's Team OGR

Jordan Clark has joined NFSA's Outreach and Government Relations Team as a part-time employee. Jordan was born and raised in Calvert County, Maryland where she went to school from kindergarten through college. She lives with her family and two dogs. Jordan comes from a long line of fire service personnel, including her dad, brother, and both grandfathers. Growing up she was always interested in fire prevention and safety, and hopes to keep that up while working as part of NFSA's Team OGR!



NFSA's Leadership Team Looks to the Future

NFSA's Leadership Team spent a week planning for the future in Annapolis, Maryland. "I appreciate our department leaders and the role each one plays in helping to execute our operational plan," said NFSA President Shane Ray.

The Team was grateful that Maryland State Fire Marshal Brian Geraci was able to join them for lunch.



New Hampshire Gets New Demo Unit

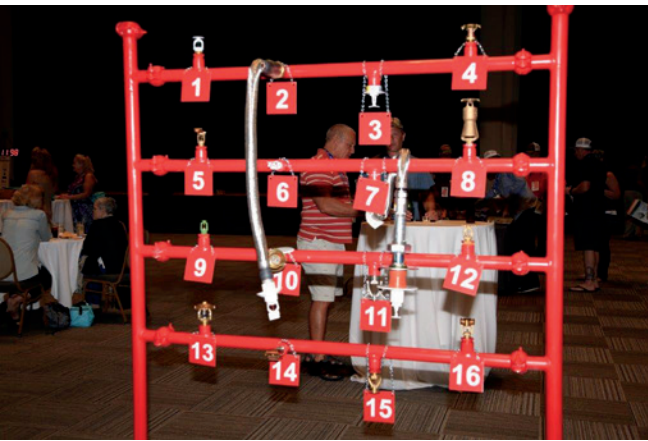
The National Fire Sprinkler Association delivered a new side-by-side fire sprinkler burn demonstration unit to the New Hampshire Fire Prevention Society on Tuesday, July 23rd, 2019. NHFPS President Stephen Gallagher was on hand to accept delivery of the latest NFSA side-by-side trailer unit with NFSA New England Regional Manager Mike Young and Southeast Regional Director Brian Biggs.

The unit will be utilized throughout New Hampshire to educate the public on the fire & life safety benefits of residential fire sprinklers.



CHAPTERS in ACTION

Florida Chapter **Hawks Cay 2019**



Florida Fire Sprinkler Association is preparing for *Hawks Cay 2019 October 20 – 24*. The conference is full of exceptional speakers including NFSA President, Shane Ray, NFPA President, Jim Pauley, Viking President, James Golinveaux, Wes Baker, FM Global just to name a few. FFSA has a panel discussion with the Florida Home Builders, Water Purveyors and Sprinkler Contractors to discuss *“A Common Thread”*. This conference is shaping up to be the best conference in FFSA history, starting out the week with the one and only Fire Product Challenge for our vendors which sold out in 4 days. Please check out the full brochure at www.floridafirespinkler.com.

St. Louis Chapter **Golf Tournament Benefits Burn Camp**

St. Louis Chapter members worked together recently to sponsor an outstanding golf tournament that included a delicious lunch and dinner for over 100 golfers, and more than a dozen fire department



officials. Proceeds went to the Burns Recovered Support Group and the Midwest Childrens Burn Camp. A big thank you to all of those who contributed to the success of the tournament with the donation of prizes, volunteered their time, or sponsored a hole.

Southwest NFSA Chapter News

The NFSA Los Angeles Chapter met on April 18th at the Rio Hondo Golf and Event Center in Downey, California for a great dinner meeting that began with drinks and conversation and later found members in attendance receiving a report from Regional Manager Bruce Lecair on the Office of the State Fire Marshal NFPA 25 Work Group project for adoption of the next edition of NFPA 25 in California. Bruce also reported on the OSFM Automatic Extinguishing Systems Advisory Committee meetings being held at the State Fire Marshal's Office, as well as NFSA and FPO news and events throughout the state.

The Los Angeles Chapter met again on June 20th for a report from Bruce on the Office of the State Fire Marshal NFPA 25 Work Group project, the OSFM Automatic Extinguishing Systems Advisory Committee, the Fitter Certification CEU Program and NFSA training in Southern California. Also in attendance was Area Director Peter Hulin from Superior Automatic Fire Protection who gave an update on the recent NFSA Board Meeting, his views on the California Fitter Certification Program and the movement of hanging and bracing to a separate NFPA Standard and his upcoming schedule in his role as Area Director. The next meeting is scheduled for October 17th.

The San Francisco Bay Area Chapter met on May 30th in Fremont, California. at Saki's Spin a Yarn Restaurant and Grill. Associate Director of Outreach and Government Relations Caleb Armbrust was in attendance to report on the NFSA Membership site and how members can better use it to obtain news and information. His visit to the Chapter meeting was preceded by visits he and Bruce made to members in the Bay Area to spend time showing them the NFSA website and the features that are available as a resource for news and information, as well as how they can make the site available for access to their employees. Members also received a report from Area Director Peter Hulin and Regional Manager Bruce Lecair. The next meeting of the San Francisco Bay Area Chapter is planned for September 26th.

The Arizona State Chapter met at the Phoenix Fire Department Headquarters on May 14th for a luncheon meeting which included a set of reports from Area Director Aaron Bennett and Regional Manager Lecair. The meeting was a great opportunity for an exchange of ideas and information for fire sprinkler information topics in Arizona. Future NFSA Arizona Chapter Meetings are scheduled for September 10th and concluding the 2019 schedule on November 12th.

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CHAPTERS in ACTION

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TFSCA Fall Fling

Fall Fling September 25th – 28th in Pigeon Forge at the Main Stay Conference Center registration coming soon at www.tfsc.com

- Meet and Greet on September 25th @ 6:00pm.
- Training session Sept 26th & 27th 8:00am – 12:00pm each day. Sept 28th
- General Business Meeting 9:00am – 10:00am
- Golf outing starting at 11:00am
- Banquet/Dinner at 7:00pm. All times for Fall Fling are EST.

New England Chapter Events

Boston Chapter Upcoming meetings:

September 18, 2019 at 5:30 pm at the Sheraton Four Points Vincent Powers, Engineer with NFSA will present on Inspection, Testing & Maintenance of Fire Sprinkler Systems

October 10, 2019 Third Annual NFSA Boston Chapter Charity Golf Event at the Plymouth Country Club, 221 Warren Avenue, Plymouth, MA

Connecticut Chapter Upcoming meetings:

November 12, 2019 at 5:00 pm at Eli's on Whitney 2392 Whitney Avenue, Hamden, CT 06518

Illinois Chapter ITM Committee Meeting

The NFSA Illinois Chapter Inspection, Testing & Maintenance Committee recently met to re-establish its purpose or agenda, and brainstorm new ideas.

The first discussion was establishing set meeting dates for 2020. It was decided to have preset quarterly meetings based around the same schedule as Chapter Meetings. The next Meeting will take place on Wednesday October 23rd, 2019.

The Committee will continue to focus on training and educating AHJs, Building Owners and Managers. The Committee discussed the fact that educating them would lead to enhanced maintenance in accordance with NFPA 25 and result in additional service-type work for our contractors. It will also provide a better understanding of why certain testing or maintenance must be performed. Different ideas on how to get more AHJs to attend meetings were discussed and the main consensus was to make them free of charge, which may be accomplished by Contractor or Chapter sponsorships.

Illinois Chapter Don Smith and Mike Neisman Retire

The NFSA Illinois Chapter gave recognition to Industry Promotions Committee members Don Smith of Chicago Backflow

and Mike Niesman of Victaulic as they retire from the industry.



Pictured left to right: Matt Clegg/Valley Fire Protection, Travis Glimel/Nelson Fire Protection, Matt Treutelaar/Great Lakes, Mike Niesman/Victaulic, Don Smith/Chicago Backflow, Ed Kadlec/C.L.Doucette, Jamie Reap/USA Fire Protection

Illinois Fire Inspectors Annual Conference

NFSA Illinois Chapter was a conference sponsor for the Illinois Fire Inspectors Annual Conference.



Pictured is Illinois State Coordinator Bob Tinucci providing information to one of the attendees.

NFSA North Texas Chapter Lunch and Learn Free Lunch & Learn - NFPA 291 Fire Hydrant Flow Testing

When: September 18, 2019 at 11:30 a.m. – 1:00 p.m.

Where: Uncle Buck's Brewery, Bass Pro Shop, Grapevine, TX 75261

Who: All Fire Protection Industry

How: Register Here: <https://nfsa.org/events/>

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Henderson Engineers Announces Fire & Life Safety Leadership Transition

Henderson Engineers announces Chris Culp as the new director of Fire and Life Safety. Culp succeeds Darrell Stein, who previously held the role since 2001 and was recently given additional leadership responsibilities for Henderson. Culp takes the lead for one of the largest fire protection groups in the country. He now directs Henderson's Fire and Life Safety roster of more than 50 team members nationwide. The full-service team provides technical expertise to clients across all vertical markets that Henderson serves. The Fire and Life Safety Group works side-by-side with building systems engineers at Henderson, as well as construction

management and commissioning experts at Henderson Building Solutions – a wholly-owned subsidiary of Henderson Engineers – to ensure clients have seamless, one-stop service.

Stein's new role provides leadership oversight of three business units, which includes the Fire and Life Safety Group and design teams focused on healthcare, retail, grocery, and entertainment. His new responsibilities include working with team leaders on all aspects of operations, including financial, strategic, and personnel. Stein functions as an advocate for and liaison between the Board of Directors and teams. •

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CHAPTERS in ACTION

Featured Speaker

Kevin J. Kelly, P.E., is a Codes and Standards Specialist for Vic-taulic. Previously he was a Fire Protection Engineer Consultant for the National Fire Sprinkler Association. Mr. Kelly graduated from the University of Maryland with a B.S. degree in Fire Protection Engineer and is a Licensed Professional Engineer. He has taught technical seminars on topics related to fire protection. He has served on several NFPA technical committees including NFPA 13, Standard for the Installation of Sprinkler Systems, NFPA 291 Fire flow Testing and NFPA 24, Standard for the Installation of Private Fire, Service Mains.

Empire Chapter Presents Strikes for Safety Charity Bowling Tournament to support Westchester Burn Center

Save the Date! Tuesday, 29th of October!

- Prizes, Raffles, 50/50, Food and soft drinks, and friendly competition!
- Pricing available for individual bowlers and five-somes! Gutter Guards not allowed!
- *Location:* Spins Bowl (<https://www.spinsbowl.com/poughkeepsie-ny>)
47 Taft Av., Poughkeepsie, NY 12603
- *Time:* 12-2pm Registration, 12:30p-2:00 p.m. LUNCH.
2:00 p.m.-6:00 p.m. Tournament Bowling

For more information, contact Regional Manager Dominick Kasmauskas at kasmauskas@nfsa.org.

Southwest NFSA Chapter News!!

The Los Angeles Chapter met on April 18th at the Rio Hondo Golf and Event Center in Downey, CA. for a great dinner meeting that began with drinks and conversation and later found members in attendance receiving a report from Regional Manager Bruce Lecair on the Office of the State Fire Marshal NFPA 25 Work Group

project for adoption of the next edition of NFPA 25 in California. Regional Manager Lecair also reported on the OSFM Automatic Extinguishing Systems Advisory Committee meetings being held at the State Fire Marshal's Office as well as NFSA and FPO news and events throughout the state.

The Los Angeles Chapter met again on June 20th at the Rio Hondo Golf and Event Center in Downey, CA. for a report from Regional Manager Bruce Lecair on the Office of the State Fire Marshal NFPA 25 Work Group project, the OSFM Automatic Extinguishing Systems Advisory Committee, the Fitter Certification CEU Program and NFSA training in Southern California. Also, in attendance will be Area Director Peter Hulin from Superior Automatic Fire Protection who will give an update on the recent NFSA Board Meeting, his views on the California Fitter Certification Program and the movement of hanging and bracing to a separate NFPA Standard and his upcoming schedule in his role as Area Director. Additional meetings are scheduled for August 15th, and October 17th.

The San Francisco Bay Area Chapter met on May 30th in Fremont, CA. at Saki's Spin a Yarn Restaurant and Grill. Associate Director of Special Projects Caleb Armbrust was in attendance to report on the NFSA Membership site and how members can obtain news and information for better use of it as a member benefit. His visit to the chapter meeting was preceded by visits by he and Regional Manager Bruce Lecair to members in the Bay Area to spend time showing members the NFSA website and the features that are available as a resource for news and information as well as how they can make the site available for access to their employees. Members also received a report from Area Director Peter Hulin and Regional Manager Bruce Lecair. Additional meetings for the San Francisco Bay Area Chapter are planned for July 25th and September 26th.

The Arizona State Chapter met at the Phoenix Fire Department Headquarters at 150 S. 12th Street in Phoenix, Arizona on May 14th for a luncheon meeting a set of reports from Area Director Aaron Bennett and Regional Manager Bruce Lecair. The meeting was a great opportunity for an exchange of ideas and information for fire sprinkler information topics in Arizona. Future NFSA Arizona Chapter Meetings are scheduled for July 9th, September 10th and concluding the 2019 schedule on November 12th. •

SPRINKLING OF NEWS

■ Victaulic® Acquires Globe Fire Sprinkler

Effective July 8, 2019, Victaulic has purchased Globe Fire Sprinkler. Combined, these two respected companies will have the resources and capabilities to bring exciting new solutions to the fire protection industry around the world. Steven Worthington, who will continue to serve the combined organization as President, Globe Fire Protection commented, “Victaulic brings additional financial resources to Globe, enabling added focus on innovation to support our customers and the industry.” John F. Malloy, CEO of Victaulic commented, “The addition of Globe’s fire protection sprinkler volume and engineering capabilities will provide the scale and skills necessary to be a true leader in all aspects of the fire protection industry.”

■ Johnson Controls introduces non-magnetic sprinkler for healthcare MRI environments

Johnson Controls introduces the Tyco® RFII-MRI 5.6 K-factor Non-Magnetic Concealed Pendant Sprinkler, developed for use in Magnetic Resonance (MR) system rooms in healthcare environments. The sprinkler is acceptable for use under a static magnetic field strength of up to 7-Tesla, more than twice the magnetic strength of standard MRI equipment, which are typically around 3-Tesla.

The RFII-MRI sprinkler is available in both standard and extended coverage options. With a quick response extended coverage (QREC) rating of up to 400-square-feet (20 feet by 20 feet), the extended coverage model helps protect MRI rooms with up to five fewer sprinklers than the standard coverage option. Both models feature a flat cover plate designed to conceal the sprinkler.

The sprinkler is offered in two temperature options: a 155°F (68°C) sprinkler with a 139°F (59°C) cover plate, and a 200°F (68°C) sprinkler with a 165°F (59°C) cover plate.

For additional information on the Tyco® RFII-MRI 5.6 K-factor Non-Magnetic Concealed Pendant Sprinkler, including technical data sheet and installation guidelines, visit www.tyco-fire.com/MRI.

■ Simplex ES Net IP-Based Life Safety Network Adds Speed, Resilience to Fire Detection and Life Safety Systems

The Johnson Controls new Simplex life safety network greatly increases the speed and ease at which fire detection and life safety systems communicate and operate. The Simplex ES Net Life Safety Network harnesses the power of IP technology with data rates up to 100MB per second and a range of network connection choices including Ethernet, DSL and fiber.

By allowing up to 82,000 feet (25 Km) between nodes, ES Net gives users more options to meet performance and budget requirements. The network’s increased memory capacity and broad bandwidth helps maximize uptime, deliver consistent performance and support future expansion and enhancements.

This new technology gives Johnson Controls the ability to support the industry’s largest networks – up to 687 nodes – while also supporting multiple network topologies (ring, star, bus and mesh). This provides end-users with a great deal of flexibility for design, installation, performance and fault tolerance.

With the system’s TrueSite Workstation Mobile Client, network monitoring and management can easily be completed on a mobile device or single console. Advanced diagnostic tools ensure fast installations, easy commissioning and quick, efficient pinpointing of network performance and connection issues.

For more information on Johnson Controls fire and life safety systems, go to <http://www.johnsoncontrols.com/buildings/security-and-fire-safety>.

■ New TYCO® DV-5A RED-E Cabinet from Johnson Controls

The new TYCO® DV-5A RED-E Cabinet by Johnson Controls is a pre-assembled, pre-wired and pretested fire protection package. Enclosed within a free-standing, 14-gauge steel cabinet designed to occupy minimal floor space, the cabinet provides an aesthetically pleasing enclosure for the fire protection valve riser. It includes the TYCO DV-5A valve and is available in both deluge and preaction package options.

The valve package includes the manual system shut-off control valve, automatic water control valve and water-flow/supervisory switches. The system is also available with an optional built-in air compressor, optional control panel and back-up batteries for providing electrical alarm, supervisory and trouble functions.

Both the deluge and preaction packages are designed to readily incorporate 1 and 1/2-inch to 8-inch valve risers. The cabinet package is UL and C-UL Listed, and FM and OSHPD approved for both the deluge and preaction actuations (wet pilot, dry pilot, electric actuation deluge systems, single interlock wet pilot, dry pilot, electric actuation, double interlock electric/pneumatic and electric/electric).



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Other key features include:

- Optional seismic kit
- Externally visible gauges and panel displays
- Working pressure range of 20 to 300 psi
- Two-door cabinet design for ease of maintenance

To learn more about the RED-E Cabinet, visit www.tyco-fire.com/cabinets.

■ Core & Main Completes Acquisition of Long Island Pipe

Core & Main LP announced that it has closed on its previously announced agreement to acquire substantially all of the assets of Long Island Pipe Supply, Inc., one of the leading providers of fire protection products and fabrication services in the U.S. The acquisition, Core & Main's seventh since becoming an independent company in August 2017, adds more than 20 fire protection locations to Core & Main's footprint. Visit www.coreandmain.com or www.coreandmainfire.com to learn more.

■ New Revit® Families Provide Enhanced BIM Design Capabilities for Fire Sprinkler Systems

The Viking Corporation announced the release of a new Revit family library for its complete line of fire sprinklers. The new Revit families provide Revit users with an enhanced BIM design process for Viking sprinklers.

When a new family is loaded into a BIM project, the designer can choose a specific Viking sprinkler(s) based on various attributes including sprinkler type, orientation, temperature, and finish. This allows for a more precise representation in the BIM project and avoids over-burdening the project file with unnecessary data.

Each new Revit family is provided in a zip file, which includes both the Revit file (.rfa) and a corresponding text file, which contains the specific sprinkler types, models and attributes. When extracted from the zip file, the text file will download automatically and is then referenced behind the scenes to allow for the customization of the selected sprinklers in the BIM project. Additionally, based on extensive feedback from the Revit user community, Viking has optimized the visual representation of the new Revit families to provide an accurate 3D view of the sprinkler, while also removing unneeded visual detail, thus allowing for faster rendering and load times.

The new Revit families also allow for customization of various instance parameters within the BIM project, including the sprinkler's thread engagement with fittings, inclusion of an escutcheon, and deflector positioning. Also, when working in the Revit plan

view, the new Viking families reference the appropriate sprinkler symbols, following the NFPA 170 Standard.

For more information on Viking's complete line of fire protection products and services, please visit www.vikinggroupinc.com or call 800-968-9501.

■ Hydraulic Characteristics of Three 3" NPS Pipes—Assigning a preliminary C-Factor value for HydroLogic Sprinkler Pipe

In previous white papers, Bull Moose Tube Company's newest product innovation – HydroLogic sprinkler pipe featuring Arcanum Alloys' Optiform® steel – was introduced, and its unique properties and practical implications were explored.

HydroLogic tube uses Optiform steel sheet, which is created by decoupling surface properties from the core properties in metals during the production process and introducing a metallurgically bonded diffusion alloy on the surface of the tube that can't be removed or damaged. The result is a new alloy that offers higher performance and improved economics versus traditional alloys.

HydroLogic's corrosion-resistance performance versus carbon steel and galvanized steel was measured in a series of accelerated-corrosion tests. Because its surface composition is essentially ferritic stainless, HydroLogic's performance compared favorably against traditional carbon-steel and galvanized-steel pipe.

But the true test in determining flow performance in sprinkler pipe is measured by its C-Factor, which refers to how much energy water gives up as it flows through the pipe and is determined by flow, pipe diameter and friction experienced within the pipe, among other influences. A higher C-Factor indicates a smoother pipe surface and a greater carrying capacity resulting from lower friction or energy losses as water flows through the pipe.

In this most recent study (Hydraulic Characteristics of Three 3" NPS Pipes), Prof. Cesar Mendoza, Ph.D. and Wesam Mohammed-Ali (Ph.D. candidate) from the Department of Civil, Architectural and Environmental Engineering at the Missouri University of Science and Technology tested two samples of HydroLogic sprinkler pipe (Prime ID, Prime OD)³ and one "control" sample of standard black steel sprinkler pipe. All three samples went through identical processes required to find the C-Factor value of any sprinkler pipe⁴.

That said, both samples of HydroLogic sprinkler pipe yielded a higher C-Factor than the traditional black-steel pipe, verifying Bull Moose Tube's assertions of HydroLogic's superior performance.

To learn more about HydroLogic, its performance and its potential impact within the sprinkler-pipe/fire-protection industries, please contact Julie Childress, Marketing Manager at 636.812.9285 or Julie.Childress@BullMooseIndustries.com. •



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



New England Region

MICHAEL YOUNG
Regional Manager

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

Regional Manager’s Minute

#FireIsASerialKiller

Every day I see social media posts and news reports about fires across the country claiming the lives of men, women and children in their homes. Those same homes which are supposedly their ‘safe place’ to live. Each year two to three thousand lives are lost in fires; But where is the outcry? Why are these lives treated as less significant and not worthy of public uproar, when compared to lives lost in an airline crash, or natural disaster? The public screams for immediate investigations, hearings and solutions from both industry and the government if a plane crashes, a train derails or a bus overturns, But the Silence is deafening each day when a fire in a residential dwelling takes the life, or lives of the occupants. It’s as if an anonymous killer is out there, on a spree across the country and won’t stop until the public realizes the danger and commits to stopping it.

The Fire Sprinkler Industry, the Fire Service and Public Safety Organizations all recognize that “*Fire is a Serial Killer*” and the means to stop it exists, if only the public, legislative officials, builders and realtors, will accept that fire sprinkler protection in residential dwellings is the answer. “*Fire Sprinklers Buy Time... Time Buys Life*”

Legislative Activity in the New England Region

MASSACHUSETTS

Representative Ruth Balser has filed a “Local Option” Bill to allow cities and towns to require residential fire sprinklers in 1 & 2 Family Dwellings by amending MGL Ch.148 s26H. Currently the Massachusetts State Building Code does not follow the ICC IRC “Model Code” requirement for fire sprinkler protection in new single-family homes.

RHODE ISLAND

The proposed “Check the Box” bill to require builders to ‘offer’ information on residential fire sprinklers in new homes to buyers was not successful during the 2019 legislative session.

NEW HAMPSHIRE

A bill submitted to remove the requirement for fire sprinkler protection in day care facilities, as long as there are two means of egress in the building, was amended to strike the fire sprinkler removal language, with the provision that a study and review

would occur with a report submitted back to the legislature for further consideration.

CONNECTICUT

Efforts are still ongoing to create “limited License” classifications F5/F6 to enable installation of Stand Alone fire sprinkler systems in 1 & 2 Family Dwellings by plumbers who qualify for certification in the new designation. The Regulation Review Committee voted to send the bill back for technical and formatting changes. The Financial Review Committee supported the bill as it created no financial hardship.

MAINE

Maine is hearing testimony on requirements for fire sprinklers in substance recovery facilities and their potential designation as single-family dwellings. Maine Legislators are carefully following the “Fitchburg Case” ruling just released in Massachusetts Superior Court.

Professional Fire Fighters of Massachusetts Convention in Springfield, MA



NFSA Displayed at the Professional Fire Fighters of Massachusetts Convention in Springfield, MA to highlight how fire sprinklers can increase firefighter safety and reduce occupational cancer health risks by reducing exposure to carcinogens.

Side by Side Fire Sprinkler Trailer Burn Demonstration:



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On May 29, 2019 NFA conducted a Side by Side Burn Demonstration in Middlefield, CT, hosted by Licia Ciotti of United Restoration and Cleaning. NFA staff, David LaFond and Michael Young presented a session on Residential Fire Sprinklers and Code and Standards Development. In addition there were presentations on 'After the Fire' and Navigating an Insurance Claim. The attendees also viewed a 'Live Burn' Demonstration in rooms with and without fire sprinkler protection. The Middlefield Fire Department was on hand to extinguish the fire in the Non-Sprinklered Room.



NFA Joins with NFPA in Quincy, MA to Recognize National Fire Sprinkler Day on May 22, 2019



NFA meets ASFA – Presidents Shane Ray and Debra McGuire at the National Fire Sprinkler Day event at NFPA Headquarters in Quincy, MA



NFA President Jim Pauley, Lorraine Carli, NFPA Vice-President Outreach & Advocacy and NFA President Shane Ray at National Fire Sprinkler Day event in Quincy, MA



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NFPA President Jim Pauley spoke about fire death statistics and the need for residential sprinklers in the codes.



NFPA Vice President of Outreach & Advocacy Lorraine Carli



Dr. Denis Onieal, Deputy U.S. Fire Administrator stressed the important role of fire sprinklers in residential dwellings.



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New York Region

DOMINICK KASMAUSKAS
Regional Manager

NEW YORK

Legislation

A7510/S5804 Contractor License— neither bill has legs yet as the fitter license bill has caused confusion among legislators. The two bills have different language on Inspectors and rest in two different departments; the contractor bill would be under the Dept. of State Licensing Bureau and the fitter bill would be under Dept. of Labor. This a red flag and may stop both bills without amendments.

A4403A Fitter License— this has passed the Senate and is waiting for the Assembly version (A7948, recently introduced) to catch up. NFSA Regional Manager Dominick Kasmauskas stated, “This year’s half of the legislative session is closed, but we will need to keep pressing the sponsors of both bills to correct some terrible language in both versions”.

A4439/S5488— Tax Credit for Installation of Residential Fire Sprinkler System. This bill would incentivize the installation of sprinkler system in residential properties by providing a 25% tax credit to residential property owners who install such systems.

Other New York bills that Kasmauskas follows and communicates with legislative staff include:

A5805/no senate— premium reduction for non-profit entities that have historical site

A66/no senate— retrofit of CUNY/SUNY properties

A4385/S5911— directs the boards of trustees of SUNY and CUNY to report on the extent of fire detection and suppression systems within residential facilities within the state and city university

A2241/no senate— relates to assistance for certain small businesses including dry cleaners and those that practice nail specialty for necessary code related improvements (including fire sprinkler systems).

NYC:

Intro1146A for residential retrofit in NYC still sits idle and does not appear to have support in the city council.

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Mid-Atlantic Region

DELAWARE, NEW JERSEY, PENNSYLVANIA,

NJFSAB Opposes A5534 and A5535

Members of the New Jersey Fire Sprinkler Advisory Board expressed their opposition to two bills in Trenton that would seek to take rights away from code officials and hurt the industry. Bill A5534- “Prohibits municipalities from imposing local fire safety standards stricter than the State fire safety code in certain circumstances, and A5535- “Requires promulgation of separate code criteria for certain buildings.” Both of these bills are moving quickly and the NJFSAB is working tirelessly with other professional organizations to act in the best interests of public safety.

New Jersey Chapter Golf Outing

The New Jersey Chapter’s annual golf outing was a huge success. Over 80 individuals attended the event that benefited the FMBA and the Phoenix Society for Burn Survivors. The Chapter would like to thank all those who attended and donated to these great causes.

A Special Thank You to Rick Coppola

The members of the NFSA PenJerDel Chapter honored Rick Coppola’s 22 years of service as President of the Chapter during a Chapter meeting. Rick’s dedication and tireless efforts helped to grow the Chapter throughout the years and had a huge impact on the City of Philadelphia and the fire sprinkler industry as a whole. President Shane Ray, Area II Director Dave Oliver, and NFSA Chairman of the Board Kent Mezaros all spoke and presented Rick with a commemorative letter and an accolade for his service.



Capital Region

TERIN HOPKINS
Field Service Coordinator

MARYLAND, VIRGINIA, WASHINGTON D.C.

The Capital Region Chapter continues to provide training with the “Developed for the Inspector Series” program. This was the first time CRFSA has done this program in Virginia and was pleased to be partnering with The Fairfax County Fire & Rescue Department-FASST lab. The program hosted over 70 attendees from Maryland and Virginia and featured high-rise presentations from Ken Isman

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– University of Maryland, Ray Grill – Arup, Kevin Hall – NFSA, and the Chapter’s very own past Chair, Terry Victor – JCI/Grinnell Fire Products. This program has become a staple for the region and is always extremely well attended. The next program is in Maryland on October 9th and will focus on inspection, testing and maintenance of fire protections systems. Check the Chapter website often for all training opportunities.



CRFSA also honored Terry Victor for his longtime leadership and dedication to the Chapter. National Fire Sprinkler Association President Shane Ray was on hand at the Chapter meeting to present Terry Victor with a plaque honoring him for his longtime leadership and dedicated service. Terry Victor is a founding member of the Chapter and his leadership has been unequivocal in its success. We thank him for his service and welcome his continued participation within the leadership of the CRFSA.



The Chapter meetings continue to be well attended with several new contractor members. This has allowed the Chapter to continue to work on the advancement of the fire sprinkler concept with several upcoming project like the retrofitting of the Maryland State Firemen’s Association headquarters in Annapolis Maryland, just steps from the Maryland State House.



The region continues to see challenges to residential fire sprinklers by several local municipalities refusing to abide by the statewide Maryland residential fire sprinkler requirements. The most recent challenge has been rejected but will most likely be an issue at the next general session in the State House. Members of the National Fire Sprinkler Association, the Maryland Fire Service and all partners throughout the state will stand strong to protect the citizens of Maryland when and if needed.

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Southeast Region



BRIAN BIGGS

Regional Manager

ALABAMA, GEORGIA, MISSISSIPPI,
NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE

Fire on 22nd Floor of Raleigh, North Carolina High Rise Extinguished by Fire Sprinklers

On June 26th, an overnight fire broke out in a 22-story-tall apartment in Raleigh, North Carolina in the early morning hours.

Around 12:30 a.m., firefighters responded to the Sky House located at the intersection of E. Martin Street and South Blount Street. Officials credited the building’s fire sprinkler system with extinguishing the fire. Only one person, who occupied the unit of origin, was displaced. No injuries were reported.

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This is yet another great example of the difference fire sprinklers make in residential occupancies. From homes to high-rises, fire sprinklers save lives and property!

20 Units of Homewood, Alabama Apartment Complex Destroyed by Fire

In stark contrast to the story above, 20 units of a Homewood, Alabama apartment complex were destroyed by fire on June 20th.

Firefighters on scene made it a point to tell reporters that the complex did not have a fire sprinkler system. 20 families are now without places to live and have lost most, if not all, of their belongings.

The comparison between this and the preceding story is one that can be made on almost a daily basis. Set up a Google alert for “fire sprinklers”. It won’t take long until a tale of two types of fires and the differences in the outcomes arrives in your inbox!

Brian Biggs
 NFSA’S Regional Manager / Southeast
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The group met and talked about what they hope to contribute. They created a vision for the committee and began work on a mission statement. One of the topics discussed was future leadership opportunities and what training is needed. They were excited to go forward and set realistic goals for the future.

The group plans to have four meetings per year, two by conference call and two in person. The next in-person meeting will be walking the halls in Tallahassee in January of 2020. Our thanks to the sponsors of this meeting, Ferguson, Victaulic and Reliable, and to the companies investing in their team by allowing them to get involved.

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Florida & Puerto Rico



Florida & Puerto Rico

LORRELL BUSH
 Regional Manager

FLORIDA, PUERTO RICO

Great Lakes Region



Great Lakes Region

RON RITCHEY
 Field Service Coordinator

INDIANA, MICHIGAN, OHIO, WEST VIRGINIA,
 KENTUCKY

Golf

The Indiana Chapter of NFSA hosted their 2nd Annual Golf Outing on Thursday, August 22, 2019 at the Country Club of Indianapolis. A portion of the proceeds for this event were donated to the Hoosier Burn Camp that provides life-changing experiences for young people who have suffered the physical and emotional trauma associated with a severe burn injury at many events throughout the year, including a week long summer camp at Camp Tecumseh

The Michigan Chapter of NFSA will be holding their Inaugural Golf Outing in celebration of our new Chapter formation on Wednesday, September 11, 2019 at Devil’s Ridge Golf Club located in Oxford Michigan. Registration details can be found at <https://birdeasepro.com/event/register/11943/>

If you have any questions, please contact me and we hope to see you there!

Ron Ritchey
 Regional Mgr. Great Lakes Region
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FFSA Future Leaders

The FFSA Future Leaders of Florida met in Clearwater Beach on July 9th for a planning session regarding what they can do for our industry. Ryan Peterson, Wayne Automatic, chairs this very important committee and has grown it from what was originally five dedicated few, to now 25 folks from companies across the state of Florida.



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Illinois Region

BOB TINUCCI
State Coordinator

ILLINOIS

During the May Illinois Chapter meeting, NFSA Director of Regional Operations Gary West was the featured speaker. Gary provided an update on NFSA programs and initiatives.



Alan Jacobs/Shambaugh & Sons, Bob Tinucci/NFSA, Gary West/NFSA, Ed Kadlec/C.L. Doucette, Tom Lia/NIFSAB, Erik Hoffer/NIFSAB



NFSA Illinois Chapter was an event sponsor for this year's Illinois Fire Service Legislative Day held in Springfield, Illinois.

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Missouri Region



PAUL RICHARD
Area Coordinator

MISSOURI

Fire at Hospital Center Controlled by Fire Sprinkler System

Shortly before 10:00 am on Sunday morning of Memorial Day Weekend, firefighters from three north county districts responded to a fire at the DePaul Hospital's South Medical Building in Bridgeton. Deputy Chief Laurie Taylor of the Pattonville Fire Protection District said that the fire was controlled by two sprinklers that had activated due to the heat of the fire. Firefighters worked to extinguish the remaining fire, evacuated people from the building, disconnected power and removed the toxic smoke. The fire is believed to be accidental, Taylor said. The sprinkler system inside the building activated and worked as intended to hold the fire in check until firefighters arrived, she added. "No one was injured and the building appears to have sustained only minor damage," Taylor said. "We're grateful the sprinkler system did its job."



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North Central Region

TIM BUTLER
Regional Manager

IOWA, MINNESOTA & WISCONSIN

NFSA's Positive Impact

A number of recent events held in Minnesota highlight the broad scope of work and the exceptional talents of NFSA leadership and members. I am continually amazed by the complexity of our Association and the influence our members have on the safety of lives and property in the region. These events included:

- An NFSA Design Advantage Seminar in Minneapolis on May 23rd for 20 AIA architects and designers, contractor representatives, and SAM members. Jeff Hugo, Director of Codes and Public Fire Protection, presented the seminar. The class ended with a side-by-side burn demonstration for attendees and local media.
- Sprinkler Fitters Local 417 apprentice graduation ceremonies were held on June 4th. 14 Fitters graduated from the five-year program at a ceremony attended by families, the JATC members, NFSA staff, the President of the Minnesota Pipe Trades, and the Minnesota Department of Labor.
- The 4th District UA Apprentice Contest was held in Saint Paul the week of June 10th. Five contestants from four states participated in the Sprinkler Fitter division of the contest. Dennis Komassa, representing Local 183 (Milwaukee), won the Sprinkler Fitter contest and will compete in the national competition in Ann Arbor, Michigan in August.
- The NFSA national Board of Directors held their quarterly meeting in Minneapolis on June 24-26.
- The Minnesota Chapter hosted the Fire Team NFSA seminar in Minneapolis on June 27th. 25 participants from the Minnesota and Iowa fire services and NFSA member companies attended. A team of national presenters included: NFSA President, Shane Ray; Vickie Pritchett, Director of Outreach and Government Relations; Jeff Hugo, Director of Code and Public Fire Protection; and Terin Hopkins, Field Services Coordinator for the Mid-Atlantic Region. The seminar was topped off by a side-by-side burn demonstration presented by NFSA President, Shane Ray.

Fire Sprinklers Protect Minnesota Wildlife

On June 18, I visited with George Carlson, a Wildfire Protection Engineer and former Fire Chief of the Gunflint Trail Volunteer Fire Department in Minnesota. The visit provided a very interesting and educational exploration of wildfire protection sprinkler systems used in a number of remote wilderness areas. The visit provided a historical perspective of one of Minnesota's largest wildfires – the 2007 Ham Lake fire – and a technical review of the external fire sprinkler systems that helped preserve millions of dollars' worth of homes and recreational facilities during that significant wildfire event. Chief Carlson is a pioneer in wildfire protection systems, and owner of Wildfire Protection Services.

It has been a very busy and rewarding season, and I cannot wait to see what the rest of summer brings!

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North Central Region

MARTY KING
State Coordinator Wisconsin

Wisconsin Sprinkler Saves

July 1, 2019 - Jackson, WI

Jackson FD received a waterflow alarm at 1:00 a.m. at a manufacturing facility. The origin of the fire was an electrical panel on an inside wall. A single sprinkler extinguished the fire and kept it in check. Damage was limited and no injuries reported.

July 10, 2019 - Onalaska, WI

A fire broke out inside a shredder hopper about 8:30 a.m. at a processing facility. The building was evacuated. The company's sprinkler system subdued the fire, and firefighters were able to contain it to the shredder hopper. There was no structural damage to the building.

July 13, 2019 - Brookfield, WI

The Brookfield Fire Department responded to a fire at a 120-unit, three-story apartment building. This was a dumpster fire in the building's east underground parking garage that was confined to its point of origin in a trash collection room. The fire was held in check by the activation of one sprinkler positioned over the dumpster. There was a moderate smoke condition through the

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parking garage, which was eventually ventilated post extinguishment, however the structure itself sustained no smoke, heat or water damage. This was an absolute textbook example of the effectiveness of automatic sprinkler systems in protecting occupants in a large, multi-family dwelling.

July 15, 2019 Oak Creek, WI

On July 15th, at 10:45 a.m., the Oak Creek Fire Department, assisted by the South Milwaukee and Franklin Fire Departments, responded to the report of a truck fire inside a maintenance garage at KEI Landscaping. Upon arrival, crews found moderate smoke conditions at the rear of the two-story garage. Oak Creek crews made entry and found that the sprinkler system had activated and was controlling the truck fire from spreading to other parts of the garage. Crews extinguished the small fire in the cab area of the vehicle and cleared the structure of smoke. "Damage was limited to the vehicle, approximately \$1 million in property was potentially saved by the activation of this sprinkler system" according to Assistant Chief Kressuk.

July 18, 2019 Madison, WI

Engine Company 14 and other fire companies were dispatched to a condominium complex just after midnight. One resident met firefighters and advised that an electric bike was on fire in the garage. The remainder of the building was evacuated as firefighters proceeded to the basement. They found the sprinkler system had the fire under control, and only a small amount of smoke had entered the living space within the complex. Crews extinguished the remaining fire and stopped the automatic sprinkler system. Investigation determined the homeowner had left the e-bike on a charger for the night, the battery on the bike started on fire, which activated the sprinkler system. Fire damage was isolated to the bike, with slight damage to a workbench nearby. The owner advised that the electric portion of the e-bike was an aftermarket kit they had purchased on eBay.

July 29, 2019 Madison, WI

Fire was reported to have started when a charcoal grill caught a third-floor apartment's balcony on fire. Before fire crews arrived, the apartment's fire sprinkler system activated on the balcony. A resident of the apartment told firefighters he was grilling bacon on the balcony. It was found that heat from the flare up caused the activation of the sprinkler system. No smoke or fire damage was found to the interior of the apartment. City of Madison fire code prohibits the use of natural gas or charcoal grills on decks or balconies or within ten feet of combustible construction unless the balcony or deck is protected by automatic sprinklers. The automatic sprinkler system limited damage to the grill, and the residents of the complex were able to stay in their apartments.

Contact Marty King with your Wisconsin saves! 414.531.9542, e-mail: king@nfsa.org

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Phone: 414.531.9542



North Central Region

TOM BRACE
Minnesota State Coordinator

Lack of Fire Sprinklers Cited in Fire at St. Elizabeth Ann Seton School in St. Cloud

On July 4th, a fire was started in the St. Elizabeth Ann Seton School by a pinched wire in a fluorescent light fixture that had just been updated with LED bulbs. A passerby noticed the fire just before 6 a.m. and called 911. The building sustained smoke damage throughout. The fire also damaged a vestibule area and an adjoining hallway.

The investigation took over 100 hours and involved several different agencies including the State Fire Marshal's Office, the Bureau of Alcohol, Tobacco and Firearms, St. Cloud Police and Fire Departments.

The building did not have a sprinkler system. Damage estimates range from \$1.1 to \$1.5 million dollars, making it the largest fire loss to date in the City of St. Cloud this year.

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Kansas Region

GARY L. WEST
Director of Field Operations

KANSAS

Fire Severely Damaged Unsprinklered Church in Kansas City

In the early morning hours of July 7th fire erupted at a Kansas City, Kansas Church. The Bureau of Alcohol, Tobacco, Firearms and

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Explosives said a preliminary investigation showed the fire was an accident started by an electrical issue in the sanctuary.

According to the local fire department, a passerby saw flames coming from the basement of the church just before 2 a.m.

Firefighters said that when they arrived on scene, the church had heavy flames venting from the roof of the structure. At one point, there was a partial collapse of the roof and crews went into defensive mode. Additional crews were called to assist.

Two firefighters suffered injuries and were transported to local hospitals.

Gary L. West,
 NFSA Director of Field Operations
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 Cell: 443.202.3621



Jon Lopez, Area Manager for Ferguson Fire & Fabrication accepts Dallas Branch 25-year anniversary award.



Mike Salinas, Branch Manager of Ferguson Fire & Fabrication San Antonio accepts the San Antonio Branch Award.



South Central Region

CYNTHIA GIEDRAITIS
 Regional Manager

ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS

NFSA Texas Members Dominate & Shine Nationally! Ferguson Fire & Fabrication—NFSA 25-Year Anniversary Member

Thank you to Ferguson Fire & Fabrication for choosing Texas as your national headquarters! Ferguson Fire & Fabrication has 74 (and growing) branch locations with its headquarters located in Mansfield, Texas; a suburb of Dallas/Fort Worth.



President George DiMatteo of Ferguson Fire & Fabrication proudly shares Tulsa Oklahoma's 25-year branch award with Eric Gill, Business Development Manager.

Moments That Matter in the South-Central Region

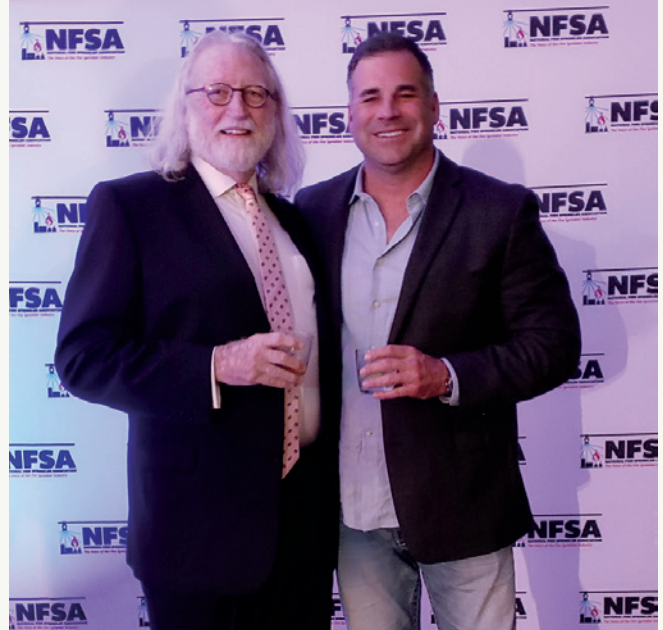


American Fire Protection Group Donald Isham, Dallas Texas and Luther Pringle, Monroe Louisiana, both of American Fire Protection Group competed in the NFSA Top Tech Contest 2019!

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Texas Fire Sprinkler Chair Roland Garcia who serves as the Assistant Fire Chief of Pearland Texas produced a Home Fire Sprinkler Video that features Houston Based – 1st Texas Fire Protection and a recent Home Fire Sprinkler Trade Up Project in Pearland, Texas.



Buck Buchanan of Globe Fire Sprinkler - Golden Sprinkler Award Winner is congratulated by Tate Hitzeman, North Texas Chapter Vice Chair and Texas Regional Manager of Potter Electric.

Significant South-Central Member Anniversaries

Northstar Fire Protection:

30-year Member Anniversary Award

Williams Automatic Sprinkler Company:

30-year Member Anniversary Award

Ferguson Fire & Fabrication:

25-year Member Anniversary Award

Chero-key Piping:

20-year member Anniversary Award

Metro Fire Protection:

20-year member Anniversary Award

Buckeye Fire Protection:

15-year member Anniversary Award

Core & Main:

15-year member Anniversary Award

Custom Fire Protection of Texas:

15-year member Anniversary Award

American Fire Systems:

10-year member Anniversary Award

Automatic Sprinkler of Texas:

10-year member Anniversary Award

Hilti, Inc.:

10-year member Anniversary Award

Vanguard Fire & Security:

5-year member Anniversary Award

Advanced Fire Protection:

5-year member Anniversary Award



John Kauffman, NFSA Area Director for NFSA South Central, attended the Texas Fire Service Legislative Day at the Capitol and met with his State Representative Dwayne Bohac during a quick break from the legislative floor.



Mike Osso of NVent Caddy accepts 10-year Anniversary Award from NFSA President Shane Ray, Ferguson Fire & Fabrication Membership Chair Bob Knose and NFSA Chair Kent Mezaros.

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NFSA's Regional Manager / South Central
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PO Box 10403, College Station, Texas 77842.
Phone: 979.324.8934

Building Owners and Managers Association Conference

NFSA was represented by staff members Terin Hopkins, Vince Powers and Rob Geislinger at the Annual BOMA Conference, held at the Salt Palace Convention Center in Salt Lake City, Utah from June 22nd through 25th. Over 100 vendors participated in the event. While attendance at the Expo was lighter than anticipated, NFSA made a number of positive contacts.

Training

Colorado Springs hosted a successful five-day training seminar which ran from Jun 17th-21st. Courses offered included: Understanding, Applying and Enforcing NFPA 25; Rough and Final Inspections; Fire Pumps; Hydraulics; and Advanced Hydraulics. Ninety-six certificates were issued over the course of the week, with many positive comments coming from the attendees.

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Great Plains Region

ROBERT GEISLINGER
Field Service Coordinator

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

Colorado Fire Protection Association Expo

NFSA was proud to be an active sponsor for the annual CFPA Expo, held May 9th in Denver where your Regional Field Service Coordinator offered a session entitled Hot Topics in Fire Suppression. The course covered changes in in State rules as well as discussion on significant changes in the new editions of the Standards.

Wyoming Association of Fire Marshals Conference

NFSA was also an active sponsor the Annual WAFM Conference, which ran from May 29th through June 1st and boasted over 50 attendees. The conference was held at the Ramkota Events Center in beautiful Casper, Wyoming. Field Service Coordinator Rob Geislinger presented on strategies for adopting residential sprinklers, followed by a panel discussion. The highlight of the conference was provided by Director of Field Operations, Gary West, who provided the keynote address at the final banquet. NFSA looks forward to assisting WAFM as it continues to grow into a strong voice within the Wyoming fire service.



Southwest Region

BRUCE LECAIR
Regional Manager

CALIFORNIA, HAWAII, NEW MEXICO,
NEVADA, ARIZONA

NFSA Training in the Southwest!!

NFSA Instructor Chase Browning and Regional Manager Bruce Lecair teamed up to teach an Understanding and Enforcing NFPA 25, California edition and the Understanding and Enforcing NFPA 13D in Concord, CA. on May 8th and 9th. It was a fun two days of training that gave students instruction and important thoughts on the importance on the intent and scope of the standards as well as staying within the standard for plan review and enforcement purposes.

Brea, California was the site of a two-day seminar on June 25th and 26th at the Brea Civic Center for a 2-day Protection of Storage Occupancies class taught by Chase Browning. This free class was sponsored by the Southern California Fire Sprinkler Advisory Board and hosted by Executive Director Robert Rowe. This seminar covered all aspects of storage protection in NFPA 13 and was well attended by students throughout Southern California.

The 2-day Plan Review class in Las Vegas has been moved to July 24-25 and is on the NFSA website for easy registration.

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“WE MAY NOT BE AS FAST AS WE ONCE WERE, BUT FIRE IS FASTER THAN EVER.”



According to the U.S. Fire Administration, people over the age of 65 face the greatest risk of dying in a fire – more than 2 ½ times that of the general population. Ages 85 and over were 3.6 times more likely to die in a fire than the general population.

Certain modern construction methods and synthetic home furnishings have **reduced the time a family has to escape a home fire to about three minutes.**

FIRE IS FAST, FIRE SPRINKLERS ARE FASTER!

For more information,
visit www.nfsa.org
#fastestwater



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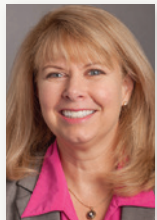
Your Association has some great ads you can use in your printed materials or at trade shows and events. Contact NFSA Marketing Manager Joanne Genadio at genadio@nfsa.org for more information.



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The NFSA training site is open and we are accepting students for the 2-week Layout Technician Class to be held from July 22 – August 2 in the Sacramento area. Registration for this class has been great and we are definitely on track for a great 2-weeks of training in Sacramento.

Bruce Lecair
NFSA's Associate Director of
Regional Operations / West
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25417 West Hyacinth Street, Corona, CA 92883
Phone: 951.277.3517, Fax: 951.277.3199



Northwest Region

SUZANNE MAYR
Regional Manager

ALASKA, IDAHO, MONTANA, OREGON,
WASHINGTON

Two Great NFSA Classes in the Northwest!

Thanks to Tualatin Valley Fire and Rescue and to the Central Oregon ICC Chapter for hosting NFSA Seminars this month.

NFSA instructor Ray Vance taught the 2-day Plan Review for Fire Sprinkler Systems followed by a 1-day Rough and Final Inspection seminar for members of the Bend, Oregon ICC Chapter. Thank you to Lisa Weishoff for organizing all of details!

NFSA Instructor Chase Browning taught the Fire Service Mains seminar for Tualatin Valley Fire & Rescue staff and neighboring jurisdictions. Thank you to Kate Stoller for setting up the class and making sure it was a success!

If you or your organization is interested in contracting with NFSA to bring a fire sprinkler seminar to your area, please contact Suzanne Mayr, Northwest Regional Manager at mayr@nfsa.org.

Suzanne Mayr
NFSA's Regional Manager / Northwest
email: mayr@nfsa.org
P.O. Box 7328, Tacoma, WA 98417
phone: 253.208.8467



TO DOMINICK KASMAUSKAS

Dear Dominick:

Thank you so much for your most generous support of the SFPE NJ NY Metro Chapters Education Foundation through your sponsorship of our Golf Outing event on June 3, 2019. Your 13th Hole sponsorship and the amount of \$250 will help keep our educational programs alive, active and relevant to the field of Fire Protection Engineering.

The SFPE NJ NY Metro Chapters Education Foundation operates as a scholarship organization, which provides assistance to persons interested in the pursuit of careers in Fire Protection Engineering, Life Safety and associated trades. In addition, the organization promotes education of individuals in these fields of study and employment through continuing education programs and other events intended to promote the interests of the SFPE in the New York Metro and New Jersey areas. Proceeds from this event support this objective

Thank you again for supporting our program and the fire protection engineering community. Your generosity of spirit is greatly appreciated.

Sincerely,
Rich Reitberg
President
SFPE NJ NY Metro Chapters Education Foundation

SPRINKLER HUMOR





National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

NFSM Article Submission Guidelines

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

Query

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

NFSM runs full-length feature articles of approximately 800-1200 words.

Feature Articles

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

Writing Guidelines

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

Each manuscript should be accompanied by a list of resources on the topic at hand: relevant books and reports, conferences, and/or contact people and their phone numbers. To settle points of style, use *The Chicago Manual of Style* (University of Chicago Press).

Illustrations

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

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

Copyrights

Articles must be exclusive to *NFSM* magazine and not submitted to any other industry publication, unless prior agreement has been reached. Author is responsible for the accuracy of article and that it does not infringe on any other copyright. All published submissions become the property of NFSA.

Payment

NFSM does not pay for articles; we do recognize an author with a byline and credit. NFSA reserves the right to reject any submission at its own discretion.

NFSM EDITOR:

Joanne Genadio

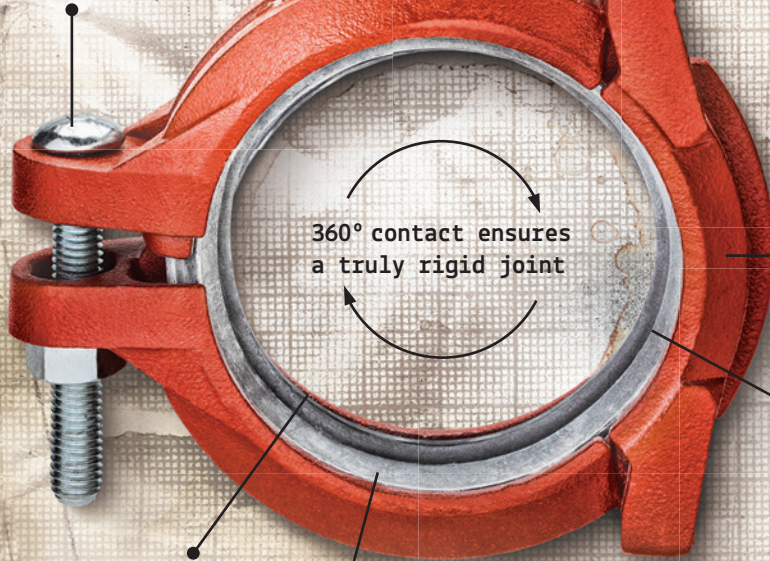
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G-Fire One-Bolt Coupling / Figure 579

Single-bolt design means no alternate tightening required



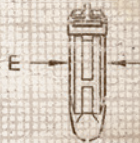
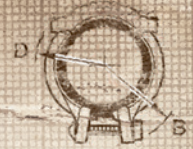
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