National Fire Sprinkler Magazine

March-April 2021 No. 225

The Flagship Publication of The National Fire Sprinkler Association







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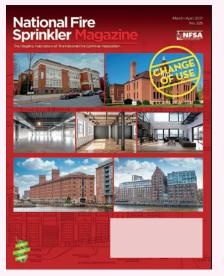
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Fire is fast. Fire sprinklers are faster.

From the President's Desk

Shane Ray

Change and the Way Things Are

t didn't take a worldwide pandemic for NFSA to reorganize, relocate, and rebuild. After 110 years as an association representing the fire sprinkler industry, it was recognized that NFSA should reorganize, relocate, and rebuild. As we just turned 115 years old, we have accomplished that goal. We have done whatever it takes to ensure that we commit daily to the mission of NFSA and to serving our members through the best of times, as well as some of the worst of times.

As many industries and professions have proclaimed, including the fire sprinkler industry itself, "two things the fire sprinkler industry hates are change and the way things are." As the new NFSA Leadership Institute (which is in full swing by the way) will attest, NFSA and the fire sprinkler industry aren't just in favor of change, we drive change. As long as property is being destroyed and lives lost, injured or endangered, we will continue to push for the fire sprinkler concept.



Like us, many businesses, organizations, and families are realizing that the current economic, political, and worldwide pandemic climate is a time to move. This impacts our industry in many

ways, but as with everything in life, we can choose to be positive and take advantage of the current reality or we can be victims and let it pass us by. We will defend and promote this industry every day, regardless of the situation.

We are actively engaged in assisting our members as buildings across this country are getting repurposed and reused. From the EOD questions that come in as a traditional mall is being converted into a distribution center, or as office buildings are converted to residential units, to states introducing legislation that prohibits fire sprinklers from being installed, as restaurants are remodeled and occupancy loads are changed, to exempting homes from being protected with fire sprinklers as they are also used as businesses, the NFSA is on the front lines ensuring more occupancies and people are protected with fire sprinklers.

We are in the middle of this sort of situation in New York, as we sell our former national headquarters. Fire sprinklers are a benefit to the sale of that building. We have had interest from charter schools, medical facilities, law offices, and now a woodworking business. All have been interested in the fact that the building could comply with the local and state code because it is protected with fire sprinklers. We haven't had any potential buyer turn away from their desire to repurpose or reuse the building. NFSA works with local, state, and federal officials to understand the true value of having fire sprinklers and I hope you enjoy seeing our successes every week as we save lives, property, the environment, the local and state tax base, as well as minimize the risk to firefighters who respond.

By the time this column appears in the magazine I hope the fire sprinkler industry is enjoying a good first quarter. 2020 wasn't as bad as we prepared for with our Recession Plan, however, according to many of our association partners in the D.C. Metro area, construction will be the most impacted this year as a result of the pandemic and election. The Associated General Contractors recently predicted over 50% of the metro cities in the country will see construction fall because of projects stalled or placed on hold.

Please know that NFSA is fighting hard at the local, state and federal level to ensure that the latest code and standards are adopted and that high-risk occupancies are retrofitted with fire sprinklers. We are diligently pursing state and federal funding for the retrofit of high-rise occupancies, with funding coming from US Housing and Urban Development (HUD). Our team in DC is hard at work on the Transportation, Housing and Urban Development Senate Subcommittee to ensure that funds are appropriated for local and state housing authorities to retrofit HUD housing across the country. Our team in Minnesota is working at the state level and we are working with Senators Tina Smith and Amy Klobuchar, who introduced the Public Housing Fire Safety Act during the last Congress and will again. NFSA is seeking House sponsors as one of our previous sponsors retired and one lost re-election. Welcome to the ever-changing world of politics.

We aren't deterred by an election or a worldwide pandemic. NFSA has worked for over 115 years to promote the fire sprinkler concept and support our members in the fire sprinkler industry. We have, and always will, seek bi-partisan support for our cause. The devastation of fire isn't concerned with politics, but it will take advantage of your vulnerabilities.

As our Chair of the Board always says, please reach out to us and let us know what you need or how things are going. Please stay safe, stay well, and remain vigilant during these times.

Shane Ray, President



Reliable Automatic Sprinkler Co., Inc. Manufacturer & Distributor of Fire Prote

January 23, 2021

One hundred and one years ago, our grandfather and great-grandfather incorporated the Reliable Automatic Sprinkler Co., Inc. Now, as we conclude our Centennial year, we renew our legacy of service and commitment to the fire sprinkler community.

15 - Sam

When we began this Centennial celebration last January, little did we know of the trials that faced us in the coming year. Much as Frank J. Fee's young company was born in the aftermath of a deadly global pandemic, one hundred years later we found ourselves negotiating another pandemic with COVID-19.

Again, we must thank our family of employees, trusted customers, professional service partners, associations, suppliers, fellow manufacturers, and all the men and women who have dedicated their lives to the protection of life and property.

Together, we demonstrated the resilience of our industry in the face of most dire circumstances. We look forward to the future and brighter days to come.

Sincerely,

Sevin T. Fee

Kevin T. Fee President

John 7. Feefor

Kevin T. Fee, Jr. VP, Americas Sales



Frank Fee

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full tee

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From the Chairman's Desk

Kent Mezaros

Preserving and Protecting While Repurposing

aving damn near exhausted myself recently on communicating with you all regarding some sort of COVID related issue that has affected our industry, I thought it would be nice to get back to just discussing fire sprinklers. That's right, we are going to spend a few minutes just talking shop.

The theme for the current Issue of National Fire Sprinkler Magazine is Reusing and Repurposing Buildings, so staying on brand, let's take a dive into what happens when a set of bid documents shows up on your desk for a new project. However, in this instance you open them up only to find that what you are looking at isn't new construction *(new in the sense that it is be constructed from the ground up)*, but you are looking at a major renovation of an existing building to repurpose the building into something completely different.

Probably like many of you, my first inclination is to say Ugh and then contemplate actually even bidding the project altogether or figuring out whom in the office you should pass the enviable task of working up pricing for this one. Realistically though, either you, or another very experienced estimator in the office, is who



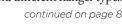
should be putting the pencil to the paper. There are lots of unforeseen hidden costs in these types of projects and therefore someone who has experienced the pain of not figuring in these unforeseen hidden costs for a past project is typically the best person to figure them in, in the future.

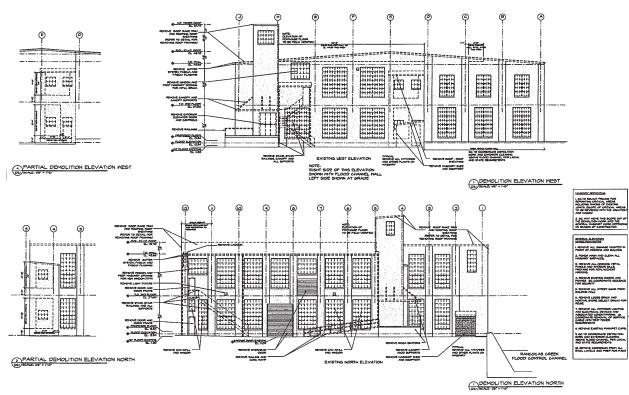
My company (shameless plug for Quick Response Fire Protection located in Freehold, NJ) performs a lot of residential fire sprinkler system installs, mostly of the multi-family and large rental variety. Most of our customers are developers that we have had long-term relationships with, so if they are repurposing a building, so are we — it's as simple as that. I've included some pictures of a recent project we completed in 2020 named Turbine Lofts Apartments in Mount Holly, NJ. This particular project was

the repurposing of a 1960's era industrial building that would now be used for rental apartments.

You can reach me at: kmezaros@qrfpss.com kent@quickresponsefireprotection.com

In this case, and as the case with most of these type of repurposed building projects, the structural elements of the existing building are different from the type of structural elements one would be using for a residential project today. Therefore, the hanging of piping was not typical with new construction and different hanger types





From the Chairman's Desk

Kent Mezaros







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and methods were used *(and are more labor intensive)*. The floor ceiling assembly and heights between floors was much greater than that of a typical new residential building. We also had to take into account that some of the ceilings were being installed directly to the underside of the roof assembly, and hence that the only way we could run portions of our piping was to run it exposed (or in soffits which our developer decided against), as there was no other space we could occupy to provide proper coverage. Heck, our developer was shocked when I told them I wouldn't be running all CPVC piping and fittings as we normally do for their properties. Often these projects have an industrial look to them for exactly these reasons. Our particular project only mixed in certain industrial elements, typically due to specific needs, and therefore you can see portions of our piping run as it would have been back in the day if this type of building was sprinklered in its previous life.

Our project required a new fire water service, as the existing incoming service was not sized adequately for fire. While one would normally assume you would have adequate water going from an industrial building type to a residential building type, you shouldn't forget that many of these buildings are old enough that they never had fire sprinklers in them at all! New fire services can be expensive to get into old buildings. Many of these buildings may be located in downtown or otherwise developed areas which present their own specific issues in getting water to the building. Make sure you spend some time exploring this prior to wrapping up your proposal (the phrase "staring inside the building at an adequately sized outlet provided by others" often works wonders).

I must admit that even though these projects are a bit of a PIA to bid, design and install there is definitely a proud feeling of accomplishment once they are completed *(and often relief if you didn't lose your shirt on them)*. Much of what we otherwise complete has a cookie-cutter look to it so it I actually enjoyed the challenge of tackling this building repurpose, just don't send too many of them!

Stay safe and well & looking forward to seeing you all soon. Thank you to all NFSA members for your support and the opportunity to continue to serve. •

Respectfully yours,

Kent Mezaros, Chairman



Networking in The New Normal

by Chi Chi Okezie

The virtual networking scene is taking off in a mighty way. Due to the pandemic and our need to social distance, the networking climate has literally changed overnight. Our normal habits such as traveling and congregating at large events have been obsolete for about one year. Savvy networkers are pivoting and looking for avenues to efficiently connect online. Virtual networking involves various methods to ensure effective connections occur. Similar to in-person events, building relationships and showing credibility are still major priorities for success.

Listed below are tactics savvy networkers can take to leverage their online objectives in this new online environment.

The Foyer vs. The Waiting Room

In the past, people would gather in the foyer or the entrance for an in-person function. Since we have transitioned to digital events, the waiting room has become our new location. Consider logging into events at least ten minutes early. If applicable, introduce yourself and make conversations in the waiting room. Share your business or expertise, as well as the reason for joining the session. Let others know what you expect to learn and how you would like to further connect. Feel free to include your contact information and social handles for a more effective follow up.

The Old Q&A vs. The New Q&A

Previously, Q&A sessions were reserved for after a presentation or talk. Due to the nature of the digital platform, the presenter or moderator can take questions throughout the meeting. This gives individuals an opportunity to engage more actively and add value during the program. Sharing your thoughts, comments or posting questions can enhance the discussion and encourage participation from others.

Response Time vs. Instant Feedback

Organizers of events have been able to leverage technology to more effectively connect with their members / attendees. Instead of waiting a few hours or days to send out surveys, they can send out a survey link immediately after the virtual session. This time advantage allows them to collect an increased number of accurate responses. The data obtained becomes an excellent resource for future planning, engagement and customer satisfaction.

Use these tips to improve your networking agenda. Find ways of meaningfully connecting with others and leveraging technology to increase your efficiency. Although this is a new way of networking, the principles and values remain the same.•

Chi Chi Okezie is owner / producer of SIMPLEnetworking, LLC in Metro-Atlanta, GA. Visit http://www.snseminars.com to read excerpts of her books, sign up for her newsletter and follow her blog and social media.

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Hydraulic Calculations for Existing System Modifications

by Michael J. Joanis, PE



Hydraulic calculations can be challenging when designing modifications to existing sprinkler systems when buildings are renovated, change use, or receive an addition. First, designers need to understand the proposed modifications. Such information can usually be found in the architect's proposed floor and reflected ceiling plans. The main challenge is typically determining the layout and

hydraulic design of the existing sprinkler system. This information is often unavailable, hard to find, or requires a complete survey of the existing system. The hydraulic performance is required to properly design the proposed modifications. This can quickly become a limiting factor to the progress of the design documents.

The 2019 edition of NFPA 13, *Standard for the Installation of Sprinkler Systems*, was reorganized to consolidate the requirements applicable to system modifications to a new Chapter 29. These requirements were previously scattered throughout the standard. There are 42 sections in Chapter 29 and almost half of them deal with hydraulic design requirements.

The requirements of Chapter 29 specifically apply to system modifications or additions. They are in addition to the other applicable requirements of the standard. Plans are required to indicate enough of the existing system to ensure the proposed modifications are clear when reviewing, approving, and installing the system. This often necessitates documenting the existing pipe layout and sizing to perform new hydraulic calculations.

The pipe schedule method can only be used in lieu of hydraulic calculations for additions or modifications to existing pipe schedule systems. This requires the piping to be sized according to the tables of Section 27.5. The designer should confirm the existing system is, in fact, a pipe scheduled system and meets the minimum pipe sizing. However, existing pipe scheduled systems that have been hydraulically calculated during previous modifications or additions, are no longer considered to be pipe scheduled systems. The hydraulic design criteria and associated pipe sizing would apply to the system going forward.

When existing pipe scheduled systems are revamped, a nipple not exceeding four inches of length, is permitted when installed in the branch line fitting. This allows relocation of a single sprinkler without hydraulic calculation when all other piping and fittings are minimum one inch. This also assumes seismic design is not required for the system. However, if two new sprinklers are installed from a branch line outlet, hydraulic calculations are required. When backflow prevention devices are retroactively installed, the standard requires hydraulic calculations based on new fire flow data to account for the additional friction loss. It is still common for the existing sprinkler systems to undergo relatively minor modifications that will include a water authority requirement to retrofit backflow prevention. This condition would then require complete hydraulic analysis.

Existing hydraulically designed systems require calculations to verify the design flow rate will be achieved. Plans must indicate enough of the existing system such that all conditions clear. There are a few exceptions in Chapter 29 to deal with changes to the standard over the years for new systems.

Chapter 21 requires sprinklers in new storage applications with design densities of 0.2 gpm/ft² to 0.34 gpm/ft² to have a minimum K-factor of 8.0. Sprinklers with design densities greater than 0.34 gpm/ft² are required to have a minimum K-factor of 11.2. There are existing systems that do not meet the current requirements of Chapter 21 for minimum K-factor. Chapter 29 permits modifications to existing systems protecting storage to use sprinklers with K-factors 8.0 or less. However, if the design criteria is 0.6 gpm/ft² per 2,000 ft² for existing storage applications, K-factor 11.2 or larger sprinklers shall be used.

Modifications or additions to existing systems equipped with residential sprinklers are allowed to use a discharge criteria less than a 0.1 gpm/ft² design density. Residential sprinklers manufactured prior to 2003, using a design density less than 0.05 gpm/ft² that are no longer available, may be replaced with a residential sprinkler with an equivalent K-factor (as long as the listed coverage area for the replacement sprinkler is not exceeded).

When hydraulic calculations are required, the process of collecting information on the existing system (to ensure conditions are documented and modifications meet the design flow rate) begins. Review your company's proposal and/or contract scope of work relative to the design. The project may assume information regarding the existing system is available or your use or a full survey of the facility is required.

Documentation on the existing system should be acquired. There is an opportunity to locate information such as the owner's certificate, above-ground test certificates, hydraulic data nameplates, general information signs, and as-built drawings. This may require a site visit to find and review available documents.

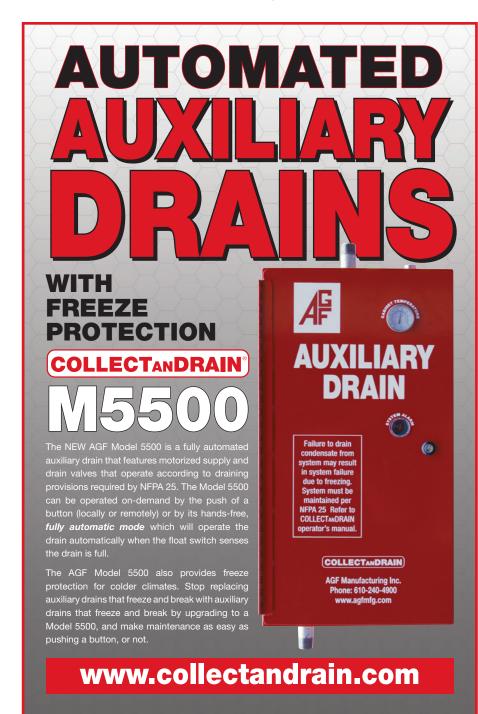
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Make sure you provide all this information for your project at completion so that it is available for the next designer to work on the system.

Detailed field surveys are time consuming. Consider what information will be required to complete your design and hydraulic calculations. This will include the type of water supply, sprinkler (make, model, response type, temperature rating, K factor, thread size), pipe (type, schedule, lengths, fittings, layout, elevation, lengths), and system type (wet, dry, pre-action, deluge, multi-cycle, antifreeze). Coordinate access to the site including all the spaces required to document the portion of the system affected by your work. This may include access to adjacent tenant spaces and core areas such as the stairs and sprinkler room. Be prepared for your survey work with the proper tools and equipment. Use existing condition drawings to accurately document your findings.

The final piece of the puzzle is to obtain water supply information. Scheduling and conducting hydrant or fire pump flow tests can require coordination and time. Designers should consider starting this process immediately upon the start of the project. This may include a hydrant flow test, fire pump



(size, arrangement, flow test results), storage tank or reservoir (size, capacity, arrangement) or standpipe system flow test results. The static system pressure or two-inch main drain test results do not provide sufficient information when evaluating water supply.

Review your project with the authority having jurisdiction. They may have policies and procedures in place for renovation projects to ensure they receive the required information for review and approval. The design work for these projects can often be more labor intensive than the actual install work itself. This additional design effort is required to ensure proper fire protection is maintained for the building and occupants. •

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Change of Use-What does it mean?

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



The phrase, *"change of use"* is utilized in many ways. It is used when a vacant big-box store turns into a church or when a waterfront warehouse is turned into a brewery and condos. It is used when a singlefamily dwelling turns into a half-way house. It is used when a commodity package changes from being stored in glass jars into plastic jugs. Change of use has many well-meant meanings, but the codes

and standards have a proper place and use for it.

Classification of the building

The codes, for example a building code like the International Building Code (IBC), classify buildings to their occupancy and use. While the U.S. has had many different legacy codes and city codes, the occupancy terms in the IBC are used when the IBC is adopted locally. It becomes the correct way to classify and determine a building. Classifying a building using the IBC, is a multi-step process for design professionals and Authorities Having Jurisdiction. Sprinkler layout technicians and contractors are not typically involved in this process, but the knowledge of what and how this was done is important for the NFPA 13 hazard classification.

The multi-step categorization of buildings is in the IBC, Chapter 3. Table 1 briefly summarizes several pages and nuances that are applied to the vast variety of buildings:

- Occupancy classified by their occupancy by their similarity of process, level of hazards, and fire loads.
- Group each occupancy is further divided into groups that subdivides each occupancy that is organized by their common hazards and risks.
- Use limitations and specific examples.
- *Conditions not in the table*, but some institutional and residential uses have further conditional applications based on ambulatory nature of the residents.
- Special occupancies not in the table, found in IBC, Chapter 4.

Classification of the building with fire sprinkler standards

Table 2 merges the IBC occupancy and group with the NFPA fire sprinkler standards and NFPA 13's occupancy classification. The IBC occupancy and group, along with area, height, and other factors, determine when a building is equipped with fire sprinklers. The classification can further limit what fire sprinkler installation

standard, or other fire protection standard, is used. For example, NFPA 13, the *Standard for the Installation of Sprinkler Systems*, is the fire sprinkler standard for all assembly occupancies, groups, and uses. NFPA 13R, the *Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*, is appropriate for residential occupancies and groups, but only up to four-stories and 60-feet.

When the sprinkler standard is determined, the occupancy classification, commodity classification (in storage occupancies) and design criteria are applied. This is familiar territory for fire sprinkler contractors, layout technicians, and fire protection engineers. The occupancy classification and commodity classification for NFPA 13, Chapter 5 and from tables in the annex of Chapter 5. Table 2 is generalized and only a design professional can make the determinations that actually apply to each specific installation.

[see chart next page]

The building changes - now what?

The phrase "change of use" is meant to identify when something changes in the building, but it is not defined by the IBC or NFPA 13. The International Code Council (ICC) family of codes, such as the IBC, International Fire Code (IFC), and International Existing Building Code (IEBC) are all model codes that deal with change of use subject. The "change of use" term is incorrect to use in the design and construction industry today. The 2021 IBC, IFC, and IEBC use the phrase "change of occupancy" and the following definition when the occupancy, group, or use (the three columns in Table 1) changes: A change in the use of a building or a portion of a building which results in one of the following:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in application of the requirements of this code.

When a change of occupancy occurs, such as when a riverfront warehouse (Group S-1) turns into a brewery (A-2) and condos (R-2), it sometimes triggers rules as if it is a new building. New building design is easy, buildings are designed and built according to the latest codes and standards. The rules are clear (most of the time). Existing buildings that change occupancies are not as clear. Certainly, a design professional can choose to apply new construction codes (the IBC) to existing buildings, however, *continued on page 14*

continued from page 13

that is not always the clear and economical route. The IEBC is a model code, specifically Chapter 10 – Change of Occupancy, is for design professionals to find the path that allows existing in-frastructure to remain while balancing new systems requirements such as fire protection.

When buildings change occupancy, do fire sprinkler systems?

When a non-sprinklered building changes occupancy and is required be sprinklered as if built new, (per IBC Chapter 9), the new or changed occupancy is sprinklered. Much of the time the IEBC (Chapter 10) installs sprinklers only in the new occupancy or when a fire area occurs, not throughout the building. If an existing sprinklered building changes occupancy and the new occupancy is required to be sprinklered (per IBC Chapter 9) the same applies.

Existing buildings with existing sprinklers systems can easily be overlooked by owners and real estate agents. To most of the public, a sprinkler system is a sprinkler system. When buildings change occupancy, the system (NFPA 13) occupancy classification changes. Remember, this means a whole occupancy change, i.e., from a big-box store (M – mercantile) to a church (A-3). NFPA 13 occupancy changes are not as severe when buildings change group or use. Regardless, of how it changed, the sprinkler system, NFPA 13, NFPA 13R, or NFPA 13D, needs to follow suit and be updated to accommodate the new hazard. The requirements to do so in the codes are not blatant, but the guidance in the IEBC Chapter 10 and IBC Chapter 9, as well as the administrative provisions in all of the codes point to making the new system "up to code" (*stay tuned for next month's article*).

Update the sprinkler system when changing occupancy!

"Change of use" is a narrow term. Using the appropriate and

Table 1 – IBC C	Occupancy, G	roup, and Use	
Occupancy	Group	Use	
Assembly	A-1	Assembly with fixed seating - theaters	
	A-2	Food and drink consumption – bars, restaurants	
	A-3	Worship, recreation, amusement – halls, churches	
	A-4	Indoor sporting – hockey rinks	
	A-5	Outdoor activities - stadiums	
Business	В	Professional and services – banks, offices, colleges	
Educational	E	Up to the 12 th grade – public, private, and parochial schools	
Factory and	F-1	Moderate hazard factory and industrial – bakeries, food processing	
Industrial	F-2	Low hazard factory and industrial – concrete plant, ice, metal fabrication	
High Hazard	H-1	Detonation hazard - explosives	
H-2 Deflagration hazard – combustible dusts, flammable, and con liquids		Deflagration hazard – combustible dusts, flammable, and combustible liquids	
	H-3	Readily support combustion – fireworks	
	H-4	Health hazard – toxic materials	
	H-5	Semiconductor fabrication	
Institutional	I-1	Supervised and custodial care, over 16 ppl. – assisted living, board, and care	
	I-2	24-hour medical care – hospitals, nursing homes, detox facilities	
	I-3	Restrained and secured – jails, prisons, correctional	
	I-4	Day care – adult and child	
Mercantile	М	Display and sales – department stores, markets, wholesale	
Residential	R-1	Transient – hotels and motels	
	R-2	Permanent – apartments, condos, dormitories	
	R-3	Permanent (nuanced) – up to two dwelling units, care facilities under 5 ppl.	
	R-4	24-hour care from 5-16 ppl. – assisted living, group homes	

defined term, "change of occupancy" is really where the industry needs to recharge their vocabulary and application. Reusing and repurposing buildings is important. As communities adapt and change, a building will change many hands. Keeping fire protection systems up to date as well as maintained, is not only smart for the building owner and community, but also required by the IFC and NFPA 25, the Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems. Codes, standards, and existing buildings and systems can be tough to navigate and interpret. Each system and building can be unique, but getting the code official, design professional, and fire sprinkler contractor involved early will have great results for any change of occupancy. The NFSA has subject matter experts in every model code and fire protection standard to help navigate the nuanced waters of existing buildings and systems rules.

REFERENCES:

2021 International Building Code (IBC), International Code Council, Country Club Hills, IL 2020.

2021 International Existing Building Code (IEBC), International Code Council, Country Club Hills, IL 2020

NFPA 13, Standard for the Installation of Sprinkler Systems, 2019 edition, National Fire Protection Association, Inc. Quincy, MA 2018.

NEW MEMBERS

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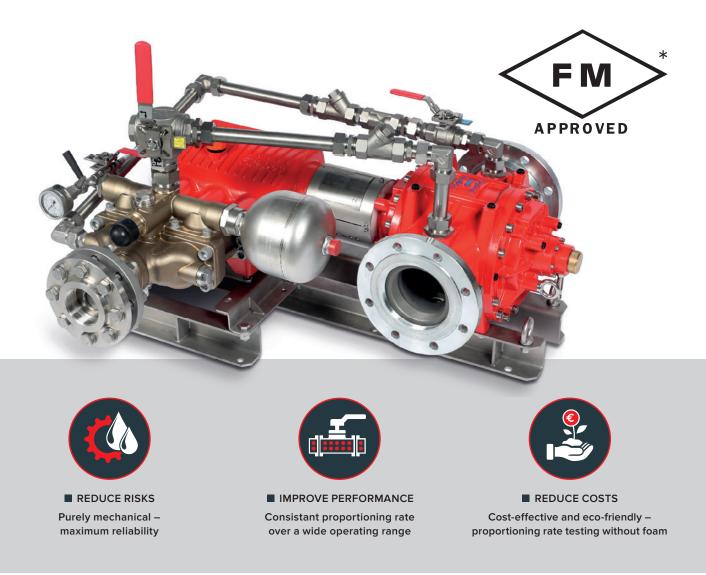
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by Vickie Pritchett, Director of Outreach & Government Relations

hope this edition of NFSM finds you all staying healthy and finding ways to thrive through what has for sure become a pandemic that lasted longer than any of us wanted! I'd like to take the time to chronicle the history that is in the making this year with NFSA's first Leadership Institute.

There are 22 members in our inaugural class, and sessions began in January! Dr. Kevin and Dr. Jackie Freiberg are leading the sessions in the first of its kind, custom designed course for the fire sprinkler industry. If you were interested in the class, but circumstances prevented your participation this year, we are hopeful that you'll start making plans now to be part of the 2022 class! I hope to document the class progress throughout the year and am looking forward to sharing with all of you!

So you to have a better understanding of the vision the Freibergs are sharing with us, I am including their opening letter to the class:

"We've been fans, for many years now, of the CAUSE for which NFSA fights and we're delighted to meet the salt-of-the-earth people who are part of this very special industry. So, thank you for joining us for the NFSA Leadership Institute.

As we envisioned the reading material for this program, we looked in a lot of directions. We landed on four of our books, each highlights timely and timeless leadership strategies worth learning and borrowing from. The intent is to assign one book each quarter.

The case studies, anecdotes and examples housed within these four books will be powerful tools for your leadership development, not because we wrote them, but rather because the gutsy leaders and innovative companies we've written about have lived incredible stories. Their stories and examples have influenced the way we live and lead. And we believe they have the power to influence your leadership journey as well.

When Shane offered to provide the Freibergs' books *NUTS!*, *BOOM!*, *CAUSE!*, and *BOCHY BALL!* as gifts from NFSA to you, we were humbled and once again reminded of Shane's belief in you and his commitment to the NFSA Leadership Institute.

Together, we are committed to raising the bar for the entire industry by equipping you with leadership strategies for leading in a world of change.

You are the generation that will advance the CAUSE and take the fire sprinkler industry to the next level of good.

Now it's your turn, as you dive into these books...how will you use their examples and strategies for advancing your leadership journey?"

Now, I am betting you can understand my enthusiasm for this program, and my hope that those who are part of the class will make big differences for the fire sprinkler industry!

On another note, a big thank you goes to all our members who serve on NFSA Councils, Committees and our Board of Directors. We have been meeting virtually during the pandemic and are very hopeful that we will be back in person together for our June meetings. To those who serve and give of your time, THANK YOU!

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NFPA 25 and Repurposing Buildings

by Vince Powers, NFSA's ITM Specialist



When the phrase, "change of use," is utilized; it typically means that the use of an existing building is changing from what it was previously used and designed for. This article will focus on buildings that have been repurposed and may not have had the proper hazard evaluation completed.

Sometimes when buildings are left vacant, or even when there is just a change in tenants, the build-

This building was not

originally sprinklered,

but was retrofitted. When this happens, the

building code defines

the use and occupancy along with the sprinkler system that is required. It is then designed and installed accordingly.

However, when there is an existing sprinkler

system and the building is being repurposed, the system may require an

ing use changes. In many cases, buildings are repurposed, such as a church becoming a brewery. An example of this includes The Ministry of Brewing in Baltimore, Maryland. This building was a church that was converted to a school and then sat dormant for a period until purchased and converted into a brewery.



evaluation to determine if the system can protect the new occupancy and its contents.

Not completing the evaluation is not typically intentional, but it is usually something that slips through the cracks during the design process. The building is then issued a certificate of occupancy and the sprinkler system is not evaluated. This potentially creates a significant hazard to the building and its occupants. According to the NFPA report, U.S. Experience with Sprinklers 2017, sprinklers fail 6% of the time due to inappropriate installation of the system. In scenarios such as this, the sprinkler system is not appropriately designed to protect the hazard being stored, or the occupancy. There are many laws and rules to combat this, but often they are not enforced uniformly across the country.

Let's look at this from an NFPA 25 standpoint. *NFPA 25, The Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, sets the minimum requirements to reasonably ensure water-based fire protection systems will operate. It does not directly address changes in building occupancy or use and is not part of the routine inspections required by NFPA 25. Section 4.1.6 of the 2020 edition of NFPA 25 addresses the owner's responsibility to ensure changes made to the building do not affect the *continued on page 20*



continued from page 19

ability of the fire sprinkler system to do its job.

Section 4.1.6 is titled, "Changes in Occupancy, Use, Process, or Materials." It states that the property owner or designated representative shall not make changes to the building in anyway without having the fire protection system evaluated. This includes erecting new walls, taking walls down, changing the use, occupancy, or materials. This evaluation is not part of the routine inspection required by the standard. Since this evaluation is outside the scope of NFPA 25's routine inspections, the Authority Having Jurisdiction (AHJ) enforces these evaluation requirements.

Other than NFPA 25, the AHJ will typically use one of the two fire codes, NFPA 1, Fire Code, or the International Fire Code (IFC) to enforce these requirements. The 2021 NFPA 1, Section 13.3.3.4.1.6* extracts the language directly from the 2020 edition of NFPA 25, Section 4.1.6. The 2021 IFC Section 102.3 titled, "Change or use or occupancy," indicates a change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code and the International Existing Building Code (IEBC).

These evaluations are typically addressed if a new use and occupancy permit is applied for. However, this is not always the case. In some jurisdictions across the country, the building code side and the enforcement side do not always communicate or there is no permit application. The only way for the AHJ to address this after the building is occupied is routine inspections. Due to lack of manpower, it could take several years for an inspector to conduct a site visit.

A tool that can help to determine if the system is correct for commodity is the general information sign. New in the NFPA 25, 2014 edition, the general information sign can assist the AHJ and building owner in verifying any changes to the building and its use. The general information sign was introduced in NFPA 13, The Standard for Installation of Fire Sprinkler Systems, in the 2007

SPRINKI	ER SY	'STEM -	– GENERAL INFORMATION for
Pipe schedule system High-piled storage	YesYes	□ No □ No	Date: Flow test data:
Rack storage:	Yes	No	Static: psi bar
Commodity class:			Resid: psi bar
Max. storage height		ft_m	Flow: gpm lpm
Aisle width (min.)		ft_m	Pitot: psi bar
Encapsulation	I Yes	D No	Date:
Solid shelving:	Yes	I No	Location:
Flammable/ combustible liquids:	I Yes	D No	
Other storage:	Yes	D No	Location of aux/low point drains:
Hazardous materials:	I Yes	D No	
Idle pallets:	Yes	D No	
Antifreeze systems Location:		🛛 No	Dry pipe/double interlock preaction valve test results
	□ Yes		Original main drain test results:
Location:			Static: psi bar
			Residual: psi bar
			Venting valve location:
Where injection system	ns are u	ised to tr	
			tration: For proper disposal, see:
Name of contractor or de	signer:		
Phone:			

edition. A great deal of information is required to be included on this sign.

Some of the information found on the sign include occupancy classification, commodity, presence and arrangement of storage, and acceptance test information, to name a few. A full list of requirements can be found in section 28.6 of NFPA 13, 2019.

It is not always easy to address changes in occupancy or use. Existing buildings with existing sprinkler systems can easily be overlooked. Even though the IFC and NFPA require it, ensuring that fire protection systems are designed, installed, and maintained properly is for the protection of everyone that enters the building. As an industry, we must work together to educate the parties involved on how

to address all building changes and how they affect fire protection systems.•

REFERENCES:

2021 International Fire Code (IEBC), International Code Council, Country Club Hills, IL 2020

NFPA 13, Standard for the Installation of Sprinkler Systems, 2019 edition, National Fire Protection Association, Inc. Quincy, MA 2018.

NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Sytsems, 2020 edition, National Fire Protection Association, Inc. Quincy, MA 2019.



Member Communities and Revised File Storage Coming Soon

by Caleb Armbrust, Director of Membership



The last year has been a series of "you won't believe what just happened" on repeat, or so it seemed to me. The pace of technology adoption accelerated at a dizzying rate (even for us millennials), along with anything that could be done virtually. One of the things we have been working on at NFSA is to identify changes in the way we all interact and engage that will persist beyond this moment

and pandemic. As many of you have experienced, we launched a completely new accounting system and CRM in the middle of 2020, which most drastically impacted NFSA staff and back of house functionality.

In 2021, possibly by the time this is printed, NFSA will be launching brand new community functionality that will take Chapter and Committee participation to the next level. This new platform will enable online discussions to happen in a safe environment, free from ad base algorithms and manipulation, where we hope the industry will gather to share new products and other matters of interest. This platform will also provide the infrastructure for the virtual component of the 2021 Annual Seminar in Las Vegas! The article search functionality has long been on the list of NFSA staff to overhaul, and we are excited that this is the new solution. I can hardly wait to have the library moved over! I will stop writing anything further to avoid over-promising. When this platform is launched, please try it out and give me your feedback (especially negative) so we can make it work better.

Onward and upward,

Caleh



New Affinity Training Opportunity: Commercial Subcontractor Contract Master Class

Contracts are something that everyone is impacted by, whether we like it or not. NFSA members are eligible to receive a \$250 discount on the "Commercial Subcontractor Contract Master Class" presented by Elliot Wagonheim. Elliot started Wagonheim University to share his experience from 30+ years practicing contract law.

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"[Eliot] helped me understand how to translate the legalese into everyday situation examples. This helped in many cases to get to a compromise on language that is acceptable to both parties."

> "This was the best class I have taken, hands down. I've had a lot of training and taken a lot of classes throughout my 20year career in the industry and this one definitely exceeded my expectations. Lawyers can be expensive – this is like having a lawyer without paying for one. It is cost-effective and worth the investment to protect our business. Eliot is very informative in an easy to understand way and I love that you can take the class at your own pace and reference it later on if you need to."•

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Valve Size	Rating	GxG	FxG	FxF
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4", 6"	300 psi	•	•	•
8"	250 psi	•		•

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FX				
Mahaa Cina	Pressure	End C	onnec	tions
Valve Size	Rating	GxG	FxG	FxF
2"	250 psi	•		
2-1/2", 3"	300 psi	•		
4", 6"	300 psi	•	•	•



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Katy, TX Fire Sprinklers Extinguish Fire in Apartment in Katy, TX

Thank you to Assistant Chief Steven McDonald for sending us this sprinkler save!

Firefighters from Harris County ESD #48 responded to a box alarm at an apartment complex in Katy, TX. Upon arrival, a small kitchen fire was discovered inside of an apartment. Firefighters learned that the fire had been quickly extinguished by the activation of two fire sprinklers. Other than the mild fire damage to the kitchen, there was no further damage to the apartment or any other living units.



McKinney, TX

Fire Investigators Determine Fire Sprinkler Saved McKinney's Hutchins BBQ

Restaurant installed sprinklers after fire in 2012 Thank you to Merit Ossian, McKinney Fire Dept. Public Information Officer, for sending in this sprinkler save!

McKinney, TX fire investigators say a fire sprinkler did its job

on New Year's Eve, when fire broke out at the Hutchins BBQ restaurant.

Units arrived just before 10 p.m. to find fire coming from the roof at the rear of the restaurant. The call was upgraded to a structure fire. McKinney firefighters were able to put it out quickly.

That effort was helped by a single sprinkler installed in the older part of the building. The sprinkler kept the fire from spreading until firefighters arrived.

"This shows the effectiveness of fire sprinklers and why building owners should strongly consider retrofitting their properties with fire sprinklers," said McKinney Fire Marshal Mike Smith. "Fire sprinklers can also be added to homes – lowering the home fire death rate by up to 90 percent."

McKinney, TX

Fire Sprinkler Kicks In When Cooking Is Left Unattended

Thank you to Merit Ossian, McKinney Fire Dept. Public Information Officer, for sending in this sprinkler save!

Stand by your pan, especially when you are frying food! On Friday, Dec. 11, the McKinney Fire Department (MFD) responded to a call for a water flow alarm at a local apartment building. The call was upgraded to a possible kitchen fire. Units arrived to find that a single fire sprinkler had extinguished a grease fire on the stovetop. This kept it from potentially spreading throughout the apartment. The resident told investigators



she was frying food and stepped away to check on a child. No one was hurt and the damage was minimal.

Mooresville, NC

Single Sprinkler Saves Apartment Complex

Thank you to Woolard, Geoffrey of Mooresville Fire Rescue for sending us this sprinkler save.

Mooresville Fire-Rescue was initially dispatched to an automatic fire alarm with "water flow." Prior to arrival, callers to 911 reported a building fire and additional apparatus responded. On arrival, firefighters found a single sprinkler activated in the laundry room of a ground-floor apartment controlling a fire in a trash can. *continued on page 25*

continued from page 24

The occupant had discarded cigarette ashes in the trash can just 90 minutes earlier. No fire damage occurred to the laundry room and the fire department removed most of the water that discharged from the sprinkler head. The fire sprinkler system was placed back in service soon after the fire with the single sprinkler head replaced in the laundry room. None of the apartment's residents were displaced, including the occupant of the "fire" apartment.

Too often we see multiple residents lose their homes and belongings from an apartment fire because the building was built without fire sprinklers. In a multi-family environment, you can't control what your neighbor does and the effects their actions may have on you. This story could have seen a much different outcome and been a leading news story with the headline "Fire Severely Damages Apartment Building - Residents Lose Everything." This incident was just the opposite.

Fortunately, this unintentional fire was contained to the trash can and controlled by one sprinkler head. In addition to quick action by the resident upon discovering the fire, a single sprinkler head prevented fire from growing, spreading, and impacting 14 other apartment units and those occupants. This is an excellent example of how fire sprinklers save lives and property. –Geoff Woolard, Fire Marshal

Worcester, MA

Single Sprinkler Saves 24-story High Rise

Thank you to Fire Captain Tom Bull of the Worcester, MA Fire Department for sending in this sprinkler save!

On December 29th at 7:06 pm, the Worcester Fire Department received a call for a fire alarm activation at a 24-story high-rise. Investigation revealed that a fire in a laundry basket on 2nd floor had been confined by the activation of a single sprinkler. The sprinkler system was restored later that night and fire damage was

limited to the room of origin. There was no press coverage of the incident due to the fire being contained to the room of origin.

Dover, DE

Two Fire Sprinklers Control Townhouse Garage Fire

Thank you to the Delaware Fire Sprinkler Coalition's Paul Eichler for sending us this sprinkler save!

One New Year's Eve, the Dover Fire Department responded for the garage fire in the Silver Lake townhome community. On arrival, firefighters found a small fire in the garage controlled by two activated sprinklers. Firefighters made sure there was no extension. There was no need for smoke removal from the garage. There was no extension into the house because the interior door from the garage to the house was closed. No one was displaced or injured. The family was notified of something going on due to working smoke alarms and water flow notification. The family of six spent New Year's in their own home due to the sprinkler save. The fire is under investigation by the Dover Fire Marshal's Office.

The development was built by a builder who did most of his work in Maryland, where residential fire sprinkler systems are required. He was used to building with sprinkler systems and installed them through his own initiative. His forethought and progressive business practices just saved this family from a devastating event.

St. Paul, MN

Sprinkler Save at St. Paul, MN Mechanic's Garage

Thank you to Assistant Chief/Fire Marshal Terry Johnson of South Metro Fire for alerting us to this sprinkler save!

"I wanted to share an amazing sprinkler save we had in West St. Paul last night. Six sprinklers activated to save this commercial property where a vehicle fire started inside of a mechanic's garage. The only thing that was damaged by fire was the truck. All other contents of the building got a good bath. A true testament to the value of fire sprinkler systems.

The passenger compartment of the pick-up truck was destroyed. They may try to salvage the engine and transmission. Estimated truck value was \$30k. The tax value of the building is \$350k. Fire Marshal Johnson reported, "The sprinklers dumped quite a bit of water in the automotive repair suite, but we had very little to no fire/smoke damage. The contents of the entire building, which includes three businesses, is maybe \$250k."

Farmers Branch, TX

Single Sprinkler Extinguishes Cooking Fire in Fourth Floor Apartment

Thank you to Fire Marshal Tim Dedear and Captain Scott Burke of the Farmers Branch, TX Fire Department for sending us this sprinkler save.

Single Sprinkler Extinguishes Fire- The fire occurred when a

resident fell asleep after turning on the stove to warm some food. The resident was in the apartment at the time of the fire and was uninjured. The apartment was located on the fourth floor of a four story, 188-unit multi-family building.

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Fire Sprinklers in Action

continued from page 26 Brookfield, WI

Fire Sprinkler Saves Christmas at Wisconsin Mall

Thank you to Nick Rogne, Deputy Chief of Fire Prevention at the Brookfield, WI Fire Dept. for sending in this sprinkler save!

On December 17, 2020, fire crews responded to a report of a fire at the Brookfield Square Mall in Brookfield, WI.

At approximately 7:33 p.m. the Waukesha County 911 Communications Center received a 911 call from security reporting a fire at that address, with first arriving fire units reporting light smoking in a back hallway and activation of the sprinkler system.

The fire was contained and extinguished by the fire sprinkler system. The fire was limited to cardboard boxes burning in the hallway. There was no structural damage to the building. Areas of the Mall were evacuated to protect occupants.

Houston, TX

Single Sprinkler Saves University of Houston Building

Thank you to Wendell McCloud, Assistant Fire Marshal at the University of Houston for sending us this sprinkler save!

We had a fire in one of our buildings, Agnes Arnold Hall, which is a six-story building we recently retrofitted with a sprinkler system.

On Sunday, January 10, 2021 there was a fire in an office in Agnes Arnold Hall. The fire activated the single sprinkler in the room and extinguished the fire. Luckily, the door was closed and contained the spread of the fire. The fire originated in or on a small side table next to an old burlap and foam



sofa with a wooden frame and coil springs. The fire progressed across the sofa until it activated the sprinkler.

This could have been much worse if there was not a sprinkler system, as this office has three walls that are floor to ceiling bookcases that are loaded with books, manuals and writings.

Bayside, WI

Single Sprinkler Saves Assisted Living Complex

Thank you to Fire Marshal Matthew Mertens of the North Shore Fire Department in Bayside, WI for sending us this sprinkler save!

The NSFD had a sprinkler save in a large, assisted living apartment complex.

A packaged terminal air conditioner (PTAC) electrical fire in an

apartment that was still filled with moving boxes full of clothes, etc, was contained to the PTAC enclosure by a single residential sidewall sprinkler. A packaged terminal air conditioner is a type of self-contained heating and air conditioning system commonly found in hotels, motels, senior housing facilities, hospitals, condominiums, apartment buildings, add-on rooms & sunrooms.

The resident was able to be rescued from the smoke charged apartment by the PD because of the sprinkler activation and the patient was evaluated and refused transport to the hospital.

This is a true example of a life saved.

McKinney, TX

Single Sprinkler Extinguishes Grease Fire

Thank you to McKinney Fire Dept. Public Information Officer Merit Ossian for sending us this sprinkler save.

On Friday, December 11th, the McKinney, Texas Fire Department responded to a call for a water flow alarm at the Orion McKinney Apartments.

The call was upgraded to a possible kitchen fire. Units arrived to find that a single fire sprinkler had extinguished a grease fire on the stovetop. This kept it from potentially spreading throughout the apartment.

The resident told investigators she was frying food and stepped away to check on a child.

No one was hurt and the damage was minimal.

Chesire, CT

Single Sprinkler Saves Middle School

Thanks go to NFSA member David Tworkowski, COO of Fire Protection Team in Chesire, CT for alerting us to this sprinkler save! Stafford Middle School was evacuated after a fire started in a

janitorial closet while school was in session.

According to Stafford Fire Chief David Lucia, a fire alarm was pulled at the school at 11:07 a.m., and initially was reported as a fire in the boiler room. However, the janitorial closet was quickly identified as the source and the door was kept shut until fireghters arrived. Thankfully, the closet was equipped with a fire sprinkler, which put the fire out on its own, Lucia said.

Fireghters turned off the sprinkler and checked for any spread of the fire when they arrived.

The last fire truck left the scene by 12:45. Students, faculty and firefighters safe!

Woodland, WA

Single Sprinkler Controls Apartment Fire

Thanks to Josh Taylor, Deputy Fire Marshal in Ridgefield, WA for sending us this sprinkler save!

A Woodland, Washington apartment's fire sprinkler system quickly doused an early morning kitchen fire, minimizing damage

continued from page 26

to the unit and others in the complex.

"The team at Clark-Cowlitz Fire Rescue, along with some Woodland residents, were very thankful for fire sprinklers early this morning," the fire agency said.

The fire started when an appliance was accidentally left on and overheated, causing a fire that spread to the cabinets below. Fire crews were notified of the fire by an automatic fire alarm tied to the fire sprinkler system.

A single fire sprinkler controlled the fire, ensuring the safety of the apartment's two occupants and of those living in neighboring apartments.

"This situation would have been much worse had the building not been protected with fire sprinklers," said Clark-Cowlitz Fire Rescue Division Chief Mike Jackson. "There likely would have been significantly more damage along with a greater risk of injury to the building occupants."

Georgetown, TX

Single Sprinkler Saves Apartment Complex

Thanks go to new member Daniel Bilbrey, Fire Prevention Specialist with the Georgetown, TX Fire Department for sending us this sprinkler save.

Fire Sprinkler save in Georgetown, Texas

November 30, 2020

Engine one responded to an alarm activation at an apartment complex. Turns out the resident was smoking in the garage and cigarette somehow made it into a cardboard box. The fire was extinguished by one sprinkler in the garage with minimal damage.

Mooresville, NC

Single Sprinkler Saves Apartment Building

Thank you to Fire Marshal Geoff Woolard of Mooresville Fire Rescue for sending us this sprinkler save.

Mooresville Fire-Rescue was initially dispatched to an automatic fire alarm with "water flow." Prior to arrival, callers to 911 reported a building fire and additional apparatus responded. On arrival, firefighters found a single sprinkler head activated in the laundry room of a ground-floor apartment controlling a fire in a trash can. The occupant had discarded cigarette ashes in the trash can just 90 minutes earlier. No fire damage occurred to the laundry room and the fire department removed most of the water that discharged from the sprinkler head. The fire sprinkler system was placed back in service soon after the fire with the single sprinkler head replaced in the laundry room. None of the apartment's residents were displaced, including the occupant of the "fire" apartment.

Too often we see multiple residents lose their homes and belongings from an apartment fire because the building was built without fire sprinklers. In a multi-family environment, you can't control what your neighbor does and the effects their actions may have on you. This story could have seen a much different outcome and been a leading news story with the headline "Fire Severely Damages Apartment Building - Residents Lose Everything." This incident was just the opposite.

Fortunately, this unintentional fire was contained to the trash can and controlled by one sprinkler head. In addition to quick action by the resident upon discovering the fire, a single sprinkler head prevented fire from growing, spreading, and impacting 14 other apartment units and those occupants. This is an excellent example of how fire sprinklers save lives and property. –Geoff Woolard, Fire Marshal



Conroe,TX

Sprinkler Save at Conroe, Texas Apartment Complex

Thanks to Fire Chief Randy Parr of the Tomball, Texas Fire Department for alerting us to this sprinkler save.

On November 14th at 11:15 a.m., The Conroe, Texas Fire Department responded to a local apartment complex for a reported structure fire. First arriving units reported a vehicle fire inside the first floor garage of one of the buildings. The building's sprinkler system had held the fire in check and firefighters were able to quickly extinguish the fire. Fire damage was confined to the garage with light smoke damage to the adjacent apartment. There were no reported injuries.

Westminister, CO

Two Sprinklers Save Auto Body Shop

Thanks to Deputy Fire Chief Bob Hose of the Westminster, CO Fire Department for sending us this sprinkler save!

This was an outside fire at an auto body repair center that involved a storage area for recyclables immediately next to the building. When they have parts that they cannot use, the parts are stored in this secured area for recycling. The area contains metal, plastic, and wood materials, and is protected by sprinklers on the exterior wall of the building. An accidental fire occurred in the recycle *continued on page 28*

Fire Sprinklers in Action

continued from page 27

materials. A small plastic gas can that was partially filled was near the recyclables and also caught fire, contributing to the growth.

At 12:45 on January 15th, the Westminster, CO Fire Department received a fire alarm from the business. Further information from people on scene indicated a fire at the building, and a structure response was dispatched. Upon the arrival of the first unit a few minutes later, the exterior fire had been extinguished by two sprinklers, and there was no fire extension inside the building. The sprinkler system was shut down by the fire crew.

The damage to the exterior of the building (paint) was estimated at \$500. No other loss, as the fire involved recyclable materials. The approximate value of the building was \$1.4 million. Another great example of the effectiveness of sprinklers, and the value to the economic security of the community!

Nuts and Bolts:

Type of System:	Wet
Sprinklers Activated:	. 2
Value of Building: 1,400,000	.00
Value Saved: 1,399,500	.00

Racine, WI

Fire in Racine, Wisconsin Manufacturing Plant Contained by Fire Sprinklers

Upon arrival, personnel from Engine 6 reported discovering a light haze inside the building and were directed to the complex's "aluminum sample shop" where fire sprinklers had activated. The fire was brought under control in about an hour, RFD reported. There were no civilian or firefighter injuries reported.

The fire was contained to an aluminum particle collection machine, according to a release. Damage is estimated to be at \$35,000.

Chelan Fire District

Fire Sprinklers Save Fire Station in Central Washington

Thanks to Fire Chief Mike Asher of #ChelanCountyFire-District#8 in Entiat, WA for sharing the photos and information for this save.

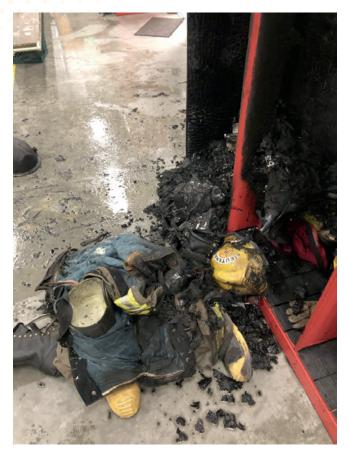
When Chelan County Fire District #8 built its new station in 2012, the allvolunteer district in central Washington wanted to be a good example to the rest of the community by installing fire sprinklers throughout the facility. That good example paid off when a

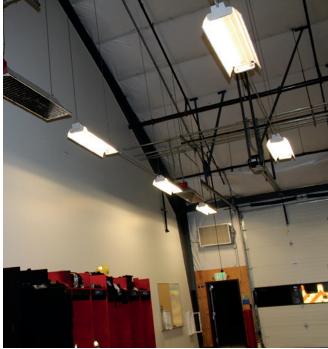


faulty heater caused an early morning blaze on Jan. 21st.

Crews were called out at 4 a.m. to respond to a fire at their own station in Entiat, arriving to find heavy smoke coming from the apparatus bays. Several sprinklers had activated, containing the fire to the locker area. Crews were able to safely remove an ambulance and fire truck from the bay.

"The fire sprinklers prevented us from having much worse fire damage," said Chief Mike Asher. "The station is a two milliondollar facility housing eight apparatus and equipment valued at about another two million."•





FEATURE

This Spring, New Beginnings Have New Meaning

by Elizabeth Lafond Coppez

t the time of writing this column, a fresh, deep blanket of snow is resting outside my door here in New England. But reader, as you follow my words, we are at the cusp of change.

During these early spring days, the thoughts that come to mind are hope and new beginnings, days filled with extra light and warmth, and early crocus flowers emerging from the semi-frozen earth, giving us a glimpse of what's to come inside their purple petals.

We will have less layers, lighter jackets, yellow forsythia flowers, mud, and warm rain... all signs that brighter days are here. And did I mention what is giving us the greatest sense of hope? The COVID-19 vaccine.

My sister received her COVID vaccine as part of the first round that was administered to healthcare workers before the Christmas holiday. She's an MRI Technologist at a large medical center. Her nerves diminished as she realized how lucky she was to be among the first to help halt this wicked virus.

We've endured severe illness and loss during this year-long pandemic, and we've found amazingly creative ways to adapt.

I'll never forget the zoom meetings required in my second grader's remote learning days. Mixed in with the teacher's lectures were statements you wouldn't normally hear in-person. 'Please don't show your opened mouth on screen;' 'please don't play video games;' 'please unmute yourself;' and my cousin had a fifth-grade student using a sewing machine during a history lesson. The student's response? 'Oh, I'm just finishing up a mitten. See?'

Perhaps we are all just becoming experts at multitasking. An article in *The Boston Globe Magazine* last year revealed some embarrassing zoom bloopers. One woman was folding laundry while on a work zoom meeting. As she was listening and folding, she realized her video feed was not turned off! 'Victoria's Secret' was a secret no longer.

Lessons Learned

NESA

The pandemic has taught us all so many lessons. Workplaces have been invited into employee's homes. Employees have learned how to juggle children's needs and work needs to get the job done. I learned how to manage two children on separate zoom calls at once, bouncing back and forth to give each assistance.

I also learned how to have more empathy. It's so easy to make judgements on others before we know the big picture. The school

committee that manages the important decisions for my children's school was often divided. Teachers and parents had different views, too. Finding the best learning model in the middle of a pandemic was impossible.

But the lesson

for all was to find empathy for the single, full-time working mother hoping for school to become fulltime; or for the households with impaired immune systems who couldn't risk COVID exposure and desired remote learning. In the end, I'm happy to be part of a community that cares so much about our children's academic. social and mental needs.



Grace R. Coppez collects backyard spring flowers in April 2020.

When it's finally safe to leave our homes without experiencing pandemic panic, my son says he wants to visit Bermuda. Our last big trip was to Bermuda just two months before the first COVID case was documented in China.

My daughter wants to have a giant party at our house and invite all our family friends. I can hardly wait for a nice, maskless dinner inside a restaurant. But the biggest hope is to bring our kids to Disney World in Orlando.

All of this daydreaming about post-COVID life is inspiration to stay the course. Cheers to all of you for wearing your masks, washing hands frequently and maintaining distance from others. And congratulations to all who received COVID vaccines to-date.

Although it's only a few months into 2021, daily life is laced with anticipation and hope – let's embrace it and work together so we can find our way into a joyful, grateful, post-COVID life! •

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A quiet, easy to install air compressor unit for fire sprinkler applications.



A wide range of pressure and system capacity **all in one unit**.

SCAN & LEARN MORE!





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Gast Manufacturing, Committed to Sprinkler Industry Training and Education

by Bo Coffman

he importance of training and education cannot be over-emphasized in our industry. The role Gast plays is in the design and manufacture of high-quality industrial air compressors for dry pipe and pre-action sprinkler systems. When we introduce new and innovative compressors for dry sprinkler systems, being there to provide training on the proper use and application of these compressors is just as important. The dry sprinkler team at Gast can provide this training and we also partner with manufacturers, industry contractors, and training centers across the country to ensure the right knowledge base is there for good system integrity.

FEATURE

To get the maximum benefit from training and education, collaboration can really enhance this. There is a wide variety of what that effort can look like, and Gast collaborates in many ways. Some great examples are UA local training centers across the country, hundreds of skilled private contractors such as Sprinklermatic, and world class manufacturers such as Reliable Automatic Sprinkler. And of course, incredible organizations like NFSA who help and support all aspects of our industry including education. Gast works with all these kinds of partnerships, providing air compressor equipment for hands-on training, conducting online virtual training sessions, and meeting with contractors to help design the right features for new dry sprinkler compressors. Gast has more recently been introducing our quiet Rocking Piston compressor technology to the fire sprinkler industry and it is through this collaboration that we refine our most critical product attributes. When it comes to the wide variety of sprinkler system specifications, you want to feel confident in applying the right compressor size, pressure, air flow, and how NFPA 13 and 25 requirements impact installation and maintenance. Gast is honored to support the many organizations providing critical training and education for this, and you can look to us to continue this work into the future.

Bo Coffman has been with Gast Manufacturing for 27 years. Contact him through the NFSA member directory or directly at BCoffman@idexcorp.com (941) 416-0252 to learn more about Gast compressors and training.

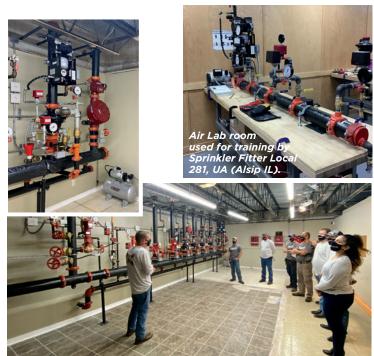
GAST COMPRESSOR PRODUCTS IN TRAINING CENTERS ACROSS THE COUNTRY:



Sprinkler Fitter Union Local 281, UA (Illinois) and Local 699, UA (Indiana)



87R-110S compressor also shown in NIFSI burn trailer recently completed in 2020



Sprinklermatic Fire Protection and Sprinklermatic University (Florida)

Wanted: First Responders Who Look Like Me



by Suzanne Mayr, NFSA Northwest Regional Manager

fter more than 20 years in the fire service, Lani Hill has seen a lot of job candidates come through the door. Like other organizations, the fire service wants to attract a workforce that reflects the communities they serve. Obstacles such as lack of outreach and training opportunities can hinder those efforts.

With a mission "To increase the number of women, people of color and other underrepresented groups working in the fire service in Oregon and Washington," the Northwest Fire Diversity Council is an Oregon nonprofit that is doing something to address those obstacles.

The group, made up primarily of the fire service and partner educational organizations, are providing outreach, scholarships and mentoring to help attract qualified, trained candidates to these rewarding careers.

"Getting young girls and minorities to realize that opportunities are out there is part of our mission," says Hill, the Fire Marshal at the Port of Portland Fire Department who serves as the Council's president. "Until you see someone in those shoes doing that job, you may not be able to picture yourself in that role."

The Council participates in career-oriented camps, such as the Portland Metro Fire Camp and a trade camp geared towards the construction trades called Girls Build. The camps give girls and young women an opportunity to not only learn about nontraditional careers, but actually apply some of the skills utilized in these careers such as a confidence course, CPR training and using firefighting gear and equipment.

In addition, the Council provides scholarships for those entering fire science or emergency medical services programs. It has partnered with area schools such as Portland Public Schools and several community colleges. In addition to funding, it also provides mentoring and job shadow opportunities, resume and interview prep, leadership training and other tangible assistance.

The Council also participates in job and career fairs by providing career-focused workshops for attendees. Past events include the Self Enhancement, Inc. Job Fair, and the International Youth Leadership Conference at Portland State University.

When Fire Marshal Hill learns that one of the young women she has mentored has landed a job in the fire service, she has a feeling of accomplishment. "It's amazing to help someone enter this rewarding field," she said. "I want to help increase involvement from other sectors such as the fire sprinkler industry to help attract more qualified, diverse future leaders to these non-traditional fields."•





Trying on a hard hat for size: Christina Schulz of Hillsboro talks to girls attending the Girls Build camp about opportunities in the fire service, trades and other fields that do not traditionally attract a lot of females.

Lucy Plews of Banks Fire Department in Oregon coaches a potential future firefighter on how to properly apply water to a fire.



Young girls get a chance to literally walk in a firefighter's boots during a confidence course at a camp aimed at learning about non-traditional fields such as the fire service and building trades.

Fire Chief Kristan Mauer of Clark County Fire District 6 shows a potential future firefighter how to gear up for an emergency call during a Girls Camp aimed at showing young girls opportunities in non-traditional fields.



Members of the Northwest Fire Diversity Council work with a group of young girls to help them picture themselves in nontraditional fields such as firefighting and emergency medical services. Council members include Lindsey Zook, PCC Fire Student and Lucy Plews Banks Fire District #13 on the left, and on the far right, Soulmaz Brazil, Hillsboro Fire, Kylie Kellie of Hillsboro Fire Dept., and Lani Hill of Port of Portland Fire Dept.





When Bernie Sanders' Mittens Broke the Internet

Many things were different about the 2021 Presidential Inauguration. The inauguration festivities began on a somber, yet moving, tribute to the 400,000 lives lost to COVID-19. The pandemic kept attendees to a minimum. The National Guard was deployed, protecting the event after the storming of the Capitol that

occurred only a week before. Because of the deep division and perpetuation of unfounded voter fraud claims in this country, some were jubilant, while others were still having a hard time accepting the election results. The country welcomed its first bi-racial vice president, who also happened to be a woman and the daughter of immigrants. While all these things are of historic significance, it was Bernie Sanders' mittens that broke the internet!

Memes of Bernie sitting alone and trying to stay warm during the inauguration proceedings went viral immediately. If you haven't seen any of these masterpieces, I suggest you get on your favorite web browser and start searching. He was pictured in everything from a scene from The Dating Game to a cold and lonely fire pump room. Wait! A fire pump room? I had to jump on that one! I shared the meme on our Facebook, Twitter and LinkedIn feeds, sat back, and watched the fun begin! As suspected, our followers went crazy!

You may wonder what the value is to sharing a "bit of fluff." When it's a viral bit of fluff, the value is manyfold. Let's take a quick look at what happened on each of our social media sites, and don't roll your eyes at the analytics, there's some pretty interesting stuff here:

Twitter	
Impressions: 2,434	Likes: 24
Profile Visits: 6	Retweets: 4

While our impressions, likes and retweets are none too shabby, of note here is the profile visits. Six people took the time to visit NFSA's profile and learn more about our association. Most of our tweets garner maybe one or two profile visits. We consider it a win when we've piqued enough interest with this meme to have someone take the time to investigate what we're all about!

Facebook	
Reach: 1,704	Likes: 81
Shares: 16	Profile Visits: 66

Our profile visits from this post boosted our weekly average of visits by 41%, to a total of 247, and gained us five new followers. Among the people who shared our post were the Fire Sprinkler Contractors Association of Texas and S & S Sprinkler Co. of Mobile, AL, who commented "Too good not to share. Thank you, National Fire Sprinkler Association." (How about joining the Association, S & S? You'll gain a lot more than a few chuckles.)

As you see, the post served to bring the NFSA to the attention of several potential members, and that's a very good thing!

LinkedIn	
Reach: 6,732	Likes: 162
Shares: 7	Profile Visits: 293

NFSA maintains both a group and a company page on LinkedIn. The group gains its members through invitations or approvals of requests to join. If you missed my article in the Jan/Feb issue, go back, and read it! It will give you some great reasons why joining the group is good for you AND your business. Since I like to keep the group informational, I posted the meme on our LinkedIn company page, which is open to the public. Our post was seen and liked by Presidents and CEOs of both NFSA member and non-member industry-related companies, sprinkler fitters, engineers, AHJs, designers and many members of the fire service. If you are on LinkedIn, I encourage you to look up the post on our page and click on the "likes." You'll be amazed to see the wide spectrum of people that we reached. Some of the comments are rather amusing too!

While NFSA social media prides itself on being the number one social media purveyor of sprinkler saves and industry-related breaking news, it is undeniable that people like to laugh, perhaps even more in our country's current situation. When Bernie's mittens went viral, your association was right in the mix! It was great to be able to put a smile on so many faces, and even better knowing that many took the time to find out more about NFSA. As I had found the fire nump meme on the internet, it would

As I had found the fire pump meme on the internet, it would



not reproduce well in print, so I took the liberty of creating a new NFSA meme for your viewing pleasure! Enjoy... and if you do not already participate, please get involved with our social media platforms! Send me an email if you have an account on any of the social media sites and I'll be sure to follow and repost your postings! You can repost ours, and we can ride the social media wave together. Get on board before the next "mitten meme" goes viral!

Meet our new Manager of Training and Educational Programs, Evan Combs

When the fire sprinkler industry needs to hear about its business, it has always turned to the NFSA first to hear from "the Voice of

the Fire Sprinkler Industry". Over the years, through many channels, one of the main avenues is through NFSA's training. With the changing times, the flooding of the training market with virtual content, it is time to provide the industry with an education.

Evan Combs, Manager of Training and Educational Programs, started with the NFSA on January 1, 2021. His work is to align with NFSA's mission of "...acceptance of the fire sprinkler concept." in a



scientific and data driven process of adult learning. He comes from many years with Pearson and the US Social Security Administration, advancing the latest learning methods and developments in the adult education field.

"NFSA training has always been good. Having Evan on board and in this position provides the sprinkler industry with the latest and proven methods of not only training, but the true education component for the industry," Jeff Hugo, NFSA V.P. of Codes, Standard and Public Fire Protection.

Evan has been in the field of education for 15 years, working



Dr. Richard A. Bucher Named Victaulic Chief Executive Officer

Victaulic announced the appointment of **Rick Bucher** as Chief Executive Officer, succeeding John F. Malloy, effective January 31, 2021. Dr. Bucher was named President of Victaulic in April of 2020, following a June 2019 appointment as Chief Operating Officer. Prior to joining Victaulic in 2009 as Vice President of Engineering, Dr. Bucher worked for 15 years for W.L. Gore, a manufacturer of technologically advanced composite materials. Dr. Bucher received a B.S. and M.S. in engineering from Rice University and a Ph.D. in material science from Virginia Tech.

Dr. Malloy, who will remain Chairman of Victaulic's Board, commented, "Rick has consistently demonstrated the intelligence, judgement and courage to make wise and sometimes with Pearson Education, local public schools and colleges, and the Federal Government. For most of his career, Evan has focused on innovating training development by combining new wave educational science and strategy with cutting edge technology to engage learners through active experiences. He holds a Bachelor's in Education, Master's in Computer Science, and is currently pursuing an associate degree in Business Management. He has received prestigious recognition from various educational committees and journals for his work in the field of educational technology.

HQ NEWS

Evan lives in Maryland with his wife and two children. He enjoys composing for and teaching high school bands and community college, building computers, and painting.

2021 North American Fire Sprinkler Expo at the Cosmopolitan in Las Vegas!

NFSA is busy making plans for our October *North American Fire Sprinkler Expo and NFSA Board Meeting*! We are working to bring this event to you as an in-person event, with plans to include live streaming of some segments. Please follow our social media accounts to always have the latest information regarding events and opportunities to network together.

We are super excited to have a vendor/tabletop area.... so, while it won't be a full-scale Expo floor we are very happy to offer this format that will provide the opportunity for us to gather in a socially distanced environment!•

difficult decisions while preserving the compassion and concern for everyone associated with Victaulic – employees, customers, shareholders and our community. Since joining Victaulic in 2009, Rick has reinforced Victaulic's long-standing commitment to innovation. Under his leadership Victaulic's patent portfolio has grown substantially with the issuance of over 3,200 patents globally while our research and development organization has doubled in size.



Last year, Victaulic celebrated its

Centennial Anniversary as a family-owned company, adding close to one million square feet to the company's manufacturing operations. These investments included a new, 400,000 square foot state-of-the-art manufacturing center in Pennsylvania's Lehigh Valley, as well as investments and expansion of the company's facilities in Dalian, China; Drezdenko, Poland; and Ontario, Canada. *For more information visit www.victaulic.com.*•

CHAPTERS IN ACTION

NFSA New Jersey Chapter Honors Chair's Service, Welcomes New Chapter Officer

The NFSA New Jersey Chapter honored Chapter Chair Jim Burge at the chapter's final meeting of 2020. The chapter presented Mr. Burge with a plaque commemorating his two years as Chair of the chapter as well as his many years of service to the industry, from a sprinkler fitter all the way up to Vice President of Oliver Fire Protection and Security. Jim's accomplishments and contributions to the industry will be remembered for years to come and the chapter wishes him the best in his retirement.

The chapter would like to welcome **Paul Cacioppo** of Landmark Fire Protection as its new Chapter Chair.

Get to Know Paul Cacioppo

Paul Cacioppo is the Vice President of Landmark Fire Protection, Inc. and has been employed with Landmark since June of 1986. He became a partner in July of 1998 and has served the company in every technical and managerial capacity including project estimating, design, supervision, inspection, maintenance, and project management. He holds a bachelor's degree in Mechanical Engineering (cum laude) form the New Jersey Institute of Technology and is an active member of the NFSA and the New Jersey Subcontractors Association. He is a member of the New Jersey Department of Community Affairs Fire Protection Sub Code Committee and is the only fire protection contractor to hold a seat in the committee.

Florida Fire Marshal Awarded Champion of the Industry Award by Florida Fire Sprinkler Association

The Florida Fire Sprinkler Association's (FFSA) Champion of Industry Award is the highest honor given by the FFSA and is normally given at the Buddy Dewar Golf Classic. Due to COVID restrictions, the FFSA Board of Directors honored Fire Marshal Janet Washburn in the city where she is making a daily difference.





Fire Marshal Washburn was awarded the "Champion of the Industry" award due to her work promoting fire sprinklers in single family homes and practicing what she preaches by installing fire sprinklers in her own home. Moving to Bonita Springs, Florida and building a new home, she found that no major builders would allow her to install fire sprinklers during construction. Fire Marshal Washburn tried to fight this, but found it was an impossible battle. Believing strongly in building the safest home possible, after construction she retrofitted her new home with a total life safety fire sprinkler system. Continuing her message, she was able to convince a new home builder after the fact to allow fire sprinklers to be installed if they were requested by the customer. Before moving to Bonita Springs, Fire Marshal Washburn had a successful career as Fire Marshal of Hollywood, Florida and served as a past President of the Fire Inspectors Association of Broward County.

Janet Washburn has always been an advocate for fire sprinklers and a truly deserving Champion of our Industry.

PenJerDel Chapter Forges Relationship with AIA

In the summer of 2019, the NFSA PenJerDel Chapter was pleased to present an introductory class to the American Institute of Architects (AIA) Bucks County Chapter. This past January, the AIA Bucks County Chapter reached out to the PenJerDel Chapter stating that the training was the most popular event that year and expressed a desire to conduct more events in the future. At the time this piece is being written, the PenJerDel Chapter is scheduled to hold a class with AIA in the fall.

The PenJerDel Chapter recognizes the importance of forging relationships with other associations and hopes for further opportunity to teach architects and other professionals about the importance of including fire sprinklers in their designs.



Virtual & Online CEUs For Texas Fire Professionals



FREE or CHEAP for Members!

When you sign up for the virtual trainings below; you are helping the NFSA Texas Chapter and Arkansas, Louisiana, Oklahoma, and Texas Government fire officials. Training registration fees for these trainings will be used to fund Training Scholarships for area government fire protection professionals! Access the NFSA Training page at https://nfsa.org/training/.

Storage Fire Protection March 10, 2021: 9:00 a.m. - 12:00 noon

Fire Sprinkler Trade-ups in the IBC – NFSA Texas & Texas Fire Protection March 24, 2021: 11:00 a.m. – 12:00 noon CST

NFPA 14 - Standpipes for Fire Protection

April 14, 2021: 9:00 - 11:30 a.m.

GOVERNMENT MEMBER TRAINING FEES ARE FREE FOR THE ABOVE TRAININGS!

Wisconsin Chapter 33rd Annual Burn Center Golf Invitational

Once again, the NFSA WI Chapter will be hosting the 33rd Annual Burn Center Golf Invitational benefitting the Ascension Columbia St. Mary's Burn Center and Wisconsin Youth Burn Camp. The event will be held at the Grand Geneva Resort and Spa – Lake Geneva, WI on Monday August 23rd. Shotgun start at noon.

We were able to provide this event in 2020 due to the sponsorship interest received. Over 160 golfers attended and enjoyed an afternoon of golf and social distance networking. The event was able to donate \$70,000 to its charities.

Sponsorship information will be sent late February/Early March. We look forward to welcoming back past sponsors and golfers for a truly enjoyable event. *Please save the date.*

St. Louis Fire Sprinkler Alliance and Metro Area Chapter Fire Sprinkler Campaign

2020 brought a general downturn in the St. Louis fire sprinkler industry, and with some of our contractors facing serious economic loss, the St. Louis Fire Sprinkler Alliance (STLFSA), in cooperation with the St. Louis Metro Area Chapter managed a fire sprinkler media campaign during the winter months. Using the professional expertise of Nexstar Media Group, STLFSA produced four television commercials and multiple avenues for digital media to promote sprinklers in the metro area. The threemonth campaign emphasized the importance of fire sprinklers from homes to high-rises, and the benefits of the new federal tax benefit for sprinkler systems.



Kicking-off the campaign was a side-by-side burn demonstration covered by three St. Louis television stations and shared "live" on social media. Just days later, St. Louis Coordinator Paul Richard educated Fox 2 New Midday viewers on the realities of fire safety and benefits of fire sprinklers. In addition to television appearances, commercials, digital banners and increased social media presence, STLFSA has also posted the life-saving message of fire sprinklers throughout the bi-state region with multiple billboards. The clear and simple billboard message is designed to increase the publics awareness of fire sprinklers and points the viewer to the NFSA website where a St. Louis Outreach page awaits.

STLFSA is the area's Industry Promotion Committee, managed by Richard Boyer of Boyer Fire Protection, Lou Grasse of Grasse & Associates, and Matt Coleman of Engineered Fire Protection.•

SPRINKLING OF NEWS

Johnson Controls Introduces Tyco[®] Ds-8 8.0k Dry Pendent Sprinkler For Outdoor Spaces And Commercial Freezers

Johnson Controls is expanding its Tyco DS Dry Sprinkler product family to include the DS-8 8.0K (K 115) Dry Pendent Sprinkler. The enhanced features of the DS-8 Sprinkler make it ideal for protecting commercial freezers and outdoor spaces like



balconies, breezeways, loading docks and parking garages.

The DS-8 Dry Sprinkler provides more flexibility for designers and offers the possibility for lower design pressure compared to other dry sprinklers. It connects seamlessly with the entire Tyco DS product portfolio, including the DSB-2 Dry Sprinkler Boot, to provide a single-source solution and ease of installation. The DS-8 is available in both quick response and standard response and is cULus Listed.

The DS-8 Dry Pendent Sprinkler features a 3 mm or 5 mm thermosensitive glass bulb that can be used in cold environments, specifically in sprinkler systems that are exposed to freezing temperatures. With a variety of escutcheons (recessed, deep, standard or none), escutcheon finishes (including stainless steel) and custom piping lengths available, the DS-8 provides end users with the increased design flexibility and installation options to meet customers' unique building project needs.

For more information, go to www.tyco-fire.com.

Sharpe® Introduces Fire-Safe (API 607 7th Edition), Cryogenic Flanged and 3-Piece Ball Valves

Anvil & Smith-Cooper International's new Sharpe® Series FSC70/74 flanged and FSC80/89 3-piece ball valves are fire-safe versions of the fieldproven Series C70/74 and C80/ C89 cryogenic valves.

Qualified by severe temperature and performance testing, FSC70/74 and FSC80/FSC89 valves are designed to deliver



superior performance in applications, such as LNG, that require compliance with American Petroleum Institute fire test standard 607.

All Sharpe cryogenic valve platforms are specially designed, manufactured, and assembled to provide exceptional and trouble-free operation at extreme low temperatures. One-piece cast extended bonnets ensure stem sealing integrity by creating a gas column separating the stem seals from cryogenic fluid.

Series FSC70 full port, fire-safe, cryogenic flanged ball valves are available $1/2^{\circ} - 4^{\circ}$ sizes. Series FSC74 standard port, fire-safe, cryogenic flanged ball valves are available in $1^{\circ} - 4^{\circ}$ sizes. Series FSC80, standard port, fire-safe, cryogenic 3-piece ball valves are available in $1/2^{\circ} - 4^{\circ}$ sizes. Series FSC89, full port, fire-safe, cryogenic 3-piece ball valves are available in $1/4^{\circ} - 3^{\circ}$ sizes. Pressure Rating: ASME Class 600; ASME Class 300.

For more information visit www.anvilintl.com.

New TYCO[®] Stainless Steel Sprinklers Food Production Facilities

Johnson Controls introduces the Tyco Series TY-L stainless steel sprinklers featuring an all-metal link design ideal for food production facilities looking to maintain glass-free environments. The stainless steel components extend the life of the sprinkler by resisting corrosion from cleaning agents used in commercial food production environments. They are also designed for durability in factories, refineries and chemical plants.

TYCO® Series TY-L sprinklers are comprised primarily of stainless steel parts which improves resistance to aesthetic

and corrosive degradation compared to standard copper alloy sprinklers. This provides customers with greater ROI and increased resilience over time.

These standard response, standard coverage, solder type pendent sprinklers are available in 5.6 K-factor (K80) and 8.0 K-factor (K115) varieties and three temperature ratings. Multiple escutcheon options allow up to 1/2-inch (12,7-mm) adjustability for simple, flexible installation. The sprinklers are FM Approved as corrosion resistant sprinklers, and CE listed.

Tyco Series TY-L stainless steel sprinklers complement the full line of Johnson Controls products and solutions to help make buildings more safe, secure and sustainable.

For more information on Tyco Series TY-L stainless steel sprinklers, visit tyco-fire.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.

FLORIDA

Florida Members Make the Most of a "COVID Christmas"

Advanced Fire Protection Services



"COVID-19 made us really think about how we could celebrate with our team members and remind them how much we appreciate them. Advanced Fire Protection Services decided to take the funds allocated for this year's holiday

party and use it to give our team members an extra day off to spend time with their families. We felt like extra time with loved ones was a valuable way to give back to our team and let them know how much we appreciate every one of them."

-Submitted by Dana Sudheimer, President

Epic Fire Systems-Miami



"This year it has been a different type of year as we all know, still we are a strong family who believes in people and family. We were not able to do our traditional Thanksgiving party and Christmas gathering, but we did a special breakfast at the end of the year with the team.

We had some workers on vacation, but we still gathered together (with our mask of course) and keeping distance (as we should), had a good time with the team having a good Cuban-style breakfast. We spoke about the challenges we faced, stories of things that happened in the year, and about family.

Yet, it is still the EPIC family that matters, and the group is still strong and pumped up for 202WON."

-Submitted by Greg Toledo, President.

Wayne Automatic Fire Sprinklers-Ocoee



"Year-end parties at Wayne Automatic are normally held on Gey Ranch with all 600 team members invited, and include food, dancing, and lots of laughter. This

year WAFS held their party virtually. Hard to do with so many, but

they were able to highlight each branch and awards, as well as a few giveaways throughout the night. Three generations of Gey's hosted the evening: Justin Gey, Wayne Gey and Clark Gey. It turned out to be a great event, but it was nothing like being together. We at Wayne Automatic are looking forward to the day when the team can all be together again."

-Submitted by Justin Gey, Sr. Vice President

Southern Fire Protection of Orlando

"Our Christmas bash was very different this year due to the CO-VID-19 allowances.



We typically celebrate with our Southern Fire family at a more elaborate establishment with distinguished attire. This year we gathered at the office in an outdoor seating area with a catered meal to celebrate our end to 2020. Looking forward to the new beginnings of 2021."

-Submitted by Christy Caldwell, Sales

Milton J Wood Co.-Jacksonville

"Typically, each year our company puts on a large cookout for our customers, vendors, and most of all, our employees, at the



end of the year at each of our offices. The turn-out for these events ranges CONSOLIDATED from 100-450 people at each office. We fry and roast venison, fry turkeys

and fish, roast oysters and cook up a tasty low country boil. Due to COVID-19, this year we were very concerned about how to handle that many people in food lines, seating at tables and the serving of the food. Therefore, we determined that we would still celebrate, but with our employees only. This meant spreading out around the tables, face coverings in lines and serving of food rather than helping yourself. Although much more challenging it was still enjoyed by all."

-Submitted by Glenn Painter, Area Manager

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Randall Fire Protection



"We unfortunately felt it necessary to cancel all year-end festivities due to COVID-19 numbers. We decided we would celebrate with a RANDALL company-wide picnic or outing when it was

safe for us to be together. We look forward to a great day celebrating a little differently this year. 2021, we are ready for some change."

-Submitted by Jason Rountree, Vice President

Companies were creative and made new ways of doing things work for them. It has not been easy but all of the companies that we have reached out to have overwhelming said they are full of gratitude. A tough year yes, but they were able to work, their teams have been safe, and business has been good. Let's all pray 2021 is a better year.

SOUTH CENTRAL **Kauffman Re-elected!**

Please congratulate John Kauffman III, President of Kauffman

Company Fire Protection for his reelection to the NFSA National Board of Directors - Area 8. This is John's third term to serve on our Board of Directors! Thank you, John, for your leadership in Arkansas, Louisiana, Oklahoma, and Texas that has greatly improved the fire and life safety for our South-Central citizens, visitor, and buildings!



Thank you to all our Area 8 Contractors for your membership and for taking the time to vote in the National Board of Director's elections.

Arkansas Licensing Review Subcommittee

The Arkansas Licensing Review Subcommittee recommended the repeal of Arkansas Fire Sprinkler Fitter Licensing due to "double licensure"; since Fire Sprinkler companies are required to be licensed in Arkansas. The Arkansas ABC, Fire Marshals Association and Fire Sprinkler Contractors (Open Shop and Union) are against this repeal that has been accepted by the Arkansas Legislative Council on December 18, 2020. The Fitter Licensing Repeal would next have to pass through the entire legislature.

Louisiana State Fire Marshal - New ITM Procedures to Be Introduced

Chief Butch Browning and the Louisiana State Fire Marshal's Office previewed their new LSPP - IMP: Life Safety Systems -Inspection, & Management Program at the Louisiana Life Safety Roundtable. This new statewide software will be pilot tested and introduced in 2021 for use by all Louisiana life safety companies to report fire sprinkler, alarm, and extinguisher inspections. The new LSS-IMP will include electronic tagging and updated rules. Be looking for more information in the New Year!

Oklahoma Legislation Input Requested

Fire Alarm and Sprinkler Licensing During State of Emergency (ODOL)

To better protect ALFS Committee members, the public, and ODOL staff in the future, ODOL is pursuing legislation this session that would alter the license approval process during a declared state of emergency. We do not have exact bill language at this time, but we are only seeking to allow the Commissioner of Labor to determine the qualifications of applicants and issue or deny or otherwise take action on an ALFS license without a recommendation from the ALFS Committee, and only during a declared state of emergency. Committee meeting will be limited to license review and approval matters only. In the meantime, we would like to invite you to reach out to us with any questions, comments, or concerns that you may have regarding this proposal. Please email our Assistant General Counsel; Daniel Mares, at daniel.mares@ labor.ok.gov with any comments or questions that you may have.

ITM Reporting Software Industry Input Requested (OKBFAA) OKBFAA leaders met with the OKC Fire Marshal's office last week to clarify some industry questions regarding third party reporting that the City of Oklahoma City implemented with fines and reports effective October 1, 2020.

Please provide us your input so we can determine if we need to move forward with the bill, we filled for 2021 Legislative Session.

Texas Legislative Bills of Interest

HB 738 - Residential Building Code of Municipalities

A municipality may not adopt a local amendment under Subsection (c) unless the municipality:

(1) holds a public hearing on the local amendment

before adopting the local amendment; and

(2) adopts the local amendment by ordinance.

Bill Website

HB 741- Voter Approval for Police, Fire, EMS Funding Reductions

If a county or municipality adopts a budget in which the amount of money allocated to provide for a public safety service is less than the amount allocated to provide for that service in the preceding fiscal year by more than five percent, the registered voters of the county or municipality, as applicable, at an election held for that purpose, must determine whether to approve the amount allocated

SB 291 - Posting of Commercial Building Construction Information

The developer of the project shall visibly post the following information at the entrance to the construction site:

(1) the name and contact information of the developer; and

(2) a brief description of the project

GREAT PLAINS Side by Side Demonstrations

Because of the pandemic, all but two side-by-side sprinkler demonstrations scheduled for 2020 were cancelled. It was certainly

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a disappointment to the fire departments and others who were looking forward to witnessing this compelling demonstration. Also cancelled were the fire and life safety and prevention messages presented alongside the trailer.

While there were only two burns, one of them is likely to have a sustained impact. Working with the Fire Marshals Association of Colorado, Colorado Fire Sprinkler Coalition and NFPA and HFSC national staff, the NFSA trailer was burned before a professional video production company, which offered its services pro bono. Over ½ dozen cameras were used to capture the event, including one within the burn unit and another attached to a drone. The purpose of this demonstration was to create video messages which can be shared with elected officials, contractors and the public in situations where a live burn is impractical. A 30-second PSA is also expected. The final videos should be available at the time of this publication. Reach out to Rob Geislinger if you would like to see it.

Legislative Sessions in Full Swing

All of the legislatures within the region are currently in session. As of the first week of January, there were already a handful of bills or proposals that could impact our industry. National NFSA staff monitors all bills that are published nationwide, searching for key words. Bills that have a potential effect on the industry are then continually monitored to ensure that sprinkler industry needs are met. If necessary, staff will also contact our local members to reach out to their elected representatives.

In many cases, proposals are identified by regional staff a bill is published. These proposals are identified through member contacts, local news or other sources at the grassroots level. This is ideal as it allows us to prepare a response ahead of time. To assist with this process, NFSA members should contact their regional staff as they become aware of potential bills.

WISCONSIN

The Department of Safety and Professional Services has announced the Winter Code Seminars on their website under Programs/Commercial Building. These seminars will be offered as a hybrid in-person or online on March 4 or 18 at a cost of \$105. Registration is only online.

NORTHWEST

The Fire Sprinkler Advisory Board of Puget Sound launched a media campaign to promote the message that fire sprinklers protect what fire will destroy." Similar to the 2019 campaign, NFSA's 30 second spot will air on Seattle area network and cable channels. A shortened version of the ad will be run on online platforms, including YouTube. The campaign will feature an "advertorial" article in the Seattle Times featuring the importance of fire sprinklers to the many historical and new structures in the Puget Sound area. New this year is a sponsorship in Seattle Met magazine.

Both the Columbia-Willamette and Puget Sound chapters are planning events when the COVID restrictions are lifted. Watch your inbox for details and links to register on the NFSA website. If you have suggestions for speakers, please contact your Regional Manager or Chapter board members.

Because of the long drought of in-person training opportunities in 2020, your Regional Manager will be setting up seminars across the Northwest as local COVID restrictions are lifted. Be sure to go online to view NFSA's seminar catalog and then contact Suzanne Mayr with your training needs.

Washington, Oregon, Idaho, Montana and Alaska all opened legislative sessions in January. Be sure to watch for the Area 12 report emailed the first week each month for legislative updates. Your Regional Manager will be monitoring activities that may impact the sprinkler industry. One trend NFSA is monitoring is the rollback of existing building codes or the delay of implementation of enacted building codes.•

NORTHEAST

Fire in Newly Constructed Home Claims Life of Massachusetts Resident—NFSA Responds

On January 26th, a fast-moving fire in a Natick, Massachusetts home claimed the life of a male occupant. The fire broke out around 2 a.m. with a couple inside, both in different parts of the house.

The home, which was constructed only two years ago, was not built with fire sprinklers.

Your Association was quick to respond with a national press release. Vickie Pritchett reached out to Natick Fire Chief Michael Lentini and Chief Michael Newbury, President of the Fire Chiefs Association of Massachusetts, both provided invaluable quotes for the release. Thanks go to **Dave Lafond** for connecting us with the Chiefs to obtain the quotes!

The Release:

On January 26th, a family, a community, a company, a public safety dispatcher, and the fire department experienced a tragedy because of a fast-moving fire in a Natick, Massachusetts home. This fire claimed the life of a male occupant. The fire broke out around 2 a.m. with a couple inside, both in different parts of the house.

Modern furnishings and open floor plans of modern homes have been tested in actual field settings and laboratory settings where fast-moving fires resulted, creating no visibility in the homes within a few minutes. Because of the fast-moving fire and heavy flames in the Natick home that firefighters encountered upon their initial arrival, they were unable to enter and the fire went to three alarms.

The home, which was constructed only two years ago, was likely built to the Massachusetts State Building Code as adopted by the Board of Building Regulations and Standards (BBRS). Essentially, this is where commercial and residential construction is regulated and this is where fire sprinklers should have been included in the code, not excluded, as they were.

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In 2009, a requirement was added to the International Residential Code stating that all newly constructed one- and two-family homes must include fire sprinkler systems. This requirement has been retained in subsequent standards. Unfortunately, most states in the U.S., with the exception of Maryland, California and Washington D.C., leave out the fire sprinkler requirement when adopting building codes. Massachusetts is one of these states. Because of this, local governments aren't allowed to determine what is best for local fire protection in the residential code.

"Despite the best efforts of our Public Safety Dispatch system and our fire department, the fire consumed the contents and spread throughout the structure within minutes," explained Natick Fire Chief Michael Lentini. "These tragedies shouldn't happen in new homes in our quaint community or anywhere in our Commonwealth. We know that fire sprinklers buy time for the occupants to escape and for fire departments to arrive. I hope this tragic event can bring decision-makers together to increase education and awareness of the danger of fire."

"As President of the Fire Chiefs Association of Massachusetts (FCAM), I represent the Commonwealths Fire Chiefs. It's time to adopt the fire sprinkler requirements into the state building code," explained Chief Michael Newbury. "This will ensure that we will all fire sprinklers activating or that they are connected to the fire alarm. That is not the case. In nearly all fires in homes with fire sprinklers only one or two fire sprinklers activate closest to the fire, controlling the fire and keeping it from growing until the fire department arrives. Finally, a fire in a home needs the fire department regardless of whether it has fire sprinklers or not, as people may need help escaping and the fire needs to be completely extinguished and the home checked.

"We cannot help but point out the public policy failure at every level that this fire highlights," explains Shane Ray NFSA President. "This tragedy should not have occurred. It is a tragic example that the decision to protect people from fire should be made at the local level, especially when the state fails to take the proper actions. Our hearts go out to all those impacted by this tragic incident. We are hopeful that changes will be made."

Thanks to Underwriters Laboratories Firefighter Research Institute (ULFSRI) for conducting experiments since 2009 and for capturing a new side-by-side comparison of natural versus synthetic furnished rooms in 2020. The results of the tests have been very similar for over a decade. We believe that is what happened in the case of this fire in Massachusetts. NFSA and ULFSRI partnered together in 2016, using a modern 3,200 square foot house

be able to protect our residents and our brave firefighters by changing the future outcome of fire."

The use of modern building products and synthetic furnishings has reduced the time to escape a home fire "These tragedies shouldn't happen in new homes in our quaint community or anywhere in our Commonwealth. We know that fire sprinklers buy time for the occupants to escape and for fire departments to arrive. I hope this tragic event can bring decision-makers together to increase education and awareness of the danger of fire."

Illinois. In all experiments and tests conducted, the time to flashover, which means the house would be ines-

capable, was less than

five minutes. We are

inside the UL research

facility in Northbrook,

safely to less than three minutes. Fire sprinklers greatly increase the ability to escape a fire safely by controlling the flames until the fire department arrives. Having smoke alarms and fire sprinkler have been proven to protect lives and property against fire. In fact, fire sprinklers cut the risk of dying in a home fire by more than 80 percent. It is obvious from pictures available on home sales sights that this home had smoke alarms on every floor and in every bedroom, as required by the BBRS.

"We constantly ask ourselves how we can reach the public so that they understand how quickly fires occur with today's modern furnishings," adds Massachusetts Residential Fire Sprinkler Coalition Chair and Retired Fire Chief Paul Zbikowski. "Everyone says that new homes won't burn. Well, this is an example that that is simply not true. We must re-evaluate our Massachusetts Code and not remove the provision that can address this threat straight on. We are essentially building sub-standard homes when we leave this life safety feature out."

A fire in a home today needs smoke alarms to alert occupants, which in this fire, we believe they did. Fires in a today's homes needs fire sprinklers to contain the fire to the area where it starts. Only the fire sprinkler closest to where the fire starts activates and discharges water. Many movies or television commercials portray here to work with everyone to ensure proper information is available and that future tragedies are avoided. We are hopeful that the BBRS listens to the research and data and takes action to do what their website says "The BBRS regularly updates the state building codes as new information and technology becomes available and change is warranted". We stand ready to assist and ensure that these tragedies don't occur in houses not yet built.

About the National Fire Sprinkler Association (NFSA): NFSA was founded in 1905 and wants to create a more fire safe world and works to heighten the awareness of the importance of fire sprinkler systems from homes to high-rise and all occupancies in between. The Association is an inclusive organization made up of dedicated and committed members of a progressive life-saving industry. This industry manufactures, designs, supplies, installs, inspects, and services the world's most effective system in saving lives and property from uncontrolled structural fires.

For more information about fire sprinklers, how they work and access to additional resources and information, visit www.nfsa.org for the latest material, statistics and a dedicated team of fire safety advocates ready to serve all stakeholders in order to fulfill the vision of a safer world.

National Fire Sprinkler Magazine

he 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. <u>Images must be sent as attachments</u> to emails or through a file transfer site. We cannot use images embedded within a <u>document</u>. Charts and tables must be submitted as <u>separate</u> 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

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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.

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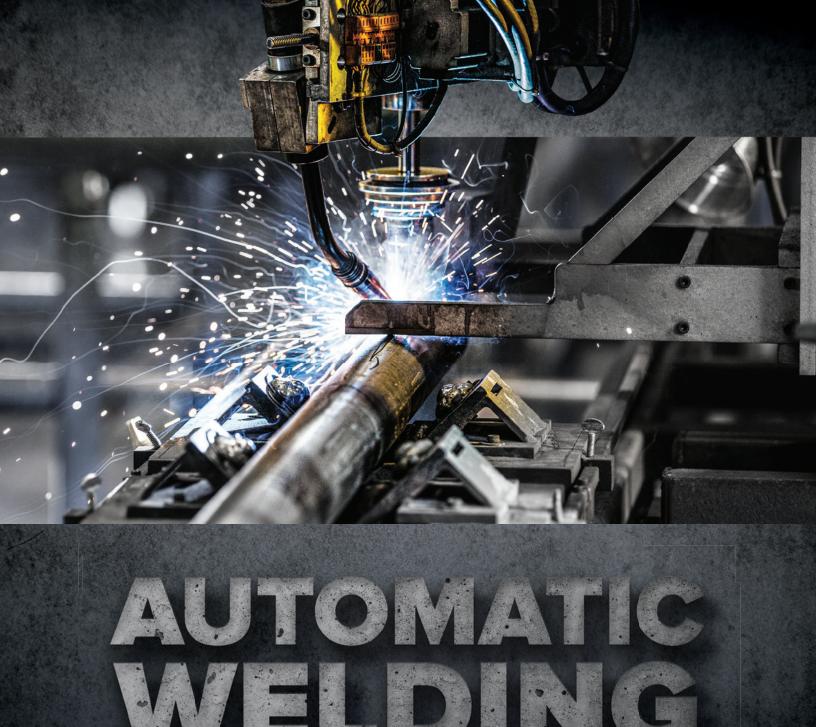




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