FPC
Fire Protection Contractor magazine
The Most Widely-Read Sprinkler Industry Publication

October 2023
$8

AIRCRAFT HANGAR SYSTEMS

also

Remote Areas

++Plus++

SFSS Report

AFSA42 Report

MODEL KFR-CCS

Combustible Concealed Space Sprinkler

No Draft Curtains

Enhanced Listing

The Reliable Model KFR-CCS Sprinkler is designed for the protection of specific light hazard combustible and noncombustible concealed spaces requiring sprinkler protection. Its high, flat spray pattern provides ideal coverage of these spaces and its rugged 212°F fusible link design requires no shipping protector. The KFR-CCS is suitable for installation with CPVC pipe (wet systems) or steel pipe (wet, dry or preaction systems).

The KFR-CCS recently received an enhanced cULus Listing:

- Protection of concealed spaces with trusses without requiring draft curtains.
- Protection of concealed spaces with trusses up to 60 inches in height.
- Maximum sprinkler spacing up to 16 feet in concealed spaces with trusses or non-combustible insulation-filled joists.
- Matches industry leading hydraulic requirements for wet systems.

Proper sprinkler application made easier with designer-friendly bulletin 044.

Assembled & Rigorously Tested in Liberty, SC

Reliable®

reliablesprinkler.com/ccs

In this Edition

October

~ On the Cover ~

Cover photo courtesy of Jim Devonshire, Manager - Foam Business at Buckeye Fire Equipment Company. He kicks off the Aircraft Hangar feature on page 14. The Remote Areas feature is found on pages 19 and 24. And, ICYMI: catch up on all the fun at the SFSS and AFSA42 events! Good times, good company, GREAT industry!

Aircraft Hangar Systems

Remote Areas

COLUMNS

NEWS

DEPARTMENTS

Editorial

The Blessings of Being Best

Don't get me wrong, I'm not saying we're the best, or that we are even close to being the best that we can be, but the fire sprinkler industry contains some of the ***best*** people in the world, and I believe that from the bottom of my heart.

And fire sprinkler systems are the ***best*** fire protection money can buy!

Having just been to AFSA42, I experienced ***the blessing of being with the best!***

Amongst us are the best minds, the best engineers, the best speakers, the best motivators, the best apprentices, the best fitters, the best designers, the best contractors, the best bosses, the best estimators, the best fabricators, suppliers, and manufacturers.

Simply the best.

Fire sprinklers are the best fire protection money can buy!

— *Brant R. Brumbeloe*, Editor
Son of Sprinkler Man

Proverbs 10:22
The blessing of the Lord makes one rich,
And He adds no sorrow with it.

According to the Bureau of Labor Statistics: *Projections for the population, labor force, and Gross Domestic Product (GDP) are closely related. All three are expected to experience slower growth over the 2022–32 projections period relative to the growth rates seen over the previous several decades.*

We can do better. We can fix this.
Unleash the energy sector: Drill Baby Drill.
Secure the Border.
Secure the Nation, Get tough on Crime.
Be Fruitful and Multiply.
Put these things first:
God, Family, Work.
It is not always easy, but it is worth it.

Ephesians 1:3 — Redemption in Christ
Blessed be the God and Father
of our Lord Jesus Christ, who has
blessed us with every spiritual blessing
in the heavenly places in Christ...

***FPC* magazine,** **Fire Protection Contractor**
ISSN: 1043-2485

Volume 46, No. 10
Since 1978

EDITOR & PUBLISHER *Brant R. Brumbeloe* | **ASSOCIATE EDITOR & PRODUCTION MANAGER** *Tami L. Collins*
ASSOCIATE EDITOR & OFFICE MANAGER *Leigh Petersen* | **ASSOCIATE EDITOR & OFFICE ASSISTANT** *En Brumbeloe*
ADMINISTRATIVE ASSISTANT *Lillian Brumbeloe* | **FOUNDER** *Haden B. Brumbeloe, P.E., F.P.E.*

FPC/Fire Protection Contractor is published for the benefit of fire protection contractors, engineers, designers, sprinkler fitters, apprentices, fabricators, manufacturers, and distributors of fire protection products used in automatic fire sprinkler systems.

Circulation: Last month, September 2023, our circulation was 1,767 copies and 24 digital subscriptions. We have subscribers throughout the United States and Canada and several foreign countries and territories.

Readership: Fire sprinkler contractors and systems designers make up most of our circulation. Readers include architects, engineers, fabricators, manufacturers, suppliers, unions, fitters, universities, libraries, etc., totaling over 40 categories.

Subscription Rates: In the U.S.: 3 years/$171, 2 years/$124, 1 year/$68. Mexico and other countries, $145 per year (payable in U.S. dollars), First Class International. Canadian rates are (USD): 3 years/$272, 2 years/$192, 1 year/$102 (5% GST included). Digital rates: $55 per year.

Advertising deadlines for display ads is the first of each month for insertion in the following month's issue.

Submittals: All letters, articles, and photographs are welcome and should be directed to Editor's attention. Material will not be returned unless accompanied by self-addressed, stamped envelope.

FPC/Fire Protection Contractor is published monthly in Auburn, California; Phone: (530) 823-0706, Website: www.fpcmag.com, E-mail: info@fpcmag.com by Haden B. Brumbeloe & Associates, Inc. Periodicals postage paid at Auburn, California and additional mailing offices.

POSTMASTER: Send address changes to
FPC/Fire Protection Contractor
P O Box 370
Auburn, CA 95604-0370

ISO CERTIFIED

Rest assured—when you work with any of our ISO-certified fabrication facilities, you're benefitting from products and services that are held to industry-leading quality specifications.

FERGUSON
FIRE & FABRICATION

VISIT US ONLINE AT
FERGUSON.COM/FIRE

Social Chatter

DiD YOU SEE THAT?
>> SOCiAL CHATTER <<

AFFF Foam???!!!

The following comment was in a thread on LinkedIn. Reprinted with permission:

Wait. You tested and flowed AFFF foam???!!! Be careful please, the class action lawsuits are very big. To protect your company this should be a strong NO.

Help your customer get the replacement foam, but do NOT get rid of the old foam. Put that on your customer. I don't want to see contractors being sued for something that can be avoided.

Also, remember the new synthetic foam is not the same, it's not just a quick replacement.

— Henry Fontana, Vice President of Sales
S.A. Comunale
Barberton, OH
❑

WHAT DO YOU THiNK?
Send your Reactions, Opinions, or Comments to:
info@fpcmag.com

Question of the Month

Where do you see things going for the fire sprinkler industry in 2024?

Please share your experiences, insights, and wisdom gained regarding the fire sprinkler industry. We publish stories, views, opinions, ideas, and photos related to the fire sprinkler industry. *Please advise if you wish to remain anonymous.*

Please e-mail today!
FPC/Fire Protection Contractor
info@fpcmag.com

Advertisers Index

National

Construction Planning Posts Largest Drop Since March

Commercial and institutional activity are likely to continue to be constrained for the rest of 2023, as evidenced by a key index's sixth straight decline.

An article by Sebastian Obando posted September 11, 2023, on www.constructiondive.com, said the Dodge Momentum Index, a benchmark that measures nonresidential building planning, dropped 6.5% in August due to slowdowns in both commercial and institutional projects, according to the Dodge Construction Network.

August's drop means the Index, which peaked in December 2022 and typically leads actual construction spending by 12 months, has now contracted for six straight months. It was also the largest drop in the Index since March.

"Overall activity remains above historical norms, but weaker market fundamentals continue to undermine planning growth," said Sarah Martin, Associate Director of Forecasting for Dodge Construction Network. "It's likely that the full year of tightening lending standards and high interest rates has begun to affect institutional planning, which has otherwise been resistant to these market headwinds."

The commercial component of the Index, which includes retail, warehouse, and office, dropped 1.6% in August, while the institutional sector, encompassing **healthcare and education projects, tumbled 14.8%**. On a positive note, the DMI remained 4% higher than in August 2022.

The sizable decline in the institutional sector stems from a deceleration in education, healthcare, and amusement planning activity, according to Dodge.

On the commercial side, stronger hotel planning offset weaker office activity. That caused just a mild regression in the commercial segment over the month, according to Dodge.

But both commercial and institutional planning will continue to be constrained during the final months of 2023, said Martin.

Meanwhile, architectural activity, which also provides a gauge for upcoming construction work, remained flat on a national level, according to the most recent data from the American Institute of Architects. The report pointed to slowdowns in public sector projects and overall financing issues.

A total of 22 projects valued at $100 million or more entered planning in August, according to Dodge.

National

Construction Backlog Indicator

Associated Builders and Contractors (ABC) reported on September 6, 2023, that its Construction Backlog Indicator declined to 9.2 months in August, down 0.1 month, according to an ABC member survey conducted from August 21 to September 6. The reading is 0.5 months above the August 2022 level.

Backlog decreased on a monthly basis for all categories of company size except for those with more than $100 million in annual revenues, while only the smallest two revenue categories have higher backlog than in August 2022.

ABC's Construction Confidence Index reading for sales, profit margins, and staffing levels moved higher in August. All three readings remain above the threshold of 50, indicating expectations of growth over the next six months.

"There's no sign of a construction recession in the near term," said ABC Chief Economist Anirban Basu. "If anything, contractors are more upbeat, as policy and technology shifts, along with economic transformation, are creating substantial demand for improvements and growth in America's built environment.

"While a plurality of contractors expects only small improvements in sales, profit margins, and staffing over the next six months, even incremental improvement is remarkable in the context of tightening credit, higher project financing costs, and lingering fears of recession. Backlog continues to be at the upper end of historic levels, with the infrastructure category registering substantial gains in backlog in August. That suggests that a growing number of public works projects is poised to break ground."

The blessing of the
Lord makes one rich,
And He adds no sorrow with it.
– Proverbs 10:22

National

Pye-Barker Fire & Safety Enters 40TH State, Adds Five New Locations

Pye-Barker Fire & Safety — the largest fully integrated fire protection, life safety, and security services provider in the United States — continues its high velocity growth with the acquisition of Iowa Fire Equipment Company. Iowa Fire Equipment Company, itself a leader in fire protection and fire alarms, serves 16 states throughout the Midwest and the state of Florida. Through the transaction, Pye-Barker significantly furthers its reach within the Midwest, adds five new locations, secures the Iowa market, and enters Indiana. Pye-Barker now operates over 170 locations spanning 40 states.

Iowa Fire's highly qualified team will continue to serve customers in the Midwest and Florida.

About Pye-Barker Fire & Safety: Pye-Barker Fire & Safety is a U.S. leader in fire protection, life safety, and security systems. Founded in 1946, Pye-Barker is the largest fully integrated provider of testing, maintenance, and installation of fire detection systems, fire alarms, extinguishers, **fire suppression and sprinkler systems,** security, and monitoring services for businesses nationwide. The company operates over 170 locations and puts significant focus on customer experience and training, competitive benefits, and a caring work environment for its 5,000 team members.

Maine

Fire Chief Advocates for Residential Sprinkler Systems

An article by Malachy Flynn posted September 12, 2023, on www.mdislander.com, Bar Harbor, Maine, said Bar Harbor Fire Chief Matt Bartlett gave a public service announcement and presentation on residential sprinkler systems at the Planning Board meeting on September 6, 2023.

The Chief explained the way old and new buildings burn and showed the dif-

ference that having a sprinkler system can make when a building is on fire.

According to Chief Bartlett, "legacy fires," which occur in older buildings that contain more natural materials, burn much differently than fires in recently constructed buildings because new construction contains synthetic components.

To illustrate the difference, the Chief showed a video that compared a burning building with natural materials with a burning building with synthetic materials.

In the video, the "legacy," or natural fire, took several minutes to begin burning. Once burning, the fire spread slowly. The modern, synthetic fire, however, caught fire in seconds and quickly spread while creating a large amount of smoke.

"There's a significant difference between the two fires," said Chief Bartlett. "This is the fire behavior we see now, and you can see within three minutes it's not survivable to be in that room with the amount of smoke and heat in that room."

He explained that synthetic materials create much hotter, farther-burning fires that release more toxic gases and chemicals than fires in older buildings. He said that this is why he is pushing for more new buildings to include sprinkler systems.

"I just kind of wanted to give you a little demonstration of what we see for fires now and why you're starting to hear me talk about residential sprinkler systems more and more," Chief Bartlett said.

He then played a video that showed two mock rooms that demonstrated the efficacy of sprinklers on a burning building. Both rooms contained furniture and had curtains on the walls, which firefighters deliberately lit for the demonstration.

In the first room, which had no sprinklers, the furniture and the curtains caught fire and flames quickly engulfed the room. Chief Bartlett noted that this type of situation is especially dangerous on the lower level of a home because heat will rise and quickly spread the fire upstairs.

In the second room, which was equipped with a sprinkler system, the fire quickly activated the sprinklers, which extinguished most of the flames, and greatly reduced damage.

"You can see the difference in destruction where the other one [without sprinklers] actually burned right through the sheetrock and burned out the back," explained Chief Bartlett.

He went on to explain the life safety and fire prevention code that the town adheres to and where sprinkler systems come into play. While the National Fire Protection Association recommends sprinklers in all new single-family homes, Maine has not adopted that measure, so neither has Bar Harbor.

"We do mirror the state," Chief Bartlett said. "The state has not adopted sprinkler systems yet for one- and two-family dwellings."

Bartlett said that sprinkler systems can be a better alternative to existing required town residential fire safety measures.

Currently, residential buildings that use a public water supply need to be within 500 feet of a fire hydrant. Residences that are not on public water have a few options, such as dry hydrants and fire ponds. For new buildings, he recommends that they be equipped with sprinkler systems.

Fire ponds can be lakes, ponds, or high-level streams that contain enough water to allow firefighters to draw from if they need to. Dry hydrants are dug-out water sources on a property that fill with groundwater that the firefighters can then use. These methods can be effective, but they also require upkeep and maintenance to remain an adequate source of water to fight fires. They can also fail and not provide the water that is needed.

The biggest drawback is that these alternative sources require several additional firefighters to get water, which takes those crew members away from the scene of the fires. In some cases, it requires additional trucks to transport water.

"It takes two to three firefighters to manage one of those water sources — it's not a one-person operation. You're handling six inches of 10-foot lengths of hose, three or four of them to get to a water source," Chief Bartlett explained. "We're going to dedicate more people, more resources, to that water supply versus having them be able to fight the fire."

He said that sprinklers offer a faster response to residential fires than other means of extinguishing flames. Sprinkler systems are activated when the building reaches a certain temperature, which means the sprinklers can begin extinguishing flames much faster than other water sources. This reduces damage to the structure, reduces the risk posed to firefighters entering the burning building, reduces the amount of toxic fumes emitted and, most importantly, saves lives.

"Eighty percent of all fire deaths occur within the home in this country, and during my time, 33 years of being with the fire department, we have experienced five fire deaths," Chief Bartlet said. "And four of them have been in residential structures."

The Chief's personal view was that **sprinklers should be implemented on all new construction,** especially in residential buildings or transient accommodations. He said that he hopes to look at ordinance changes that would make that happen.

"I firmly believe in the sprinkler systems and the potential that sprinkler systems can have," Chief Bartlett said.

Minnesota

Group Helps Retrofit Group Home with Fire Sprinklers

A September 11, 2023, article on www.hometownsource.com, Eden Prairie, Minnesota, said the Eden Prairie Firefighter Relief Association organized a fundraising campaign in 2021 that raised nearly $30,000 to support special projects and events in Eden Prairie. Recently, the Association donated $10,000 of the funds to make it possible for a local group home to retrofit one of its buildings with fire sprinklers.

The Lodges of Eden Prairie, a local group home facility consisting of three two-story homes, took advantage of the Association's donation offer almost immediately. One of the houses at The Lodges already included a fire sprinkler system, but thanks to the donation, the organization was able to retrofit a second building. They plan to retrofit the final home when funds allow.

"On behalf of the fire department, I would like to express my sincere thanks to our Fire Relief Association for this generous and proactive approach to increasing safety in our community," Fire Chief Scott Gerber said. "I would also like to personally thank the leadership at The Lodges for committing to the installation of this important safety tool."

Firefighter Relief Association President Collin O'Brien presented a $10,000 check on August 25 to the management team of The Lodges at a ceremony. Eden Prairie firefighters and residents of the retrofitted house were also present at the event.

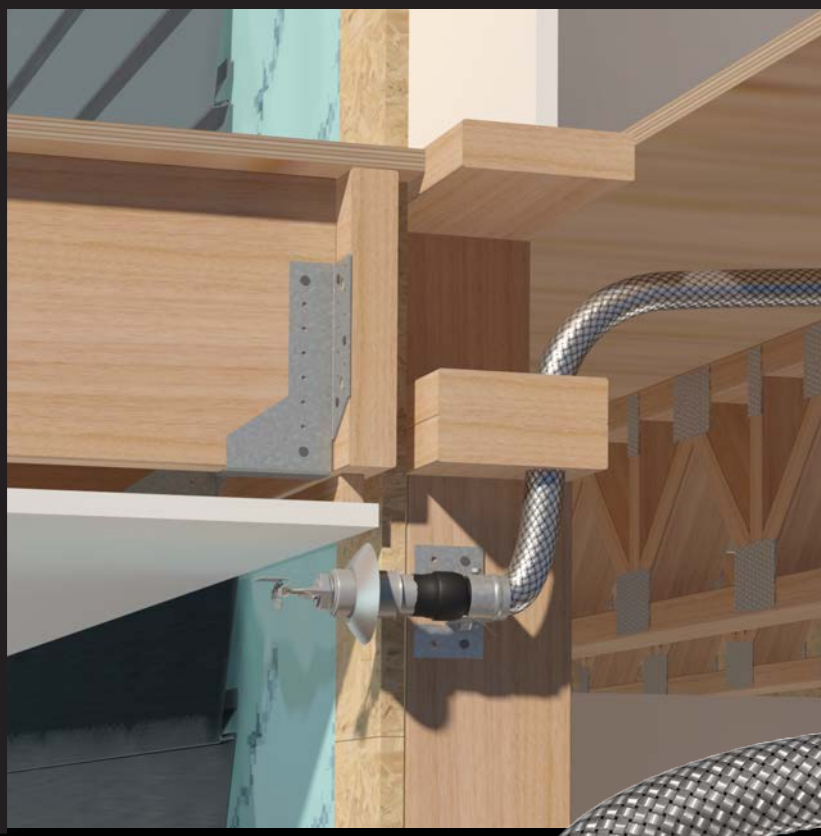
Thanks for sending this item goes to Kelly P. Reynolds, Code Consultant www.kellyreynoldscodes.com

❑

"I believe the Bible is the best gift God has ever given to man. All the good from the Savior of the world is communicated to us through this book."
— Abraham Lincoln

Victaulic®

EVERY DAY, ON EVERY PROJECT
WE WORK FOR YOU.



VICFLEX™ SERIES VS1
FLEXIBLE DRY SPRINKLER

ADAPTABLE TECHNOLOGY FOR YOUR TOUGHEST DRY APPLICATIONS

- Safeguards against frozen pipes and system impairment by keeping sprinkler water away from freezing conditions.
- Applicable wherever dry sprinklers are currently installed, such as multi-family residential, balconies and breezeways, data centers, parking garages and assisted living facilities.
- Meets NFPA 13 installation requirements for dry sprinklers
- 2” cULus bend radius

Scan for a close-up look at how the Series VS1 works

People

Send **PEOPLE** *items to: info@fpcmag.com*

Dr. James A. Milke, Professor (ret.) Fire Protection Engineering, University of Maryland, was awarded the American Fire Sprinkler Association's ***Henry S. Parmelee Award.***

This award was established to recognize an outstanding individual who has dedicated himself or herself to the professional advancement of the fire sprinkler industry and the goal of fire safety through automatic sprinklers.

Dr. Milke, a professor, educator, mentor, and leader, has dedicated over 40 years.

A member of the University of Maryland faculty since 1977, Dr. Milke is a Professor in the Fire Protection Engineering Department. He served as Department Chair from 2011-2023. Milke was also Director of the distance option for the Master of Engineering Program.

In 1991, he received his Ph.D. from the University of Maryland in Aerospace Engineering. He received a Master of Science degree in Mechanical Engineering and is a 1976 graduate of the Fire Protection Engineering program.

Dr. Milke is a Fellow and a past President of the Society of Fire Protection Engineers (SFPE). He is a member of several professional societies, including SFPE, NFPA, and the International Association for Fire Safety Science. He also served on the NFPA Standards Council.

For more information visit: www.sprinklerage.com.

Todd Short, Redmond Fire Department Fire Marshal, is the American Fire Sprinkler Association's ***Fire Sprinkler Advocate of the Year.***

Short has made a lifelong commitment to protecting people from the dangers of fire and to educating the public about the benefits of fire sprinklers.

As Assistant Fire Marshal for the Redmond, Washington, Fire Department, Short was instrumental in the passing of the city's residential fire sprinkler ordinance. He also helped secure the required approval of the State Building Codes Council (SBCC). Additionally, the SBCC determined that any subsequent jurisdiction in Washington state that passed a local ordinance for fire sprinklers in new homes would only have to provide notice of such ordinance to the SBCC and not have to gain a specific approval — another win.

Short also helped create the Best Practices Forum, which provides a place for AHJs, contractors, designers, plumbers, water purveyors, builders, and anyone else with a stake in the fire sprinkler industry to collaborate on the best practice from permit application to final inspection. The Forum also produces a "Best Practices Guide" that can be used by both AHJs and fire sprinkler contractors to anchor to a consistent and voluntary consensus document.

For more information visit: www.firesprinkler.org.

Adam Levine, P.E., President of Capitol Fire Sprinkler, Woodside, New York, has been elected by his peers as the recipient of AFSA's 2023 ***Young Professional of the Year Award*** for his education, experience, and involvement in the fire sprinkler industry. The award highlights the efforts of a young and talented fire protection professional who is under 40 and demonstrates exemplary technical, professional, and inclusive leadership skills, not only in their own businesses but also at a national level.

Levine graduated with a bachelor's degree in fire protection engineering in 2006 from the University of Maryland. After years of training and gaining experience in various capacities, he joined Capitol Sprinkler full-time in 2009. Later, he obtained his MBA in entrepreneurship in 2011 from Baruch College. It was at the stroke of a new decade that Levine finally became the President and Owner of Capitol Fire Sprinkler in 2020.

Levine serves on the NFPA 14 Technical Committee.

"Adam volunteers a significant amount of time to the industry and has facilitated AFSA's involvement with the New York Fire Sprinkler Contractor's Association," commented Kevin Hall, M. Eng, P.E., ET, CWBSP, PMSFPE, Senior Manager of Engineering and Technical Services for AFSA.

For more information visit: www.firesprinkler.org. ❑

Wayne H. Gey

October 4, 1943 - August 30, 2023

From the LinkedIn post:

"It is with a very heavy heart that Wayne Automatic is sharing the news that the good Lord has called Wayne Gey home. The founder and leader of Wayne Automatic Fire Sprinklers has lost his long, courageous fight with cancer.

"Wayne has meant so much to so many of us…father, grandfather, friend, leader, mentor, and so much more. A true legend in the industry we love so much, Wayne left an indelible impact not only on each of his team members but was instrumental in charting so much of the course of the fire sprinkler business on a national level.

"More than anything, Wayne will be remembered for being a genuinely great person. His incredible generosity was a reflection of who he was, and his guiding principle in everything he did was to create opportunities for each and every team member.

"We have all been blessed to know Wayne Gey and to be part of this amazing organization. Our team members are ready to carry on Wayne's legacy.

"We ask for your prayers for the Gey family as they are in a time of unimaginable grief. And we are asking that you respect their privacy by limiting your communications, as they will not possibly be able to respond."

Of Special Note:

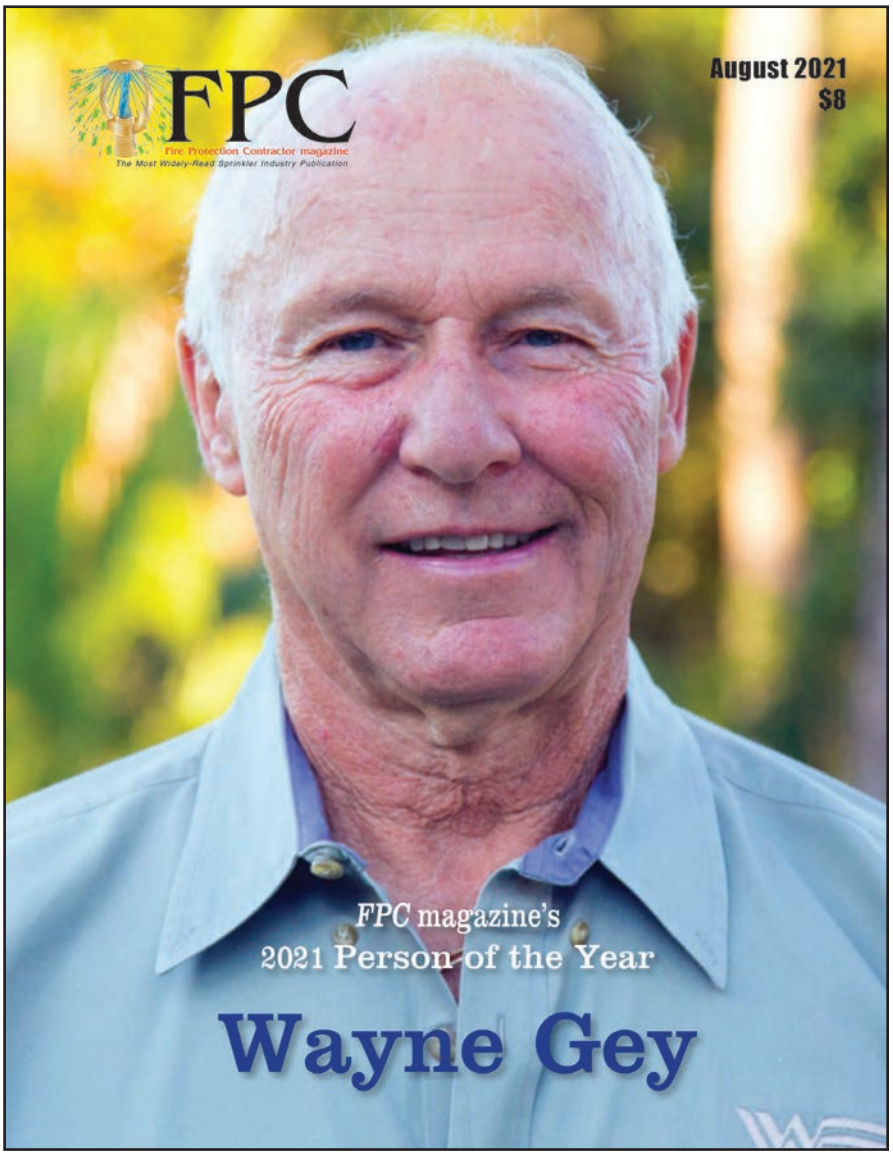
There was a service on Friday, September 8, 2023, and one person estimated that there were over 600 people in attendance.

Wayne H. Gey was born October 4, 1943, in Athens, Alabama. He moved to Florida in 1961. In 1963, he married Brenda Gowen and they had four children during their 37 year marriage: Clark, Derron, Meladie, and Brian "B.J." He married Annie Sutton Ragar in 2018.

He established **Wayne Automatic Fire Sprinklers** in 1978 and grew the family business to over 700 team members in Florida and North Carolina.

He was a trailblazer in the fire protection industry, never satisfied with the status quo. He was the Board Chairman of the National Fire Sprinkler Association (NFSA) from 2007-2009 and the 2009 recipient of the ***Golden Sprinkler Award.*** He was also a founding member of Common Voices.

Wayne Gey was ***FPC's Person of the Year*** in 2021.



Foam Fire Protection for Aircraft Hangars

By Jim Devonshire

Aircraft hangars present an interesting challenge to fire protection engineers because there is an inherent risk (albeit minimal) with the aviation fuels contained within the aircraft; yet, fires in aircraft hangars are extremely rare. To their credit, owners and operators exhibit a safety culture that minimizes the risk and they should be commended for that.

Unfortunately, there are those unwanted foam system discharges in aircraft hangars, which can be attributed to a few factors that have reported to include lightning strikes, condensation or moisture in the electrical systems resulting in a short circuit that trips the release mechanism, or, in one particular case, a malfunction in the hangar building heating system. Subsequently, designers should consider mitigation methods for these eventualities, even if it costs a little more.

NFPA 409 (2022) is the *Standard* for fire protection systems in aircraft hangars and the content is, for the most part, outside the scope of this article. NFPA 409 is a comprehensive *Standard*, but there are one or two areas of confusion. From actual conversations, some people have interpreted paragraphs 8.2.4.5 and 9.2.5 as a design for foam application. This is not true — these paragraphs refer to water only sprinkler application.

Supplementary foam hose reel.

NFPA 409 eliminated supplementary foam hose lines on the assumption that they would not be used to fight fires inside the building. (To cut cost?) While this might be true, the hose line elimination leaves no effective method to control non-fire fuel spills and other small incipient fires without activating the overhead foam systems. This should be a consideration for designers when reviewing aircraft hangar fire protection systems and their overall effectiveness.

Owners and operators should be professionally trained in the use, operation, and limitations of the foam/water hose lines when installed.

Once installed, these fire protection systems, predominantly foam systems, should be inspected and tested by properly qual-

Risers with bladder tank.

Riser test connections.

ified individuals. For the most part the systems installed will be either A.F.F.F. (aqueous film forming foam) or high expansion foam. Discharging these systems into the hangar space is not only challenging, but next to impossible due to the business interruption effect. So, how can the longevity and operability of these systems be verified to comply with the *Standard*?

There are several components to these systems — detection and control, foam concentrate proportioning, and the discharge devices — that can be inspected and tested individually to produce the integrated and homogeneous system performance.

For the detection and control system, the discharge valve can be isolated to prevent water and/or foam solution discharge and the system "dry tripped" to verify integrity and that the releasing mechanism performed as designed.

The foam concentrate proportioning system is another matter. To ensure that proper proportioning is achieved, the system will require a functional flow test. This can be accomplished by using a test connection on the riser and flowing the system above the minimum rate to where the proportioner will proportion the foam concentrate and water accurately. The riser must be capped or valved to prevent foam solution flow into the protected space. The discharged foam solution will be collected in a large vessel and disposed of in accordance with local requirements.

When considering the collection of discharged foam/water solution, the size of the collection vessel is critical. While the test flow rate may be in the order of 500-gpm (1,900 lpm), it will produce a *much larger* volume of finished foam bubbles. The volume of expansion could be in the order of 5-8 times that of the flow rate. So, get a BIG vessel, such as a "Baker" tank, one typically found in the oil fields. With care, this will provide a sufficient volume to prevent spilling foam bubbles on the ground. Defoamers can be applied, but they do take some time to influence the foam breakdown.

These days, with environmental considerations at the forefront, testing the discharge devices, particularly with the "real" foam concentrate, will be thought-provoking. If we consider an overhead foam/water deluge system, flowing into the protected space is probably a non-starter due to business interruption. At a minimum, the piping system should be internally inspected with a borescope (endoscope) camera to determine the level of corrosion, if any. Evaluation of the results of this inspection will determine what, if any, remedial measures are required. A significant build-up of corrosion, which may be dislodged by water and/or foam/water solution flow, will likely impede discharge from a typical sprinkler head. Corrective action, up to and including replacement of the piping system, may be required.

Other discharge devices such as hose lines are relatively easy to functionally test, in that the hose can be stretched out and the foam solution discharged directly into the collection vessel.

Group I hangars may include water-powered oscillating monitors and they can be operationally tested with a garden hose connected to the mechanism without a full water or foam/water solution flow. In the event a full flow is desired, the nozzle can be removed and a hose connected in place of the nozzle and the flow directed to the containment vessel.

In the case of the hose reels and oscillating monitors, collection of the foam/water solution sample should be taken at the riser to minimize the amount of effluent discharged, thus effectively reducing the costs for disposal.

This article has briefly touched on several subjects related to aircraft hangars, but more detailed information is available upon request from several sources.

About the Author:

Jim Devonshire is Manager - Foam Business at Buckeye Fire Equipment Company.

Buckeye Fire Equipment manufactures a complete line of foam agents and hardware that when used in conjunction with one another make an unbeatable fire-fighting combination. The selection includes bladder tanks, balanced pressure pump skid paks, educators, monitors, foam chambers, foam makers, high expansion foam generators, foam carts, and hand-line nozzles. Many of the components can be customized to provide optimal protection for your unique situation. All foam system components are precision made from rugged materials to provide years of dependable service.

For more information contact: Buckeye Fire Equipment Company, 110 Kings Road, Kings Mountain, NC 28086; (704) 739-7415, jim@buckeyefoam.com.

Oscillating monitor.

Oscillating monitor foam discharge.

SFO Case Study

High-Expansion Foam Fire Suppression System Upgrade Helps Safeguard San Francisco International Airport's SuperBay Hangar

By Carol Dutton

The SuperBay hangar, located at San Francisco International Airport (SFO), is a 276,000 sq. ft. building that can house four 747 aircraft at one time. The facility is a working maintenance hangar servicing two major international carriers and is subject to a continual flow of aircraft in and out of the building, which consists of two massive bays on either side. A six-story structure that separates the bays is used to store materials and house various mechanical systems, including the fire suppression system.

In 2016, planning began on a fire suppression system upgrade for the SuperBay hangar. The SuperBay's decades-old protein foam system needed to be replaced with a modern, more efficient solution. OCI Associates, Inc. (OCI), the engineering firm responsible for this project, partnered with Johnson Controls to deliver a fire suppression system powerful enough to help protect the hangar's massive footprint.

Engineering and design of the customized fire suppression system leveraged the equipment supplier's deep understanding of NFPA codes and standards. The new system needed to help protect the building and the high-value, high-hazard property housed in it, and it also needed to be implemented in a way that allowed for uninterrupted operations during installation. Other key criteria included optimizing foam system water usage, minimizing downtime for tenants, and incorporating fail-safe shut-off.

After extensive evaluation, OCI selected a non-fluorinated, high-expansion foam system for primary fire protection of the hangar's assets. The high-expansion foam technology produces an enormous volume of foam in a very short period of time, helping to smother a fire, suppress vapors, and combat reignition, all while minimizing water usage. The fully engineered foam system from Johnson Controls incorporated ANSUL® JET-X high-expansion foam generators with JET-X 2% non-fluorinated foam concentrate stored in ANSUL® 400-gallon pre-piped horizontal bladder tanks. A complementary water sprinkler system was installed for structural protection of the hangar.

High performance, demonstrated reliability, and strong technical support drove selection of this fully integrated fire protection system for SuperBay. The high-expansion foam system series installed at this massive hangar has provided successful fire and vapor suppression for over a thousand hangars and

storage facilities around the world. With impressive expansion ratios up to 1000:1, the foam output is designed to suppress a jet fuel fire on the bay floor in minutes with minimal water consumption.

The latest revision of National Fire Protection Association (NFPA) 409: *Standard on Aircraft Hangars* allows design professionals to consider alternatives to foam fire suppression systems when protecting some aircraft hangars. This includes the use of water-based suppression systems and ignitable liquid floor drainage systems in lieu of foam systems.

"With decades of experience in hangar protection, our team was uniquely positioned to tailor a system to help effectively protect this immense hangar. If updated options per the recent changes in NFPA 409 were available at the time of this project, I'm confident our team would still recommend this same high-expansion foam fire suppression system," said Dennis Phillips, Senior Business Development Manager, Johnson Controls. "When considering alternatives, it's important to remember that those methods must be equivalent to or superior in effectiveness than the solutions they are replacing. Foam fire suppression systems have a long history of providing effective protection in aircraft hangars and set a high bar for alternative systems to provide an equivalency for this specific application."

"If updated options per the recent changes in NFPA 409 were available at the time of this project, I'm confident our team would still recommend this same high-expansion foam fire suppression system."

How the System Works

High-expansion foam systems help suppress horizontal and vertical (three-dimensional) fires in large hazard spaces. In a high-expansion system, bladder tank assemblies meter foam concentrate through flange proportioners into the fire water line, creating a foam solution. The solution is then piped to the foam generator discharge devices protecting the hazard area.

The high-expansion generators utilized at SuperBay are engineered to produce voluminous quantities of low-water-content foam at optimum expansion by blowing air through a screen coated with the corresponding UL Listed foam solution. This non-fluorinated, high-expansion foam discharge creates a foam blanket to help suffocate and cool the fire, combat reignition, and suppress vapors and particulates.

The foam system also incorporates unique deluge valves with a remote-resetting feature. In the event of an accidental activation, these valves allow for a system override from one or more locations within the hangar — a feature that can limit unnecessary downtime within the facility.

In addition to the state-of-the-art foam system to help protect the assets within the hangar, OCI also worked with the supplier to design and install an ancillary water sprinkler system. This system features standard coverage, extended coverage, and extra-large-orifice sprinklers to help protect the building structure itself. In total, the complete fire protection solution includes 48 foam generators, eight foam bladder tanks, eight deluge valves, and close to 5,000 fire sprinkler heads. The system is UL Listed and complies with NFPA 409 requirements.

Working together, the OCI engineering team and Johnson Controls technical service group delivered a total fire suppression solution for SuperBay that provided both the foam system upgrade to assist asset protection as well as the water sprinkler system to assist building protection.

This comprehensive fire suppression installation was commissioned and approved with a full capability demonstration of the high-expansion foam system in July 2020. This four-year collaborative effort delivered a state-of-the-art fire protection solution that has provided years of uninterrupted operation and will keep SuperBay servicing the aviation community for decades to come.

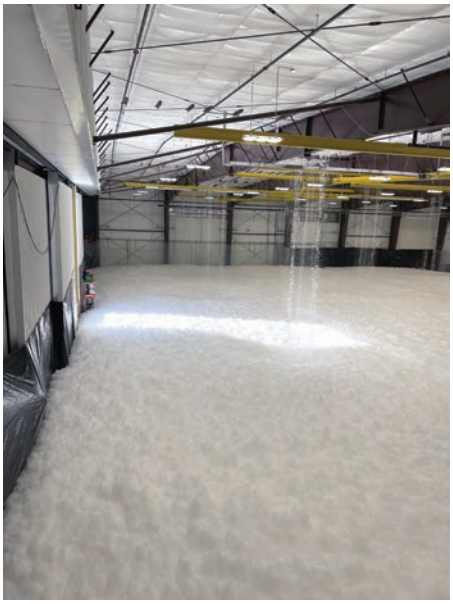
About the Author:

Carol Dutton is Global Product Marketing Manager for Foam Systems at Johnson Controls. She may be reached at: carol.dutton@jci.com.

The Impact of Empty Aircraft on Fire Sprinkler Systems in Hangars

By David Cook, CPE

Aircraft hangars are designed to house and maintain valuable aircraft, and ensuring the safety of both personnel and aviation assets is paramount. Fire safety is a critical consideration in these facilities, with fire sprinkler systems playing a vital role in mitigating potential risks. But what happens when an aircraft is empty of fuel inside a hangar? In this article, we'll explore the impact of empty aircraft on fire sprinkler systems in aircraft hangars.



1. Reduced Fire Hazard

When an aircraft is empty of fuel, the most significant fire hazard associated with aviation operations is significantly reduced. Aviation fuels are highly flammable, and in the event of a fuel leak or ignition source, a catastrophic fire can occur. When an aircraft is fuel-free, the risk of such a fire is greatly diminished.

2. Lower Fire Suppression Demand

One immediate consequence of an empty aircraft is a reduced demand for fire suppression from the sprinkler system. Aviation fuel fires typically require specialized suppression systems, such as foam or high-density water deluge systems, due to the intensity of the flames. When an aircraft is devoid of fuel, the standard fire sprinkler system may be adequate to handle potential fires.

3. Maintenance and Safety Benefits

Empty aircraft in hangars can provide numerous maintenance and safety benefits. Technicians and maintenance personnel can work more safely without the risk of fuel-related fires. Routine inspections, repairs, and modifications can be performed without the need for special safety precautions related to fuel handling.

4. Potential for Storage or Repositioning

Hangars are often used for purposes beyond aircraft storage and maintenance. When aircraft are empty of fuel, the hangar space can be temporarily repurposed for other activities or used for the storage of non-aviation-related equipment or goods. This flexibility in hangar usage can enhance operational efficiency and versatility.

5. Impact on Fire Sprinkler System Design

The empty or fuel-free status of an aircraft can influence the design of the fire sprinkler system within the hangar. Specifically:

Sprinkler Density: With a reduced fire hazard, the required sprinkler density may be lower, impacting the number and placement of sprinkler heads.

Suppression Systems: The absence of aviation fuel may eliminate the need for specialized suppression systems, leading to cost savings in system design and maintenance.

6. Consideration for Future Use

While the aircraft may be empty of fuel today, its status can change. Hangar operators should always consider the potential for fueling operations in the future. Designing fire protection systems with flexibility to accommodate both empty and fueled aircraft is a wise approach.

7. Regulatory Compliance

Even when aircraft are empty of fuel, hangars must still adhere to regulatory fire safety standards. Regulatory agencies like the National Fire Protection Association (NFPA) often provide guidelines that consider aircraft fueling operations. Compliance with these *Standards* ensures that hangars are prepared for any change in aircraft status.

Empty aircraft in aircraft hangars present a different fire safety scenario compared to fueled aircraft. The reduced fire hazard, lower suppression demand, maintenance benefits, and potential for versatile hangar usage are notable advantages. However, hangar operators should carefully consider the implications for fire sprinkler system design and always remain compliant with regulatory standards. Whether aircraft are empty or fueled, the safety of personnel and aviation assets remains the top priority in hangar operations.

About the Author:

David Cook, CPE, is Sales Manager with Aegis Fire Protection, LLC, a finalist for Subcontractor of the Year 2019, 2020, and 2021 from the American Subcontractor Association.

For more information contact: Aegis Fire Protection, LLC, Corporate Office, 13415 W. 98TH Street, Lenexa, KS 66215; Missouri Office, 305 South Kyler, Suite 511, Monett, MO 65708; (913) 825-0178, http://youtube.com/c/AegisFireProtectionFireSprinklerFireAlarm.

An NFPA blog reprinted with permission

Basics of Fire Sprinkler Calculations:

Selecting the Design Area in the Density/Area Method

By Robin Zevotek

Automatic fire sprinkler systems have consistently demonstrated their ability to reduce the impact of unwanted fires. But when a sprinkler system fails, many times it is due to insufficient water reaching the fire. An NFPA® research report titled *U.S. Experience with Sprinklers* found that when a system fails to contain a fire, 50% of the time it was because water did not reach the fire at all, and 31% of the time not enough water reached the fire.

These statistics underscore the importance of effectively calculating the water demand needed for the automatic fire sprinkler system; otherwise, the system may not be effective at reducing the impact of a fire.

This is the first in a series aimed at providing an overview of the basics of fire sprinkler design calculations (demand calculations) using the density/area design method found in the 2022 edition of NFPA 13, *Standard for the Installation of Sprinkler Systems*. [In this article] we will focus on subsection 19.2.3, which addresses the water demand, and paragraph 28.2.4.2, which specifies the hydraulic calculation procedures specific to the density/area design method.

Density/Area Method — The density/area method can be generally defined as a given amount of water (sprinkler discharge rate) over a specified area. This given amount of water is known as the design density, which is intended to provide cooling and wet adjacent surfaces with the goal of controlling an unintended fire until it can be fully extinguished by emergency services. The area is the expected area of sprinkler operation, or remote area for which the given amount of water (design density) must be applied. For water demand calculations, it's assumed all sprinklers in this area will operate. This area is often adjusted for things like quick-response sprinklers, sloped ceilings, dry-pipe, double interlock systems, and high-temperature sprinklers.

Remote Area — When calculating the water demand needed for the system it is imperative that the correct location on the sprinkler system be chosen as the remote area. Although most fire sprinkler system calculations are done utilizing hydraulic calculation software, many are integrated into computer aided drafting (CAD) programs. The ability of the program to correctly calculate the water demand is directly related to the user's ability to select the correct area.

The area selected should be the hydraulically most demanding, which is often physically the furthest point from the sprinkler riser on the system. However, in some instances, pipe sizes may make an area physically closer to the riser more hydraulically demanding. An example of this may be an instance closer to the sprinkler riser, which utilizes a more condensed spacing than the physically most remote portion of the system. When in doubt, it is best to calculate multiple areas.

Identifying the Remote Area — The steps in identifying the remote area involve determining the area (square footage or square meters) from the design criteria, applying the necessary adjustments to this area, calculating the shape, determining the number of sprinklers necessary in the area, and selecting those sprinklers that meet the remoteness and shape criteria. Let's walk through a basic example for remote area selection on a system with a main line and branch lines (not gridded or looped).

The initial step is to determine the area (square footage or square meters) from Chapter 19. Since we're utilizing the density/area method on a new system, Table 19.2.3.1.1 applies. Determining the occupancy hazard classification is very specific to the area being protected and is a bit out of scope for this blog, but certainly a topic we will cover in this series. For the sake of our calculation, let's assume we determined the occupancy to be an Ordinary Group I hazard.

You'll notice we're given two options for each hazard. This is because areas adjacent to combustible concealed spaces present a unique challenge — the fire may establish itself in the concealed space and a greater number of heads may activate. Let's assume we've determined we are not adjacent to a combustible concealed space, so the 0.15 gpm/ft² (6.1 mm/min/m²) over 1,500 ft² (140 m²) applies, thus our area is 1,500 ft² (140 m²). Remember, this area may be adjusted for things like quick-response sprinklers, sloped ceilings, dry-pipe, double-interlock systems, and high-temperature sprinklers. For our example, let's assume none of these adjustments applies.

After determining the size of the remote area, we'll need to determine its shape. Paragraph 28.2.4.2.1 indicates that "a rectangular area having a dimension parallel to the branch lines at least 1.2 times the square root of the area of sprinkler operation (A)" is utilized.

As an equation that is:

$$L = 1.2\sqrt{A}$$

Where:

L = the dimension parallel to the branch line (ft or m)

A = the area of operation (ft² or m²)

Continued on page 22

Southern Fire Sprinkler Summit
June 13-16, 2023, Gulf Shores, Alabama

Summit Committee
Ellen Ballard, Joy Willis, Coleman Farrar, & Taylor Johnson
www.southernfiresprinklersummit.org

The Southern Fire Sprinkler Summit was held June 13-26, 2023, in Gulf Shores, Alabama. There were 25 training and educational seminars with opportunities for CEUs.

The event included a Welcome Reception, breakfasts, lunches, a Vendor Expo, a special event Bazaar, games, and tons of fun.

There were an estimated 225-275 people attending this "Life is a Circus" -themed Summit.

There were 38 Vendors with expo tables/booths and there was a 'Best Booth' contest based on the Circus theme.

Back in 2021, the Hosting Chapters were Alabama, Arkansas, and Louisiana. In 2023, the Georgia Chapter joined in.

Joy Willis said the idea for this event arose from attending meetings within the AFSA.

There is a real focus on helping the "Boots on the Ground" — field personnel, designers, foremen, supervisors, etc. Seminar selections were decided with input from AFSA and AFSA Associates. And the Q & A sessions are always a bonus.

The 2021 Summit was held August 4-6, 2021. It was originally planned for 2020, but Covid prevented the gathering.

Having these fun events along with training and education proved to be a real success and pleasure for all attendees.

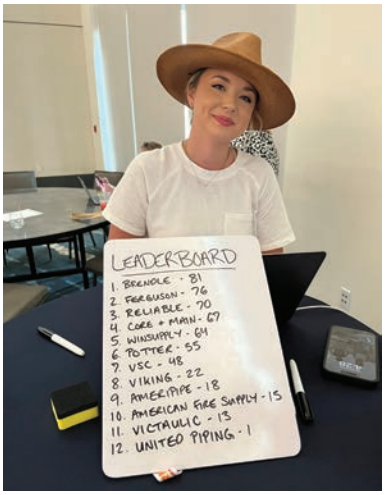
Many are asking, "why the event isn't every year?"

The group created a website specific for the event: www.southernfiresprinklersummit.org. ❑

The Welcome Reception was held on the beach dock on the Gulf Shores of Alabama.

One of the seminars was presented by AFSA President Bob Caputo.

Greg Willis and Bob Caputo on the stage for the Bazaar games.



Taylor Johnson tracking the Bazaar Teams leaderboard.

Southern Fire Sprinkler Summit Association Membership Meeting and Lunch.

Fun events along with Training & Education

Matt Hollis, Mike Vaughn, Jacques McMillan, Linda, Anthony is the guy you can barely see, Travis Hitzeman, and James Yost

Linda Biernacki and Travis Hitzeman

Spears Flameguard
www.spears.com
flameguard.htm

Jacques McMillan, Matt Hollis, Travis Hitzeman, Dan Towler

Core & Main Group Best Booth Winners

Ameripipe, www.ameripipe.com

Stay tuned for more info on the next Southern Fire Sprinkler Summit

Tate Hitzeman
South Central Regional Sales Manager
Potter Electric Signal
www.pottersignal.com

Eileen Sellers, Danna Wells, Rob Sell, Jerry Sisson, Jeff Graham, Wes Letson
The Viking Group, www.vikinggroupinc.com

Ellen Ballard, Kim Wisdon
American Fire Supply
www.Americanfiresupply.com

Continued from page 19

For the sprinkler operation area in this example, we get:

$$L = 1.2\sqrt{(1500\ ft^2}\ \ (L = 1.2\sqrt{140\ m^2})$$
$$L = 46.5\ ft\ (L = 14.2\ m)$$

We're going to assume we're utilizing a sprinkler coverage area of 120 ft² (11.1 m²), which is under the maximum allowable square footage for an Ordinary Group I hazard with standard-spray sprinklers of 130 ft² (12 m²) with sprinklers spaced 12 ft (3.6 m) apart along the branch line and branch lines 10 ft (3 m) apart [see the blog for tables and images].

The next step is to determine the number of sprinklers in the area. To accomplish this, we'll divide the area from Table 19.2.3.1.1 by the coverage area per sprinkler.

$$1{,}500\ ft^2 / 120\ ft^2 = 12.5\ sprinklers$$

Since it's not possible to activate half a sprinkler head, we round the number to 13 sprinklers.

Now that we have the shape and the number of sprinklers in the design area, we apply that to our layout and select the 13 most remote sprinklers that meet our remote area shape criteria.

To meet the shape requirement of 46.5 ft (14.2 m) long, we'd need to utilize five sprinklers along the branch line. To meet the number of sprinklers, we'd need an additional eight sprinklers, five along the next branch line and three along the third. We're permitted to utilize any of the sprinklers along the third branch line. Most commonly, the ones closest to the cross main are selected as they will result in the greatest flow [see the blog for tables and images].

As you can see, even in this simple example there are nuances to selecting the design. Keep in mind, this was one of many design options for new sprinkler systems in NFPA 13. Evaluation of existing systems has separate criteria. Make sure to utilize the correct option for your situation.

Wrapping Up — Even when utilizing computer software, engineers and designers need to select these sprinklers correctly to ensure they accurately provide the water demand needed in the event of an unwanted fire. Next up in this series of blogs we'll look at the K-factor formula for determining the flow of the starting sprinkler.

About the Author:

Robin Zevotek is a Principal Fire Protection Engineer with NFPA Technical Services, specializing in fire engineering and emergency response.

You can find this blog here: www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2023/01/30/Basics-of-Fire-Sprinkler-Calculations-Part-1

Important Notice:

Any opinion expressed in this column (blog, article) is the opinion of the author and does not necessarily represent the official position of NFPA or its Technical Committees. In addition, this piece is neither intended, nor should it be relied upon, to provide professional consultation or services.

NFPA blog post reprinted with permission.
See original post for tables and images.

New Products

Potter's SignaLink™ Bridge Wireless Supervisory System

Potter Electric Signal Company's SignaLink™ Bridge Wireless Supervisory System (WSS) can monitor any dry-contact switch such as tamper or flow switches on a fire sprinkler system and transmit their status wirelessly to any fire alarm panel. The WSS uses a wireless transmitter, installed with the switch being monitored, and a wireless receiver, installed with the fire alarm panel, to fully monitor the switch's state.

WSS features include: for service use — NFPA 13, 13D, 13R, and 72; compatible with any dry-contact switch; compatible with any fire alarm panel; eliminates trenching parking lots; ideal for temporary systems during construction; supervises wiring to connected devices; 2.4 GHz band and repeaters for long-range operation; includes Setup Tool for assisting installation and troubleshooting.

For more information contact: Potter Electric Signal Company, LLC, St. Louis, MO, (314) 595-6900, www.pottersignal.com.

❑

SEND NEW PRODUCT ANNOUNCEMENTS TO: INFO@FPCMAG.COM

Comparing Hydraulic Remote Areas in Wet and Dry Fire Sprinkler Systems

By David Cook

Fire sprinkler systems are essential life-saving devices in buildings, designed to suppress or control fires until help arrives. Two common types of fire sprinkler systems are wet and dry systems. Understanding the differences in hydraulic remote areas for wet fire sprinkler systems compared to dry fire sprinkler systems is crucial for proper system design and maintenance. In this article, we'll explore these differences and their significance.

Wet Fire Sprinkler Systems: A Brief Overview

In wet fire sprinkler systems, water is always present in the pipes. When a fire is detected, a heat-activated sprinkler head releases, allowing water to flow immediately onto the fire. These systems are commonly used in areas where the temperature remains above freezing.

Dry Fire Sprinkler Systems: A Brief Overview

Dry fire sprinkler systems, on the other hand, are typically employed in areas where freezing temperatures are a concern. Instead of water, these systems are charged with pressurized air or nitrogen. When a sprinkler head is activated by heat, the air pressure drops, allowing water to flow into the pipes and onto the fire.

Differences in Hydraulic Remote Areas

Hydraulic remote areas refer to sections within a fire sprinkler system where water pressure and flow may be insufficient to meet fire protection standards. These areas can occur in both wet and dry systems but differ in their causes and solutions.

Wet Fire Sprinkler Systems — Cause of Hydraulic Remote Areas: In wet systems, hydraulic remote areas are typically caused by distance from the water supply source or elevation changes. Water pressure decreases as you move away from the source, resulting in reduced flow and pressure at remote points in the system.

To address hydraulic remote areas in wet systems, you might need to:

- Increase the pipe diameter to improve flow.
- Install booster pumps to boost water pressure.
- Carefully design pipe layouts to minimize elevation changes.

Dry Fire Sprinkler Systems — Cause of Hydraulic Remote Areas: In dry systems, hydraulic remote areas are usually caused by the time it takes for water to fill the pipes after a sprinkler head activates. Because these systems initially contain air or nitrogen, it takes longer for water to reach and flow from the sprinkler heads.

To address hydraulic remote areas in dry systems, you might need to:

- Reduce the volume of air or nitrogen in the system by improving pipe drainage.
- Minimize the length of dry pipe runs.
- Implement quicker response systems, such as pre-action systems, which use a combination of pressurized air and water.

Significance of Understanding Differences

Understanding the differences in hydraulic remote areas between wet and dry fire sprinkler systems is crucial for several reasons:

1. Design Considerations: Properly addressing hydraulic remote areas during system design ensures that all areas of the building receive adequate fire protection.

2. Code Compliance: Complying with fire safety codes and standards requires that hydraulic remote areas are addressed effectively in both wet and dry systems.

3. Occupant and Firefighter Safety: Hydraulic remote areas can compromise the safety of building occupants and hinder firefighting efforts. Identifying and mitigating these areas is vital for overall safety.

4. Maintenance and Inspection: Periodic inspections and maintenance are essential to ensure that both wet and dry fire sprinkler systems consistently function as intended. Understanding the differences in hydraulic remote areas aids in ongoing system upkeep.

In summary, hydraulic remote areas are a critical consideration in both wet and dry fire sprinkler systems, but their causes and solutions differ significantly. Understanding these differences is essential for effective system design, compliance with fire safety codes, and the overall safety of building occupants and firefighters. Whether you're designing a new system or maintaining an existing one, a thorough understanding of hydraulic remote areas is paramount to the proper functioning of your fire sprinkler system.

About the Author:

David Cook, CPE, is Sales Manager with Aegis Fire Protection, LLC, a finalist for Subcontractor of the Year 2019, 2020, and 2021 from the American Subcontractor Association.

For more information contact: Aegis Fire Protection, LLC, Corporate Office, 13415 W. 98TH Street, Lenexa, KS 66215; Missouri Office, 305 South Kyler, Suite 511, Monett, MO 65708; (913) 825-0178, http://youtube.com/c/AegisFireProtectionFireSprinklerFireAlarm.

VIKING®

Trusted above all.™

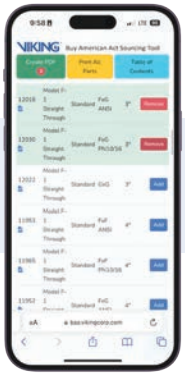
Viking's Buy American Act Sourcing Tool Available Online

Viking offers an extensive selection of Buy American Act compliant products for your project needs.

We audit our list of U.S.-made products to ensure they meet customer needs under the Buy American Act provisions of the Federal Acquisition Regulation.

Learn more on our website at **vikinggroupinc.com/baa**.

You can view an entire list of our domestically manufactured products on our website. Scan the QR code below or head to **baa.vikingcorp.com.**

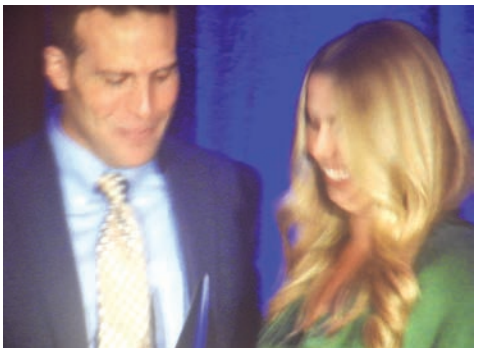


AFSA42 — Orlando, Florida

September 6-9, 2023, www.firesprinkler.org

Chris Johnson, Piper Fire Protection, Clearwater, FL, and Jay Strickland, Strickland Fire Protection, Forrestville, MD

Jay Strickland, Magician, entertaining on the main stage with AFSA Board Member Chris Johnson



Adam Levine, P.E., President of Capitol Fire Sprinkler, Woodside, NY, receives the Young Pro Award from presenter Katie Meehan, VSC Fire & Security, Ashland, VA

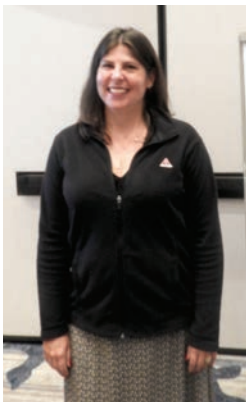
John Deutsch and Greg Shaughnessy ASC Engineered Solutions www.asc-es.com

Michael Newell (A Top Tech competitor), Belvedere LLC www.belvedereengineering.com

Chris Cox Educational Training Institute (ETI) www.eticed.com

The Gang from Dope and Tape Podcast, youtube.com/@dopeandtape with Adam Levine, P.E., President of Capitol Fire Sprinkler, Woodside, NY

Dr. James Milke, 2023 Parmelee Award Recipient, with various Alumni of the Department of Fire Protection Engineering University of Maryland, College Park, MD, enfp@umd.edu



Victoria Valentine, P.E.
AFSA

Chris Crivello, P.E.
Ran Fire Prot. Eng.

Karl Weigand, P.E.
Victaulic
www.victaulic.com

Randy Stutzman
Randal Stutzman
Advisors, LLC

Photo credit Jeannene Meisman

Linda Biernacki
Fire Tech Systems
Jeanenne Meisman
Summit Fire Consulting

Alan Johnston, Hydratec
www.hydratecinc.com
Jonathan Carl, www.Victaulic.com

Michael Combs
Service First Processing
www.sfprocessing.com

Rick Persing, PHD Mfg., Inc.
www.phd-mfg.com

Photo by Jeannene Meisman

Steve Leyton, Protection
Design and Consulting
Jeanenne Meisman
Summit Fire Consulting
Kevin Hall, AFSA

Bradley Board and Zeke Bochenek
www.metraflex.com

Cecil Bilbo, of the Fire Sprinkler Academy, with Barry Clark, Stephan LaForest, Eric Thomson, Jeff Duncan, MEPCAD, www.mepcad.com

Photo credit Jeannene Meisman

Jason Webb, Potter Electric Signal Company
Jeanenne Meisman, Summit Fire Consulting
Top Myers, Myers Risk Services

Keith Mosley, Shelly Smith, Linda Biernacki, Nikki Biernacki, Ellen Ballard, Trey Leone
Fire Tech Systems, Shreveport, LA, www.firetechsystems.com

Photo By Jeannene Meisman

Ask the Experts panel with John Denhardt, P.E., ET, FSFPE, CWBSP, AFSA, Kevin Hall, M.Eng., P.E., ET, CWBSP, PMSFPE AFSA, Jeff Hebenstreit, UL Solutions, James Goliveuaex, CEO, Viking, Willaim E. Koffel, P.E., FSFPE, SASHE, Koffel Associates, Jacqueline Wilmot, P.E., Fire Protection Research Foundation, Matt Klaus, P.E. NFPA, Russell Leavitt, CFPS, SET, Telgian, and Bob Caputo, CFPS, AFSA.

AFSA42 - Orlando, FL, Sept. 6-9, 2023

This event was special; with a reported preregistration of 1,465 and a sold-out exhibit hall, it may be one of the biggest ever. Excellence was everywhere. The format, the speakers, the topics, the site, the staff, all top notch. It was a blessing to be there. A blessing to be with the best — the best in the industry, the best in the world.

If you have never been to a fire sprinkler industry convention and exhibit, we suggest you plan on it. You won't be sorry. It is a worthy business expense. The value of the educational opportunities cannot be overstated.

The face-to-face meetings with people from across the globe will be remembered. On more then one occasion, the networking breakfast or lunch has brought me a friend for life.

Our purpose at *FPC* is to help fire contractors. That is something AFSA is doing everyday, and at this event it was paramount.

I have heard stories of business collaborations that have started on the exhibit floor or in the hallways outside of the seminars.

There is value here. Plan on taking advantage of the knowledge and wisdom available to you by attending next year.

Learn more at: www.firesprinkler.org.

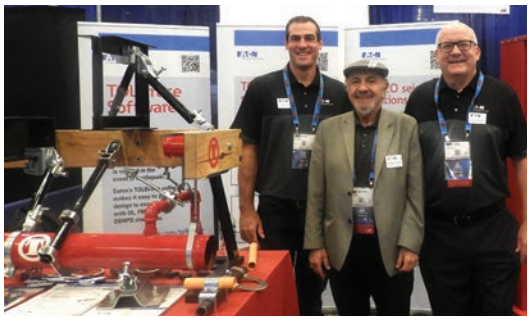
James Golinveaux, Viking, and Bob Caputo, AFSA. In addition to serving on the Ask the Experts panel, they both were speakers at other seminars.

Russell and Jean Leavitt, Telgian. Russ was a speaker for Ask the Experts; The P.E.,Contractor, and the Owner Certificate; and, The Aftermath of a System Failure — Who's to Blame. www.telgian.com

"A contractor must always be prepared. If one walks by a building and there's a problem with the installation, they could be sued."

Kamil Forbes, Russell Bryant, Jackie Dolan, Scott Strozier, Paul Hillenbrand, Kevin Dehn, Rich Dehn, Kurt Degelmann.
ARGCO
www.argco.com

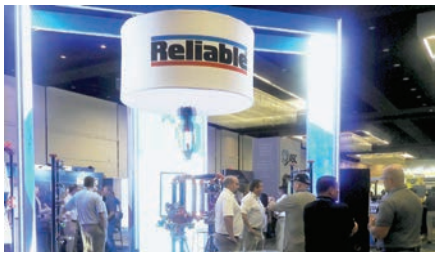
Apologies to those not pictured. We wish we could show them all. perhaps in a future post. — Ed.



Ryan Deselm, Michael Tosunian, and Sam Boskovich
TOLCO, www.Eaton.com/tolco

See you next year?

The always-busy Victaulic booth.
www.victaulic.com



The Reliable booth, also always busy.
www.reliablesprinkler.com

Holly Garvey
ACE, Academy Certification Exams
www.academyexams.com

"There is value here. Plan on taking advantage of the knowledge and wisdom available to you by attending next year."

Andrejs and Pete Lazdins
Compufire.Us Inc.
www.compufire.us

Most of the AFSA 42 team after closing ceremonies on Saturday night.
Photo by Jeannene Meisman

Next Year: September 17-21, 2024
AFSA43 Annual Convention, Exhibition, and Apprentice Competition!
Gaylord Rockies, Denver, CO, www.firesprinkler.org

Estimating in a Digital World

By Melvin Newman

Estimating fire protection and sprinkler work is critical to the success of any fire protection contractor. This work is getting harder and more risk prone as project owners and consultants move the entire design of the fire protection systems to the contractor.

Working with nothing more than architectural drawings, a few specifications, and a well-worn code book, fire protection estimators are required to put together an accurate and detailed layout, followed by a full price, typically in a matter of days. The hope is that when the project is won and the engineer does the formal layout, it matches what was bid.

It takes a significant amount of effort to put together an estimate layout and this is even before the pricing portion is attempted! What if the estimate could be built while drafting the layout? This is where a total digital workflow can become the key to success.

Digital tools allow for a new level of automation to be brought to estimating. A properly implemented digital estimating process can reduce the time to produce an estimate by up to 50% and significantly increase the accuracy of the final number. Tools that enable drafting to be linked directly to installation assemblies, along with automated material pricing and labor calculation, effectively remove these labor-intensive steps from the estimate process.

There are some practical first steps to begin the digital estimating process. The first and possibly most important step is to have the right hardware. The most important aspect of digital estimating is to have a large format (48" or greater) 4K screen. With a 48" screen you have approximately the same screen area as a 24" x 36" paper size. The 4K resolution at that size gives roughly the same resolution as a human eye, allowing the user to view digital drawings at 1:1 scale while still capturing all the data (i.e., notes, fine lines, etc.) on a drawing. The cost of one of these screens will be offset in less than six months just in printing savings typically!

Beyond the screen size, the only other really important aspect is a good, reliable, high speed internet connection. The vast majority of work today in the estimating stage is "connected." Software is cloud based; e-mail is absolutely critical and transferring large file sizes is commonplace.

Selecting the right software for your estimating needs is the next most important, and possibly the most difficult, stage of implementing a digital estimating workflow.

The first key decision to make is: A) Locally installed or, B) Cloud hosted.

There are pluses and minuses to both of these options. Locally installed has the advantage of not requiring an internet connection, full use of any local hardware acceleration, and the feeling of total control over the software. However, there are a number of major disadvantages, such as if your local hardware fails. You can be without an estimating platform altogether while rebuilding. If backups were not properly set up and maintained, total data loss could potentially be a major issue. Cloud based software removes the "backup/data risk" and is also available in general from any computer with an internet connection. This makes changing or upgrading computers much easier and seamless.

Cloud based software also removes the "updating" pains associated with keeping local software up to date and functional as operating systems change or are updated.

One of the key features to look for in any estimating software is a fully integrated graphical takeoff. Platforms like PataBid's Quantify have a fully integrated takeoff system that includes a very large library of symbols to directly draft your own fire protection layouts.

Along with takeoff and drafting, it is key that the platform supports a database of assemblies. These allow you to simply draft your sprinkler heads in on the drawing and have the system automatically calculate all the ancillary items that go with it (i.e., tees, drop lengths, finishing items, etc.) This alone can dramatically accelerate an estimator while allowing an arbitrary amount of detail to be built in.

Material pricing management is the next key thing to look for. How does the user keep material pricing up to date in their database? This is especially important in today's volatile material market. The platform should allow the user to upload their suppliers' pricing directly or even enable direct integration with their suppliers. This allows pricing to be managed easily and as automatically as possible.

One of the last key items to look for is labor management. Second to material pricing, managing and organizing labor in an estimate is essential to maximize your competitive edge. Strategies including pre-fabrication and multiple work spaces require a robust labor management workflow in the estimating platform. A well-built estimating platform will allow crews to be assigned to specific work spaces and fabrication facilities. This allows the estimate to be quickly broken down into work packages and every last competitive edge found.

Setting up a digital estimating process does not take a lot of direct monetary investment. It does, however, take some thought and time to develop a digital strategy and bring all stakeholders onboard. Once implemented, the results of digital estimating can be dramatic. Estimates are done to a much higher quality, uniformity, and traceability while significantly reducing the time spent on them.

For more free resources on digital estimating implementation, check out PataBid's blog or Youtube channel.

About the Author:

Melvin Newman is the President/CTO of PataBid.

For more information contact: PataBid, 877-472-8224, info@patabid.com, www.patabid.com.

Your Fire/Sprinkler or Security Company is WORTH MORE THAN YOU THINK!

We have qualified buyers ready to purchase your Security, Fire, Integration business and/or accounts.

- **FIRE ALARM/SECURITY**
- **INTEGRATION/CCTV**
- **BUSINESS OR ACCOUNTS**

CALL RORY'S CELL AT 1-800-354-3863

Talk to Rory Russell to get the most recent and complete Business Valuation for your company and see for yourself how much your business is currently worth.

Don't Wait! We Are Closing Deals Now! (*over $100 million*):

Ponoma, NY	$575,000
Detroit, MI	$600,000
Los Angles, CA	$810,000
Mt. Vernon, NY	$1 Million
Boston, MA	$1 Million
Northern GA	$1.3 Million
Jackson Hole, WY	$1.8 Million
Clifton, NJ	$1.8 Million
Fort Pierce, FL	$2.8 Million
Orlando, FL	$11 Million

MOST RECENT CLOSINGS 2021:

Lafayette, LA	$8 Million
Huston, TX	$1.5 Million
Edison, NJ	$10 Million
Providence, RI	$2.5 Million
Memphis, TN	$4.2 Million
Tampa, FL	$6.8 Million
Los Angeles, CA	$10.4 Million
Philadelphia, PA	$12 Million
Sarasota, FL	$21.5 Million

AFS
ACQUISITION & FUNDING SERVICES

CALL RORY RUSSELL FOR A COMPLETE BUSINESS VALUATION 1-800-354-3863

Information, Testimonials, Videos and an Informative eBook available at www.afsSMARTfunding.com

Fire Sprinkler Seminars

October 17, 2023 — Baton Rouge, LA

The Louisiana Fire Sprinkler Association (LFSA) is holding fire sprinkler seminars on Tuesday, October 17, 2023, at the St. George Fire Protection District, 14100 Airline Hwy, Baton Rouge, Louisiana.

The schedule includes: 7:30-8:00 a.m., Breakfast and Registration; Seminars: 8:00-9:00 a.m., *The Evolution of Releasing Panels*; 9:10-10:10 a.m, *OXEO Inert Gas Extinguishing Systems*; 10:15-11:15 a.m., *Recent Code Changes, New Technologies, & Products*; 11:30 a.m.-12:30 p.m., *Foam Systems.*

This will be followed by lunch and a membership meeting and then a 1:30 p.m. tour of the facility for those who are interested.

The cost is $40 for LFSA members and $80 for non-LFSA members. AHJs may attend for free.

Tate Hitzeman, South Central Regional Sales Manager for Potter Electric, will be presenting *The Evolution of Releasing Panels*. Releasing panels play an important part in fire protection system design and operation. Detection, supervision, releasing, and other functions in the right order and in the manner unique to the hazard or the agency they are releasing make the choice of releasing panel critical. In this presentation, attendees will learn about the significant role this equipment has provided for decades and see how technology is improving features available today. Time: 1 hour (60 min) 0.1 CEU.

Eileen Sellers, Viking Business Development Manager-Special Hazards, is responsible for the U.S. East Coast, South Central, Canada, and South America. She has been in contracting for the fire protection industry over the last 20 years, beginning her career with Viking Supply Net. Special Hazards is her favorite discipline in the industry. She has been invited to join the FSSA Global Outreach Program. She will present the seminar on the Viking *OXEO Inert Gas Extinguishing Systems* and provide an overview of Viking Foam Systems.

Checks may be made payable to LFSA and sent to: LFSA, Attention Ellen, 721 N. Ashley Ridge Loop, Shreveport, LA 71106.

For more information contact: Ellen Ballard, LFSA Executive Director, (318) 841-1494, eballard@firetechsystems.com.

NCN-SFPE Monthly Meeting

October 19, 2023 — Virtual

The Northern California-Nevada Chapter of the Society of Fire Protection Engineers virtual meeting on October 19, 2023, will include a presentation on the "Next Generation Fire Suppression Systems," with *American Innovation and Manufacturing Act* (*AIM Act*) highlights.

This is a ***free virtual event*** that will be held from 12:00-1:00 p.m., on Thursday, October 19, 2023.

This presentation will recap what the previous fire protection agents have been and where our industry is going with new generations of fire protection agents. The U.S. EPA finalized rules pertaining to the *AIM Act* that went into effect on January 1, 2022, and a brief summary of the *AIM Act* will be discussed, providing your team with additional comparisons of the various next generation clean agents. 3M has also announced that they will discontinue the manufacturing of NOVEC 1230™ Fire Protection Fluid by 2025, and there may be some confusion as to what other FK-5-1-12 agents are available. A Q/A session will follow the presentation.

For more information contact: NCN-SFPE, 1839 Ygnacio Valley Road, Box 240, Walnut Creek, CA 94598, www.ncnsfpe.org.

NCN-SFPE Golf Tournament/ Scholarship Fundraiser

November 10, 2023 — Oakland, CA

The Northern California/Nevada Chapter of SFPE will hold its annual golf tournament and scholarship fundraiser at the beautiful Lake Chabot Golf Course located in Oakland, California, on Friday, November 10, 2023.

Registration ends November 3. There will be a Shotgun start at 8:00 a.m., rain or shine. Registration opens at 7:00 a.m. at Lake Chabot Golf Course, 11450 Golf Links Road, Oakland, California.

For more information contact: NCN-SFPE, 1839 Ygnacio Valley Road, Box 240, Walnut Creek, CA 94598, www.ncnsfpe.org.

AFSA 2024 Education Schedule

Various Dates and Locations

American Fire Sprinkler Association Classes and programs for 2024 include:

Beginning Design School will be held January 15-February 2, April 8-26, July 15-26, and November 4-22, 2024. This is a hybrid course that includes online and in-person training. There are virtual sessions week one and two, and in-person classroom training the third week. Virtual Sessions are 11:00 a.m.-1:30 p.m. CT; and in-person classes are 8:00 a.m.-5:00 p.m. Early Bird Pricing applies if you register on or before **November 15, 2023.** Regular price applies to registrants on or before January 14, 2024.

Other upcoming programs in 2024 include: *Intermediate Design School*, February 7-16, July 22-August 2, October 14-25; *Sprinkler Hydraulics Workshop*, March 26-28, July 10-12, October 2-4; *Advanced Hydraulics Workshop*, March 18-19, May 6-7, July 8-9, November 6-7; *Introduction to the Fire Sprinkler Industry*, February 29, May 10, July 25, September 4; *Beginning ITM Workshop*, March 18-19, May 6-7, July 8-9, November 6-7; *Intermediate ITM Workshop*, April 15-17, July 10-12, August 21-23, November 13-15; *Fire Pump ITM Workshop*, March 20-21, April 18-19, May 8-9,

And much more... (Dates are subject to change.)

For more information contact: American Fire Sprinkler Association, www.firesprinkler.org.

❑

Calendar

October 8-12, 2023
2023 SFPE Conference & Expo
Washington, D.C./Bethesda, MD
www.sfpe.org

October 8-14, 2023
Fire Prevention Week
Plan to Promote Fire Sprinklers

October 9, 2023
34th Scottish Rite Charity Classic
Benefits Scottish Rite Hospital for Children
Trophy Club C.C., Trophy Club, TX
Sarah Kiefer, (512) 844-6632
sarah@fscatx.org, www.fscatx.org

October 9, 2023
29th KFSCA Golf Outing
Benefits Burn Unit
Frankfort C.C., Frankfort, KY
(502) 223-5322, michelle@ksae.com
www.kfsca.org

October 11, 2023
30th AFSA-VA Burn Surv. Golf
Benefits Central VA Burn Camp + Old Dominion Firefighters Burn Found.
National Golf Club, Williamsburg, VA
George Wagner, (804) 514-3154
Gwagner@Argusfirecontrol.com
www.burnsurvivorsfoundation.org

October 11-12, 2023
22nd Int'l Water Mist Conf.
Copenhagen Marriott, Denmark
www.iwma.net

October 12, 2023
FS Contr. Assoc. of So Cal Charity Golf
Benefits Burn Centers
Los Serranos, Chino Hills, CA
Larry Seligman, (626) 673-5345

October 16, 2023
16th LFSA Golf Tournament
Benefits Oschner LSU Burn Center and Camp I'm Still Me
Santa Maria G.C., Baton Rouge, LA
Ellen Ballard, (318) 841-1494
Louisiana Fire Sprinkler Association
eballard@firetechsystems.com
www.lafiresprinkler.org

October 17, 2023
Fire Sprinkler Seminars
Louisiana Fire Sprinkler Assn. (LFSA)
St. George Fire Protection District
Baton Rouge, LA
Ellen Ballard, LFSA Executive Director
(318) 841-1494, eballard@firetechsystems.com.

October 19, 2023
NCN-SFPE Monthly Meeting
Virtual, 12:00-1:00 p.m. PT
www.ncnsfpe.org

October 20, 2023
GBA Charity Golf Tournament
Benefits Burn Center
Allippe Preserve, Pleasanton, CA
www.afsa-gba.org

October 27, 2023
23rd Bob McCullough Memorial
Benefits Fire Safety Ed. Projects
Chateau Elan, Braselton, GA
mindy@allsouthsprinkler.com
www.georgiafiresprinkler.org

November 4, 2023
AFSA Schuylkill Casino Night
Benefits Burn Foundation
Crowne Plaza, King of Prussia, PA
SchuylkillAFSA@gmail.com
www.afsapendel.org

November 9-10, 2023
FireTECH Con/Expo
Oklahoma State Univ., Stillwater, OK
ceatfire@okstate.edu
www.firetech.ceatpd.okstate.edu

November 10, 2023
NorCal-NV SFPE Golf Event
Benefits Scholarships
Lake Chabot G.C., Oakland, CA
Matthew Signes, (415) 416-8375
matthew.signes@victaulic.com
www.ncnsfpe.wildapricot.org/event-5239171

November 29-December 1, 2023
Nat'l Fire Sprinkler Inspection Training & Certificate Program
Okla. State Univ., Stillwater, OK
ceatfire@okstate.edu

December 12, 2023
GFSA Christmas Gathering
Benefits Toys for Tots
Hamilton Mill, GA
mindy@allsouthsprinkler.com
www.georgiafiresprinkler.org

2024

March 21, 2024
Fire Protection Career Fair and Networking Dinner
School of Fire Protection
Engineering Technology
Seneca Polytechnic, Toronto, Ontario
Scott Pugsley, 416-764-9983
scott.pugsley@senecacollege.ca

May 7-10, 2024
Annual Seminar and Business and Leadership Conference
Wailea Beach Resort, Wailea, Maui, HI
National Fire Sprinkler Association
www.nfsa.org

June 2-4, 2024
CASA Annual Conference
Delta St. John's, Newfoundland
www.casa-firesprinkler.org

June 17-21, 2024
NFPA Conference & Expo
Orange County Convention Center
Orlando, FL
www.nfpa.org

Send Calendar items to:
info@fpcmag.com

September 17-21, 2024
AFSA43 Annual Convention, Exhibition, and Apprentice Competition
Gaylord Rockies, Denver, CO
American Fire Sprinkler Association
www.firesprinkler.org

More Resources:
Check Websites Dates and Courses
Academy of Fire Sprinkler Technology
www.firesprinkleracademy.com
American Fire Sprinkler Association
www.firesprinkler.org
American Subcontractors Association
www.asaonline.com
BlazeMaster®
www.blazemastertraining.com
Canadian Automatic Sprinkler Association
www.casa-firesprinkler.org
Fire Smarts
www.firesmarts.com
Fire Tech Productions
www.firetech.com
Florida Fire Sprinkler Assoc.
www.ffsa.nfsa.org
National Fire Protection Assoc.
www.nfpa.org
National Fire Sprinkler Assoc.
www.nfsa.org
Oklahoma State University
www.ce.ceat.okstate.edu
Seneca College, School of Fire Protection
www.senecacollege.ca
Test Gauge Inc.
in-franchise@testgauge.net

Other Future Meeting Dates:
AFSA, www.firesprinkler.org
October 14-19, **2025**, Washington, D.C.

NFSA, www.nfsa.org
May 7-10, **2024**, Wailea, Maui, HI

SFPE, www.sfpe.org
October 6-8, **2024**, Louisville, KY

❑

Classified Advertising

CLASSIFIED ADVERTISING INSTRUCTIONS:

♦ Basic rate is $35.00 for 50 words or less • $70.00 for 51-100 words • $105 for 101-150 ♦ E-mail us the text of your ad (no PDFs, please) and send your payment, or mail your text with your payment. (We accept checks, or to pay with a credit card using PayPal, contact us at (530) 823-0706 or e-mail: info@fpcmag.com for details.) ♦ Classified ad deadline is the 5th of each month for insertion in the following month's edition. ♦ Mailing date for *FPC* is the fourth Friday of each month (i.e. October is mailed by September 22). ♦ For any advertiser wishing to remain anonymous, we can assign a box number to your ad for an additional $5.00 per month, and replies will be forwarded upon receipt by fax, e-mail, and/or mail. (You will likely get a better response by opening a generic e-mail account, i.e., gmail.com or yahoo.com for direct reply.) ♦ Classified ads are text only. If you would like to add special formatting, color, or a logo, you must run a display ad. (Ad Design Services are available for an additional charge.) *Classified Ad Special: Run 6 months for the price of 5 — $175 for ads of 50 words or less.*

HELP WANTED

HELP WANTED

Wanted — FSS Designers, or Independent Design firm to buy. We need designers anywhere in U.S.A. Will consider buying design firms and have you work for us. Send inquiries to: info@fpcmag.com, or *FPC*, PO Box 370, Auburn, CA 95604, and include **Attn: Box#Des02.22**.

DESIGN SERVICES

Need Drawings? — Submittal drawings, working drawings, surveys, calculations, cut sheets, and material lists. We can do it all! NICET Certified. Great prices. Excellent work. Nationwide services. Millennium Fire Protection Design, (616) 844-1401, www.MFPCAD.com.

CADfps, LLC — Providing fire sprinkler system CAD drafting services nationwide! NICET-certified and FPE-degreed professionals in the industry. Preliminary drawings, coordination drawings, shop drawings, calculations, stocklists, and more. For free quote contact: (281) 256-2789, support@cadfps.com; www.cadfps.com.

SALES

DES ASSOCIATES offers UL FM Fire Sprinkler Products - Flexible Drops; Fire Pumps; Jockey Pumps; Fire Sprinklers; Butterfly Valves; Commercial and Residential Riser Check Valves; Shotgun Riser Valves; Water & Hose Valves; Adapters & Fittings; Hydrant Accessories; Foam Tanks; Water Storage Tanks - Above Ground Bolted & Welded Steel; and Underground Fiberglass Tanks. DVBE Certificate #2026104 may help you get new business! Please call for pricing!!! Contact: Dennis Sekermestrovich, oldseker@yahoo.com, (951) 541-4045.

Duyar Valve manufactures quality UL FM Valves, Riser Manifolds, Sprinkler Heads, Waterflow Detectors, Pressure Switches, etc. With sales in 85 foreign countries, they recently started selling in the United States. In the Western U.S. and for more information contact: Dennis Sekermestrovich, DES Associates, (951) 541-4045, oldseker@yahoo.com. DVVE Certificate #2026104

FPC PACKAGE DEAL

Ad Promo Package Deal: 1) See 12 Ways, send items and articles. 2) A Business Card Ad (Value $153); 3) A text-only Classified ad 6X ($175); 4) plus a paid Subscription to *FPC* ($68). A $396 value. All yours for only $250! Contact: *FPC/Fire Protection Contractor*, (530) 823-0706, info@fpcmag.com.

❑

Need to place a classified?

See Special Offer above or
E-mail us at:
info@fpcmag.com

Fire Water Storage Tanks
Corrugated, bolted, steel, above ground
Fiberglass underground
Let us provide your tank requirements.
www.firewaterstoragetank.com

Contractor, Designer, RMA, and RME
Confidential Services
Let us assist you with
Fire Protection licensing.
www.fireprotectionlicenses.com

Fire Pump Parts
Available for most manufacturers.
Quick, accurate delivery of
packing and repair kits.
www.firepumpparts.com

Fire Pump Controller Replacement
Electric, diesel, and jockey
Let us provide you a new controller.
www.firepumpcontrollerreplacement.com

Fire Pump House Packages
Pre-piped/wired skid and houses
Save time and money with
a complete package.
www.pumphousesystems.com

Seneca | SCHOOL OF FIRE PROTECTION

Hire Top Quality Graduates.

Our grads prepare for the career of a lifetime at the college that's set Canadian standards for more than 45 years. Seneca's renowned School of Fire Protection provides the most comprehensive 2- and 3- year programs in North America, including NFPA and CFAA certification.

Join the list of Canadian and U.S. employers who continue to hire our students.

Find out more...
Scott.Pugsley@senecacollege.ca
416.491.5050 ext. 22525

senecacollege.ca/fire

CLASSIFIEDS

STEWART
FIRE PROTECTION CONSULTANTS

- Design
- Survey
- Stocklisting
- Any sprinkler system type
- AutoSPRINK design
- 3D BIM Modeling
- MicroStation
- NICET Level IV certified
- Anywhere in the US
- References available

CONTACT KENT TODAY FOR A DESIGN QUOTE!

STEWART
FIRE PROTECTION CONSULTANTS
(FORMERLY M.T.&A. FIRE CONSULTING)
Kent Stewart, kent@stewartfpc.com
(501) 794-6950 • www.stewartfpc.com

Notebook

One of the many benefits of attending fire sprinkler industry events is great conversations with great people. At AFSA, the Apprenticeship Competition on the exhibit floor is entertaining, educational, and a great opportunity to catch up with dear friends.

Construction input prices rose 1.5% in August compared to the previous month, according to an ABC analysis of the Producer Price Index data. Rising energy prices drove overall price increases in August. Crude petroleum prices were up 8.9%. "...persistently elevated inflation will keep interest rates higher for longer," said ABC's Anirban Basu. "...excess inflation is here to stay."

Fire Sprinklers Save Lives.
Thanks Wayne.

Cheeky Orangutan Sets Off Fire Sprinkler at Auckland Zoo

An article posted August 31, 2023, on www.1news.co.nz, Auckland, New Zealand, said a cheeky orangutan inadvertently set off the sprinkler system and alarm at Auckland Zoo, causing firefighters to rush to the zoo.

In a statement, Auckland Zoo said one of its female orangutans, Daya, set off the sprinklers inside the South East Asia Jungle Track high canopy habitat.

Fire and Emergency New Zealand arrived at the zoo within minutes and disabled the alarm and sprinklers.

The Zoo said there was never any danger to Daya or any of the other orangutans or staff.

"Orangutans are highly intelligent, curious, and dextrous, and the Zoo will be looking into how to prevent this from happening in the future," the Zoo said.

Daya is 11 years old and arrived from Ouwehands Zoo in The Netherlands earlier this year.

On the Auckland Zoo website, Daya is described as being a "lovely natured, quite shy, and sensitive orangutan."

Proverbs 28:20 b
A faithful man will abound with blessings...

50 years is a long time for a company to be under the same leadership. For American Fire Protection, Inc., that speaks to the company founder and the talent he assembled over those 50 years that have made American Fire Protection one of the most successful and respected fire sprinkler contractors in the Southeast.

American Fire Protection was founded in 1973 by Douglas E Greer, Jr. at the age of 26, relying on his 8 years of training by Grinnell, High Point Sprinkler, and their expert trade mentors as a foundation to build knowledge and a future in the industry.

Growing up working on his dad's farm, Doug learned that hard work made a good partner to character and dependability. These qualities led him to select like-minded men and women to work toward giving American Fire Protection a strong foundation.

In good times and bad, American Fire Protection has stood the test of those 50 years, and is now a multi-million-dollar firm with 40+ skilled employees who are our corporate family. We are fortunate that many employees have been with our company for going on 30 years. Good people are one of the keys to a successful past and a strong future, and we thank them all.

From day one, Doug and his wife, Ricelyn, committed to a family-focused future aimed at everyone working together for each family's well-being. It worked! American Fire Protection is moving into the future under the leadership of their children, Michael and Michelle, and we are proud of their commitment to continue the same family values.

American Fire Protection is incredibly fortunate to be located in Greenville, SC, which is in the flourishing Upstate, and a great location to be a part of the continued growth of the Southeastern United States.

On that note, American Fire Protection wishes to thank the Upstate community, and the entire Southeastern United States for its support of our business. Our company's history and its future are here with our community. Thank you, and God's Blessings to all of you.

AMERICAN FIRE PROTECTION INC.
AFP
1973 50 YEARS 2023

AMERICAN FIRE PROTECTION, INC.

720 WORLEY ROAD • GREENVILLE, SOUTH CAROLINA

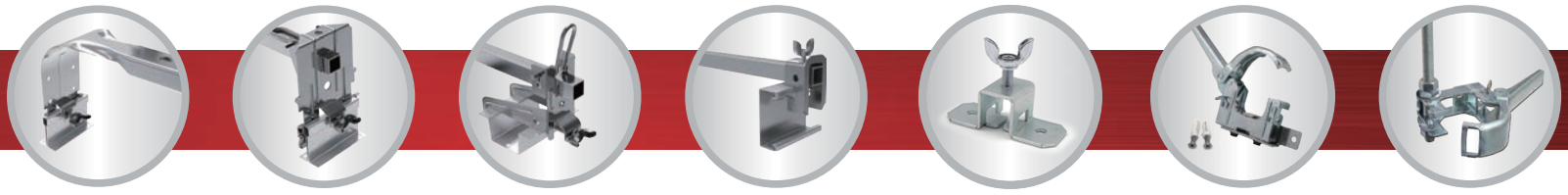
864-250-2001 | www.afirepro.com

EASYFLEX®

TAKE IT TO THE *NEXT LEVEL!*

WITH EASYFLEX'S **NEWLY UPGRADED**
ULTRA PERFORMANCE FLEXIBLE SPRINKLER FITTINGS

BRACKET SYSTEMS



OGSB	TBS	HCB	MSB	WSB	OSSBW	OSSBJ
FOR **T-BARS**	FOR **T-BARS**	FOR **HAT CHANNELS**	FOR **METAL STUDS**	FOR **WOOD BEAMS**	FOR **SIDE WALLS**	FOR **SHELLS**

info@easyflexusa.com • 888.577.8999 • easyflexusa.com