

All Hands Herald

Massachusetts Department of Fire Services

May 2019

Clandestine Lab Enforcement Team

Fire Service Certification
Meeting National Standards
4th Generation Nerve Agents
Side-by-Side Sprinkler
Demonstration Trailer

Contents

Editor

Jennifer Mieth

Copy Editors

Christina Mitchell
Justine Potter
Julie Weinstein

Graphic Artist

Julie Weinstein

The *All Hands Herald* is published three times a year by the Department of Fire Services. Our title incorporates the traditional fire service meaning of all hands working to extinguish a fire. In this publication, all hands is DFS staff providing information, training and assistance with fire service issues which affect all levels of the fire service.

Let us know how you like the *All Hands Herald* and what we can do to make it even more useful to you – our dedicated fire service members and customers.

If you have suggestions, ideas, questions or want to make a contribution to the *All Hands Herald*, contact:

Jennifer Mieth
Public Information Officer
Department of Fire Services
1 State Road
Stow, MA 01775
Jennifer.Mieth@mass.gov
978-567-3189

Visit us online at
www.mass.gov/dfs and on
Facebook and Twitter



Photos by DFS staff.

Cover and page 2 photos
by Josh Shanley.



2 Clandestine Lab Enforcement Team (CLET)

The CLET is now under the command of Captain Paul Zipper who leads the Fire and Explosion Investigation Unit (F&EIU) assigned to the Office of the State Fire Marshal.



3 4th Generation Nerve Agents Advisory to Fire Chiefs

New resources are available to help emergency responders develop guidance and training for incidents involving fourth generation nerve agents.



4 Side-By-Side Sprinkler Trailer Ready for Use in Communities

The DFS Side-by-Side Sprinkler Trailer is now ready for use around the state. This dramatic teaching tool educates the public about the power of fire and the value of fire sprinklers in containing fire.

- 1 From the Fire Marshal
- 5 Fire Service Certification: Meeting National Standards
- 5 Home Fire Sprinkler Week: May 19 - 25, 2019
- 6 Statewide Program Eradicates Toxic Firefighting Foam
- 7 DLS Issues Medical Documentation Requirements
- 8 Antifreeze for Fire Sprinkler Systems
- 9 Fire Mobilization Plan Update
- 10 Fire Investigation News
- 13 Natural Gas Regulators Donated to DFS
- 14 2018 Pride in Performance Awards
- 15 Commonwealth Prevails in Appeal of Fatal Fire Conviction
- 16 YouTube™ Burn Awareness Video Contest
- 17 Brush, Woodland and Mulch Fires
- 17 MFIRS Coding Tips
- 18 Massachusetts Firefighting Academy Graduations
- 20 2019 License Examination Schedule
- 21 25th Annual Fire & Life Safety Education Conference

Back Cover: 2019 Firefighter Safety Stand Down

From the Fire Marshal

Since the last issue of the *All Hands Herald*, we have said good-bye to Public Safety Secretary Daniel Bennett and Undersecretary Patrick McMurray. We thank them for their support of the fire service. We are delighted to welcome Thomas Turco III as the new Secretary of Public Safety and Security who we knew well in his prior position as Commissioner of the Department of Correction. We also welcome our new Undersecretary for Homeland Security Jeanne Benincasa Thorpe. We look forward to working with the new secretary and undersecretary on the mission of protecting the public from fire and explosions and preparing the fire service to face each new challenge.

Southeastern Massachusetts Campus

Secretary Turco has been working with DFS on the creation of the Southeastern Massachusetts campus of the Department of Fire Services. DFS has a use agreement with the Department of Correction (DOC) for a vacant facility in Bridgewater. Legislation will be filed to transfer the property to DFS, and funding has been requested to build out the fire training site. Modeled on our Springfield campus, the site will host firefighter training, the Fire Safety Division's code compliance officer and Boiler and Press Vessel Program staff who cover the southeastern part of the state, as well as State Police assigned to the Fire Investigation Unit's South Team.

The Bridgewater campus may also be a good home for technical rescue training. Last year, the Legislature and the Administration created the Technical Rescue Council and authorized the creation of five tech rescue districts, modeled on the hazardous materials response districts. In addition to the mobile technical rescue training props currently used in training, this space affords us the opportunity to create some static training props such as a rubble pile or a high angle rescue prop. The Bridgewater property could accommodate these props and will have classroom space.

The Massachusetts Firefighting Academy (MFA) staff is working hard to develop a plan to use the site for Recruit Firefighter training while we wait for the resources to build. Live fire training will have to occur in other locations until Bridgewater is fully built-out. After Bridgewater is complete, firefighters will have access to the same training programs and resources at all three DFS campuses.

Springfield Campus

We are in the process of completing a new search and rescue building on the Springfield campus. Funded by a

federal Assistance to Fire-fighter Grant (AFG), the project will expand our ability to conduct search and rescue training and live fire training simultaneously on the Springfield campus.

Large Venue Task Force

Deputy State Fire Marshal Maribel Fournier is one of six public safety professionals appointed by the Governor to the Large Venue Security Task Force. This group will create a strategic plan for large venue security. The task force will identify safety and security risks, recommend standards for planning, training, intelligence gathering, sharing and interoperable communications. In addition, they will review best practices on how public-private partnerships can provide large venue security. The strategic plan is due to the Governor this June.

DFS brings unique resources to this planning process. The State Police Bomb Squad, assigned to DFS, already provides security at large venue events and at large outdoor events including the Boston Marathon and the Fourth of July Esplanade concert. The DFS Hazardous Materials Emergency Response division also provides security resources for the same events.

Cancer in the Fire Service


The MFA's Cancer Awareness class is the number one requested course. The course often includes free cancer screenings. I encourage every firefighter to take advantage of both the awareness course and the free screenings as part of an overall approach to address exposures and engage in early detection. When most cancers are caught early, they are treatable.

LMS and Fire Training History

We continue to develop the DFS Learning Management System (LMS) and make it as valuable a tool as possible to the fire service. As part of that effort, we have been working to expand the data available in student fire training histories. This fall, State Police Capt. Paul Zipper from the Fire and Explosion Investigation Unit loaned the MFA several interns. They scanned old training records into the DFS Learning Management System (LMS) going back to 1967. This scanning process is still underway, but when finished,



Continued on page 2



Clandestine Lab Enforcement Team

Recently, the Clandestine Lab Enforcement Team (CLET) was put under the command of Captain Paul Zipper who leads the Fire and Explosion Investigation Unit (F&EIU) assigned to the Office of the State Fire Marshal. Some members of the State Police Bomb Squad have been members of the CLET for decades. The response to many clandestine lab scenes (clan labs) often includes members of the Joint Hazard Incident Response Team (JHIRT) in the Hazardous Materials Emergency Response Division of the Department of Fire Services. Specially cross-trained bomb and hazmat technicians have worked together for years at incidents with potentially explosive chemicals, so this was a natural fit. The CLET also includes State Police officers who are not assigned to the F&EIU. Operations often include close collaboration with the federal Drug Enforcement Agency (DEA). Captain Zipper is developing standard protocols and working to provide training and protective equipment to all members of the CLET.

A recent incident on the Massachusetts Turnpike illustrates what a good fit this reassignment is, given the close collaboration between the State Police and DFS resources.

State Police troopers found the van of a suicidal man at the Ludlow Plaza and obtained a search warrant. The troopers and the fire department believed there was a potential “one-pot”¹ methamphetamine lab inside the van, so they called for a state HazMat team and the bomb squad members of the CLET. Field testing by HazMat was positive for methamphetamine and samples were taken. The team mitigated the scene and contacted a clean-up company.

The van driver was initially taken to a local hospital. Later, he was arrested and charged with possession and manufacturing methamphetamine. After making suicidal threats, he was hospitalized again.

¹One-pot meth cooks refer to a user making a small batch for personal consumption.

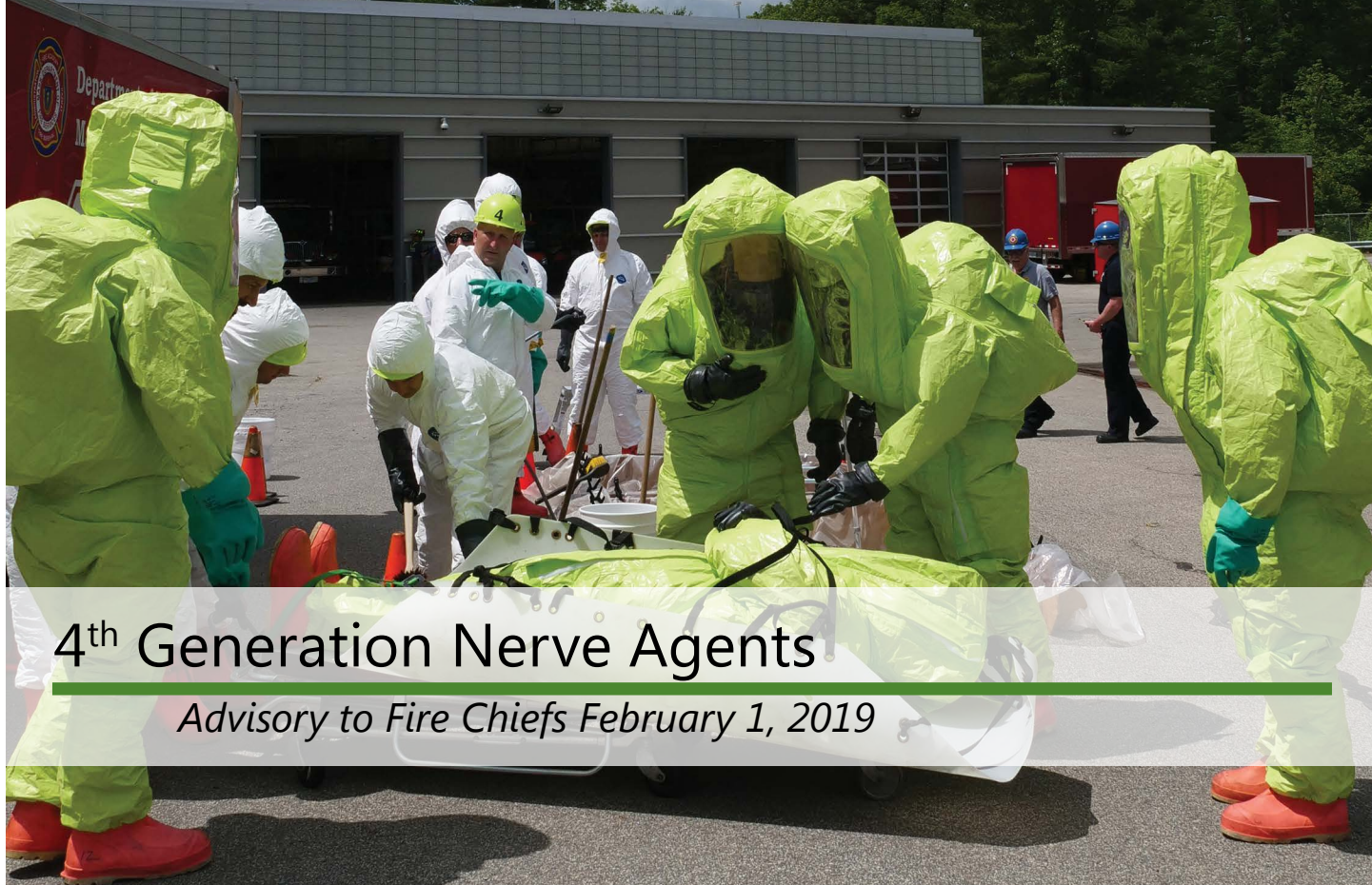
From the Fire Marshal, *continued from page 1*

should lead to a complete training history for students.

Technical Rescue Council

Last year the Legislature passed and the Governor signed a law creating the Technical Rescue Council and formally recognizing the Technical Rescue Regions. Nominations for the council have been sent to the Governor. After those

appointments are made, the Council will begin its work to create a vision and strategic plan for a technical rescue system for the Commonwealth. One of the tasks of the Council will be to develop methods of credentialing teams and equipment, so there is some uniformity in training and resources for all regions. I expect this important work to begin this spring or early summer.



4th Generation Nerve Agents

Advisory to Fire Chiefs February 1, 2019

New resources are available from the U.S. government to help emergency responders and healthcare workers develop specific guidance and training to protect themselves and save lives during incidents involving fourth generation nerve agents, also known as Novichoks or A-series nerve agents. The resources are available on the Chemical Hazards Emergency Medical Management (CHEMM) website at <https://chemm.nlm.nih.gov/nerve-agents/FGA.htm>.

After the incidents in the United Kingdom (U.K.) in 2018 involving a fourth generation agent, the White House National Security Council convened a federal interagency working group to identify and develop resources to help the emergency response community prepare for and respond to a fourth generation agent incident if one ever occurs in the U.S. The resources are available for U.S. emergency response professionals seeking to learn more about the agent used in the U.K. and how to protect themselves and respond if such incidents ever occur in their communities. No illicit use or manufacture of a fourth generation agent or other nerve agent is known to have occurred in the United States, and there is no known threat of nerve agent use in the U.S.

The following resources were developed and tailored to various segments of the emergency response community and are available on the CHEMM website:

- *Safety Awareness for First On-Scene Responders Bulletin* – Educates and prepares first responders for situations when they are first to arrive on a scene and are not aware that a fourth generation agent is present. The Bulletin helps agencies develop guidance and training to enhance preparedness.
- *Reference Guide* – Educates and prepares hazardous materials response teams. The guide includes: chemical and physical properties of fourth generation agents, and detection, firefighting, personal protective equipment, and decontamination recommendations for responding to known or suspected fourth generation agents. The guide helps hazardous materials response teams develop guidance and training to enhance preparedness.
- *Medical Management Guidelines* – Educates and prepares fire, EMS, and hospital staff and guides the medical management of patients exposed (or potentially exposed) to a fourth generation agent.

DFS HazMat teams will conduct training to educate members on the characteristics, effects and responses to these agents. All team personnel will have the knowledge, resources and skills to respond safely and effectively to a fourth generation nerve agent incident.

For questions and more information, contact David DiGregorio, Hazardous Materials Emergency Response Division Director, at 978-567-3117 or david.digregorio@mass.gov.

Side-By-Side Sprinkler Demonstration Trailer

Now Ready for Use in Communities

The Department of Fire Services has a new Side-by-Side Sprinkler Demonstration Trailer that was donated by the National Fire Sprinkler Association (NSFA). This prop gives fire departments a dramatic teaching tool that demonstrates how sprinklers save time, and time buys life in a fire. The mobile unit has two identical rooms that are set on fire. One room has a sprinkler, and one does not. During the fire, observers see how quickly fire spreads and how little time there is to escape a fire.

When the sprinklered side is lit on fire, viewers see how rapidly a fire is contained and controlled by the sprinklers. A narrator (script is provided with the prop), talks about:

- how quickly modern furniture ignites and burns, giving off deadly toxic gases;
- how little time occupants have from hearing a smoke alarm to exiting a house;
- how quickly flashover occurs; and
- how long it takes the fire department to arrive and extinguish a fire.

The visual demonstration of the rapid destruction caused by fire in unsprinklered rooms versus the rapid control of fire in a sprinklered room provides a dramatic educational opportunity for observers. Without experiencing the danger of fire, they can see the importance of home fire sprinklers.

The Department of Fire Services encourages communities to use this prop (available from April to November in 2019). To learn more about it, visit www.mass.gov/dfs and search for *Side-by-Side Sprinkler Demonstration Trailer*. There is a three-week turnaround time for each demonstration, so please check trailer availability before scheduling a program. Contact Vicky Giguere at Vicky.giguere@mass.gov, or 978-567-3813 to schedule.



Fire Service Certification

Meeting National Standards

Fire department personnel in Massachusetts validated their knowledge and skills against national standards with fire service certification at a rapid pace last year. In 2018, 2,070 certifications were awarded to fire service personnel who successfully completed assessments through Massachusetts Firefighting Academy (MFA) training programs and/or open examinations. These achievements were recorded with the National Pro Board Registry so users can verify certifications earned in Massachusetts, and through other accredited agencies in the Pro Board system.

All changes to the national standards are made after careful consideration by subject matter experts. The experts review what is expected of personnel

performing at different levels including: Firefighter I/II, Fire Officer, Fire Instructor, Technical Rescuer, etc. As the professional qualification standards change, so do the assessments at each level.

Various initiatives have further aligned National Fire Protection Association (NFPA) standards with the practices of our accrediting body, the National Board on Fire Service Professional Qualifications. As a result, the Massachusetts Fire Training Council (MFTC) has adopted policies in keeping with these changes.

The following are required for certification examinations conducted after July 1, 2019 (in addition to prerequisites):

Certification Level	New Requirements
Fire Instructor I	Pass a written exam followed by a multi-station practical exam OR Pass the MFA training program "Fire Instructor I" and a separate written exam.
Fire Officer I	Pass a written exam followed by a multi-station practical exam OR Pass the MFA training program "Company Officer I" and a separate written exam.
Fire Instructor II	Pass a written exam followed by a multi-station practical exam OR Pass the MFA training program "Fire Instructor II" and a separate written exam.
Fire Officer II	Pass a written exam followed by a multi-station practical exam OR Pass the MFA training program "Company Officer II" and a separate written exam.
Investigator	Pass the MFA training program "Advanced Fire Investigation" AND a separate written exam.

The MFA training programs Fire Instructor I, Fire Instructor II, Company Officer I, Company Officer II, and Advanced Fire Investigation, will contain evaluations

that directly address their respective NFPA standards. For more information, review each certification level in the DFS Learning Management System.

Home Fire Sprinkler Week

May 19-25, 2019

The vast majority of fire deaths in North America happen at home. The time has come to bring attention to this problem — and its solution.

The National Fire Protection Association's (NFPA) Fire Sprinkler Initiative, the Home Fire Sprinkler Coalition, and the Home Fire Sprinkler Coalition-Canada will celebrate Home Fire Sprinkler Week May 19-25, 2019. Fire departments, fire sprinkler coalitions and other home fire sprinkler advocates are urged to join in with local activities during the week.



On May 22, 2019, the Department of Fire Services (DFS), the Massachusetts Home Fire Sprinkler Coalition, and the National Fire Sprinkler Association (NFSA) will

Continued on page 13

Statewide Program Eradicates Toxic Firefighting Foam

Reprinted from Mass DEP News

MassDEP Program Removes Old PFAS-contaminated Foams from Fire Department Stockpiles

On February 25, 2019, the Baker-Polito Administration announced that a Massachusetts Department of Environmental Protection (MassDEP) program had collected and destroyed more than 149,000 pounds of legacy firefighting foam concentrate from public safety operations across the Commonwealth, ensuring that the chemical contaminants in the foam can no longer pollute drinking water resources and fragile waterways or threaten public health. The legacy foam manufactured before 2003 contains Poly- and Perfluoroalkyl Substances (PFAS) that can cause health issues at low concentrations.

The PFAS chemicals are included in the Class B Aqueous Film Forming Foam (AFFF) used by fire departments to extinguish burning hydrocarbons within many types of fuels or other flammable liquids. The AFFF-type foam is often used at airfields when airplanes crash or on roadways when fuel tankers overturn and spill their contents. Once applied at a crash scene, the long-chain version of PFAS chemicals can seep into the ground and contaminate water resources nearby.

The take-back program, operated by MassDEP, with the assistance of the Department of Fire Services (DFS), targeted old foam formulations manufactured before 2003, as manufacturers stopped production of the suspect foams in 2002. Short-chain foam formulations are still in use by fire services.

After DFS contacted every fire department across the state, over the last five months, MassDEP worked with 105 fire departments, fire districts and public safety entities to determine the quantity of legacy foam across the state.



MassDEP Emergency Response Director Nick Child (right) reviews containers of legacy firefighting foam with NEDT President Mike Robertson as part of the program.

MassDEP hired New England Disposal Technology, Inc. (NEDT) of Sutton, one of the agency's hazardous materials cleanup contractors, to remove the legacy foam. In total, 149,016 pounds (or 17,531 gallons) of foam concentrate was transported to a fuel-blending facility in Ohio, which destroyed the material in a state-of-the-art fuel incinerator.

"By partnering with Fire Services, local fire departments and the cleanup contractor, we were quickly able to determine the location of PFAS-contaminated foam and eliminate that threat at no cost to the local fire agency," said MassDEP Commissioner Martin Suuberg. "The foam take-back program will also go hand-in-hand with our efforts later this year to set drinking water and environmental cleanup standards for PFAS chemicals."

"This inter-agency partnership greatly benefited local fire departments and communities," said State Fire Marshal Peter J. Ostroskey.

As the take-back program progressed, many fire departments requested confirmation that current Class B AFFF foam was safe. While these foams often contain some amount of PFAS, it is at lower levels than legacy foam and includes PFAS that are more stable (so-called "short chain") and expected to have less of an impact on the environment. New "Fluorine Free Foam" aka "3F" foam is entering the market. The cost is comparable per gallon to current foam, but there are questions about its efficacy compared to the current Class B AFFF foams. MassDEP will continue to evaluate information and ongoing research about the impacts of various foam formulations, and will keep working to identify effective and safe alternatives to PFAS foams. For more information on PFAS and the legacy foam take-back program go to: <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>.

In 2018, MassDEP adopted a drinking water guideline of 70 parts per trillion for five of the most environmentally persistent PFAS chemicals, and the agency plans to review that guidance level during the process of setting drinking water and environmental cleanup standards for all PFAS chemicals. For more information on MassDEP's efforts to regulate PFAS compounds, visit www.mass.gov/DEP.

Fire departments that want more information, or want to take part in the foam take-back program, can contact Nick Child at 617-574-6847 or at nick.child@mass.gov.

DLS Issues

Medical Documentation Requirements

On January 15, the Department of Labor Standards (DLS) issued an interpretation letter about firefighter medical documentation requirements for fitness for duty and respirator use. The full text of the letter is included here for reference.

Through their initial training and by performing their jobs, active firefighters (professional, volunteer and call) have demonstrated their fitness for duty and ability to wear a respirator. Many firefighters have received documentary proof of fitness for duty and ability to wear a respirator, as detailed below. Not all active firefighters, however, will have this documentation, especially those with longer tenures on the job. The Department of Labor Standards (DLS) will therefore presume that all firefighters with a hire date¹ before February 1, 2019 are fit for duty and physically able to wear a respirator and will not require any additional documentation as proof of fitness for duty under 29 CFR 1910.156(b)(2), or proof of clearance to wear a respirator under 29 CFR 1910.134(e) for firefighters hired before February 1, 2019². Annual fit tests, as required under 29 CFR 1910.134(f)(2), are required of all firefighters regardless of hire date.

Additionally, any firefighter, regardless of hire date, who experiences heart disease, epilepsy, or emphysema after February 1, 2019 shall not be permitted to participate in firefighting activities unless a physician's certificate of the employee's fitness to participate in such activities is provided, per 29 CFR 1910.156(b)(2). Finally, any firefighter, regardless of hire date, may be required by the employer to complete an additional proof of clearance to wear a respirator, per 29 CFR 1910.134(e)(7).

For firefighters hired on or after February 1, 2019, DLS will require employers to maintain the following documentation in their personnel files:

Proof of fitness for duty, which may be one of the following (in order of preference):

- Statement that employee has successfully passed a NFPA 1582 physical.
- HRD Civil Service new hire form confirming fitness for duty.
- Statement from healthcare provider (NP, PA, DO, MD, RN) stating employee is fit for duty (may be employee's primary care physician).
- Firefighter 1 or 2 certificate from any training source.
- CDL medical exam or other physical exam the department has recognized as proving fitness for duty.
- Signed statement by the employer (chief or other town official) that the employee is fit for duty.



- A statement from a healthcare provider (NP, PA, DO, MD, RN) that the employee has been deemed fit to wear a respirator. Information on the method for this determination can be found at 29 CFR 1910.134(e).

DLS encourages, but does not require, departments to utilize the NFPA 1582 standard and to perform more frequent medical evaluations than those required under 29 CFR 1910.134(e) and 1910.156(b)(2).

Public sector occupational safety and health requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes DLS's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to safety and health regulations. Also, from time to time we update our guidance in response to new information. To keep apprised of developments, visit the DLS website at www.mass.gov/workplace-safety-and-health-program-wshp.

On April 5, 2019, DLS issued an interpretation letter entitled, "Clarification for Fire Departments in Massachusetts – Facial Hair and Respirator Use." Visit www.mass.gov/service-details/Learn-About-Updated-Law-For-Public-Sector-Safety.

¹For firefighters with an original hire date before February 1, 2019 who transfer departments after February 1, 2019 without a break in service, DLS will utilize the original hire date for purposes of this Interpretation Letter.

²This Interpretation Letter is not related to and does not apply to medical exams required of HAZMAT team members under 29 CFR 1910.120(f).



Antifreeze for Fire Sprinkler Systems

Is Antifreeze Making a Comeback?

Before 2010, it was common practice to use antifreeze solutions in fire sprinkler systems in places that were subject to freezing temperatures. NFPA standards allowed several types of antifreeze, including glycerin, propylene glycol, ethylene glycol, and diethylene glycol. In some NFPA standards recommended antifreeze concentrations up to 70%.

Dangers Associated with Antifreeze Systems

Starting in July 2010, NFPA issued multiple *Safety Alerts* about the newly recognized dangers of using antifreeze in fire sprinkler systems. In 2009, a kitchen grease fire activated a sprinkler system that contained high concentrations of antifreeze. The fire caused one death and a serious injury and raised concerns about the combustibility of antifreeze.

New Code Regulations for Antifreeze Systems

By April 2011, NFPA had issued four Tentative Interim Amendments (TIAs) applying to the NFPA 13, NFPA 13R, NFPA 13D and NFPA 25 standards which limited the use of antifreeze in new and existing fire sprinkler systems. The standards limited the type of antifreeze that could be used (glycerin and propylene glycol only), and required specific pre-mixed antifreeze solutions for all new installations. The standards required annual testing for existing systems to confirm that antifreeze concentrations were within newly established limits. If solutions exceeded allowable concentrations, they had to be removed and replaced with a compliant factory pre-mixed solution.

Starting with the 2013 editions of NFPA 13, NFPA 13R, and NFPA 13D, the use of antifreeze in new sprinkler systems was permitted only if the solution was “listed for use in sprinkler systems.” This requirement ended the use of antifreeze in sprinkler systems as there were no solutions listed for use available on the market. That recently changed when in 2018, an antifreeze listed for use in sprinkler systems did come on the market.

Listed Antifreeze Now Available to Consumers

The newly available antifreeze is a pre-mixed solution, intended for use in wet fire sprinkler systems, and is listed to UL 2901. The product advertises that it complies with the requirements of NFPA 13, NFPA 13R, NFPA 13D, and NFPA 25.

Ensuring that this product is used according to the manufacturer’s requirements is paramount. The manufacturer places restrictions on the product’s use, including but not limited to: minimum temperature, system volume limitations for certain types of systems, applicability based on hazard classification, and calculation adjustments to ensure piping is sized appropriately for the thermal expansion and density properties of the solution.

What Does This Mean for Authorities Having Jurisdiction?

Going forward, we can expect to review sprinkler system designs with antifreeze. And although there is now a listed antifreeze product available for use with fire sprinkler systems, it is not necessarily appropriate for all applications. Design professionals will need to design new antifreeze systems that comply with the manufacturer’s listing requirements. Documentation must be submitted to the Authority Having Jurisdiction (AHJ) that supports the antifreeze design. When AHJs review plans, they need to know that product-specific design criteria exist and understand that adherence to this criteria is critical for successful design and implementation of antifreeze systems.

For concerns, questions, or more information please contact the Division of Fire Safety’s fire protection specialists. Communities north of the Massachusetts Turnpike can contact Kristen Nich at 978-567-3376 or kristen.nich@mass.gov. Communities south of, or on the Massachusetts Turnpike, contact Jake Nunnemacher at 978-567-3377 or jacob.nunnemacher@mass.gov.

Fire Mobilization Plan Update

The Massachusetts Fire and Emergency Medical Services Mobilization Plan (the Mobilization Plan) is probably familiar to everyone in the fire service. This plan facilitated the response of hundreds of pieces of apparatus to the Merrimac Valley gas explosions in 2018. What fire service personnel may not know is that the Massachusetts Emergency Management Agency (MEMA) is the designated coordination entity, by law. The Fire and EMS Mobilization Committee, working with MEMA, in conjunction with the Fire Chiefs' Association of Massachusetts (FCAM) is in charge of planning and response coordination.

The Mobilization Plan is the accepted state mutual aid plan to coordinate additional assistance after local mutual aid systems are exhausted. The Mobilization Plan provides for the sustained response of aid to a community in the event of a localized disaster. These events can include major fires, tornadoes, train derailments, hazardous materials incidents, wildland fires, domestic terrorism and other mass casualty incidents including active shooters. Such events may overwhelm a local fire department and its normal mutual aid resources.

Over the last few years, the Mobilization Plan has been activated many times and has served communities well, bringing needed assistance while not negatively affecting the safety of responding communities. Use of the Mobilization Plan has also highlighted the ways it can be improved to better meet future response needs.

In late 2018, MEMA received a \$250,000 Homeland Security Grant from the U.S. Fire Administration. The grant application proposed a comprehensive, multi-discipline planning initiative to review and enhance the Mobilization Plan. The Fire and EMS Mobilization Committee will address the challenges, gaps and shortfalls found within the Fire Mobilization Plan in order to improve it. Once the Mobilization Plan has been updated and approved by the Fire and EMS Mobilization Committee, a tabletop exercise will be held to evaluate and assess it before it is finalized.

Limited flexibility in the existing plan has challenged incident commanders in obtaining the precise equipment or personnel needed for incidents of various sizes and complexities. And, after recent disasters across the country, this project proposes to review and plan for similar incidents here in Massachusetts. This planning initiative will bolster the Commonwealth's ability to respond to fire and mass casualty events that exceed the resources of traditional mutual aid systems. This project will highlight current fire and EMS capabilities, identify gaps, and recommend new areas that need to be part of the plan.



The project management team has representatives from the following groups:

- Massachusetts Emergency Management Agency
- Massachusetts Dept. of Conservation and Recreation
- Massachusetts Department of Fire Services
- Massachusetts Department of Public Health
- Fire Chiefs' Association of Massachusetts

To accomplish these goals, the project management team will hire a vendor who will:

- Conduct a comprehensive review and assessment of the Commonwealth's Statewide Fire and EMS Mobilization Plan, applying lessons learned from national events.
- Update the plan including all statewide mobilization resources. This will include National Incident Management System (NIMS) resource typing.
- Create training modules based on the newly revised plan for chief officers, dispatchers, fire control points, fire department personnel and EMS professionals across the Commonwealth.
- Conduct a tabletop exercise to evaluate and validate the updated Mobilization Plan.

Fire Investigation News

Arson Arrests

On September 6, 2011, the FIU West Team responded to a fire at 151 Off Maple Street in Hardwick. The homeowner was missing and evidence suggested that a violent act had occurred and the fire might be an attempt to conceal another crime. The investigation was led by State Police assigned to the Worcester District Attorney's Office and included State Police assigned to DFS and the Hardwick Police Department.

The investigation found that the homeowner, 84-year old Joseph Cernauskas, was stabbed multiple times and his body was taken to a field in Barre. Two defendants, Jonathan Hart and Jason Lopez, were charged with multiple offenses related to the death and fire.

On January 23, 2019, Jonathan Hart pled guilty in Worcester Superior Court to manslaughter and arson of a dwelling among other charges. He was sentenced on February 20, 2019 to 19-20 years for manslaughter, 6-10 years on and after for arson of a dwelling, and 10 years of probation for the remaining charges. Hart claimed that Cernauskas (his great-uncle) had molested him for many years starting when he was 6-years old.

Jason Lopez, the co-defendant, pled guilty on February 20, 2019 to manslaughter, home invasion, arson of a dwelling and other charges. He was sentenced to 20-25 years in state prison.

Wheaton College Arsons

Janelys Pimentel, a 22-year old resident assistant and student at Wheaton College, was arrested on February 7, 2019 and charged with two counts of arson for fires on 12/2/18; four counts of attempting to set a fire on 11/28/18, 12/2/18, 12/14/18 and 2/7/19; and six counts of vandalism for the fire-related incidents on all those dates. She was arraigned in Attleboro District Court.

On December 2, 2018, State Fire Marshal Peter J. Ostroskey, Norton Fire Chief Paul J. Schleicher, Wheaton College President Dennis M. Hanno, and Wheaton College Director of Public Safety Christopher Santiago issued statements asking for the school community's help solving two fires set in two bathrooms in a Wheaton College residence hall early that morning. There had also been a fire in this dormitory on November 28.

Around 6 a.m. on December 2, about 100 sleeping students were safely evacuated from McIntire Residence Hall to nearby buildings. Investigators determined that two bathroom fires, one on the second and one on the third floor, were intentionally set. Additional attempts to burn were discovered in the dorm before school vacation.

Another fire happened on February 7, 2019. At 3:26 a.m. Norton Fire, Norton Police and Wheaton Public Safety were dispatched to a box alarm on the third floor of McIntire Hall. An intentionally-set fire occurred in an old bubbler in the hallway. Students were safely evacuated and the fire was extinguished. That was the sixth fire in McIntire Hall since November 28, 2018. There were no reported injuries during any of the incidents.

The fires were jointly investigated by the Norton Fire Department, and State Police assigned to the Office of the State Fire Marshal.

During the investigation, Wheaton College increased campus patrols and the president urged the school community to be on the lookout and report suspicious activity.

Wheaton Norton Fire Chief Paul J. Schleicher said he was proud that the students evacuated so quickly and responded appropriately to the fire alarms each time.

Smoking Fires

Smoking Caused Northampton Fatal Fire

A January 3, 2019 fire at 45 Carolyn Street in Northampton was caused by the improper disposal of smoking materials. The 69-year-old resident, was rescued by Northampton firefighters and taken to a local hospital where he succumbed to his injuries. Investigators believe the fire started in the den between two recliners. There was ample evidence of smoking in that area, and other possible causes were ruled out.

There were two battery-operated smoke alarms in the home but they had no batteries and were not working. There were no signs the home had carbon monoxide alarms.

The fire was jointly investigated by the Northampton Fire and Police Departments and State Police assigned to both the Office of the State Fire Marshal and to the Office of the Northwestern District Attorney. State Police Crime Scene Services and the Department of Fire Services' Code Compliance and Enforcement Unit provided assistance.

Smoking Cause of Ipswich House Fire

The early morning fire on February 12, 2019 at 27 Farm Hill Road was caused by the improper disposal of smoking materials. Although the single family home was totally destroyed, there were no injuries from the fire.

The fire was reported at about 1:10 a.m. Investigators determined that the fire started on the exterior deck where one of the residents routinely smoked Marlboro Menthol 100s. The detonation of ammunition and the venting of several propane tanks were heard during the fire.

The fire was jointly investigated by the Ipswich Fire

and Police Departments and State Police assigned to the Office of the State Fire Marshal.

Heating Fires

Woodstove Cause of Bolton Farmhouse Fire

A 3-alarm fire at 49 Sawyer Road Bolton on January 15, 2019 was caused by the woodstove. No one was home at the time and there were no injuries. Damage to the single-family home is estimated at \$200,000.

The fire started in the living room at the woodstove, which was left burning unattended. The woodstove piping and the chimney had not been cleaned recently and there was evidence of accumulated creosote.

The fire was jointly investigated by the Bolton Fire Department, Bolton Police Department and State Police assigned to the Office of the State Fire Marshal.

Combustible Liquid Added to Woodstove Causes Fire

The January 20, 2019 fire at 60 North Main Street in Orange was caused by adding a combustible liquid to the woodstove. One person was injured and taken to a Boston hospital. Three firefighters suffered minor injuries. The single family home was a total loss.

The fire was jointly investigated by the Orange Fire Department, the Orange Police Department and State Police assigned to the Office of the State Fire Marshal.

Accidental North Adams Fire

The January 8, 2019 fire at 246-248 Houghton Street in North Adams was accidental. The fire started in the bedroom of a third floor apartment. The cause will remain officially undetermined, because investigators cannot eliminate smoking or a space heater as the specific cause. The space heater was too badly damaged to determine if it malfunctioned. The building is considered a total loss.

Working smoke alarms first alerted a resident to the fire. He tried to fight the fire himself, which delayed notification to the fire department. He suffered minor injuries. No other residents of the 6-unit building were injured.

The fire was jointly investigated by the North Adams Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal.

Hanson Fire in Foreclosed Home

Fire is Undetermined, No Signs of Arson

The cause of the February 12, 2019 fire in a foreclosed home at 45 Milford Street will remain undetermined, but it appears accidental. The home is a total loss. The fire started on the first floor. There is no evidence of an intentionally set fire and there are several possible accidental causes. The

tenants continued to live in the bank-owned home without permission but were not home when the fire started. They used the woodstove, space heaters, and the oven for heat. The extent of damage to the home makes it impossible to pinpoint the exact cause.

The Hanson Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal jointly investigated the fire.

Furnace Malfunction Cause of Hopkinton Barn Fire

The cause of the January 28, 2019 fire at 151R Hayden Rowe Street in Hopkinton was a malfunction of the gas heater. The old barn houses the Start Line Brewery that was in the process of expanding into the space formerly occupied by Water Fresh Farm.

The fire was reported at 11:40 p.m. when a smoke alarm activated and notified the monitoring company. The fire department responded quickly and extinguished the fire before it took hold of the heavy timber post and beam building. The fire originated in a second floor maintenance closet that housed the only heat source for the building, a natural gas forced hot air furnace.

The fire was jointly investigated by the Hopkinton Fire Department, the Hopkinton Police Department and State Police assigned to Office of the State Fire Marshal. They were assisted by Hopkinton electrical and building inspectors.

Electrical Fires

\$5M Cambridge Fire

The most probable cause of the January 14, 2019 4-alarm fire at 6 Hunting Street and 851-855 Cambridge Street is electrical. The fire was reported at 5:40 a.m. One resident was injured and taken to a local hospital and 22 people were displaced by the fire. The building is a total loss and damages are estimated at \$5 million dollars

The single building was originally three buildings. 851 Cambridge Street housed the Sunset Café and 855 Cambridge Street had eight apartments. There were two apartments at 6 Hunting Street; one was occupied and one was vacant while undergoing renovations.

Investigators determined that the fire started in a void space between the first and second floors on the Hunting Street side of the building and eventually broke out into the apartment undergoing renovations. The fire also extended horizontally and broke out in the Sunset Café. It appears that the fire burned undetected in the void space for an extended period of time. There is no evidence of an intentionally set fire and there is electrical wiring in the area where the fire started. The building was equipped

Continued on page 12

Fire Investigation News

Continued from page 11

with hard-wired smoke alarms that were operating when the fire department arrived.

The fire was jointly investigated by members of the Cambridge Fire Investigation Unit, detectives from the Cambridge Police Department, and State Police assigned to the Office of the State Fire Marshal.

Framingham Condo Fire

The cause of the February 13, 2019 fire at the Windsor Green Condominiums at 1710 Windsor Drive was electrical. The fire damaged two adjoining units. Losses are estimated at \$200,000. No one was injured but about ten residents were displaced. The building's construction included full-height cinder block walls, which allowed the firefighters to keep the fire from spreading to additional units.

The Framingham Fire Department, the Framingham Police Department and State Police assigned to the Office of the State Fire Marshal jointly investigated the fire.

Bathroom Fan Cause of Easthampton Fire

The early morning fire on February 22, 2019 at 13-15 Pine Street started in the bathroom ceiling fan in the number 15 side of the duplex. A resident at 13 Pine Street was awake, smelled smoke and alerted the resident at 15 Pine Street. All residents escaped safely. Three firefighters had minor injuries and one was taken to the hospital. The fire was jointly investigated by the Easthampton Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal.

Saugus Fire

The cause of the February 19, 2019 fire at 41 Bennet Avenue was electrical. The fire in the one-family home was reported at about 6 p.m. There were no injuries but two residents were displaced. Damages are estimated at \$150,000.

A resident noticed that the kitchen lights were off and the electrical breaker had tripped. A few minutes after resetting the breaker, the kitchen lights went out again, and the resident reset the breaker a second time. A short time later, he smelled smoke and saw smoke coming from the attic vent. Investigators determined the fire began in the attic above the kitchen and was due to an electrical wiring failure.

The fire was jointly investigated by the Saugus Fire Department and State Police assigned to the Office of the State Fire Marshal. Assistance was received from the Saugus electrical inspector.

Heating Lamp Cause of Westfield Barn Fire

The cause of the March 4, 2019 barn fire at Pomeroy Farm was a heat lamp. The fire destroyed the barn, killed four young calves, and caused an estimated \$350,000 in damages. Investigators determined that a heat lamp, used

to keep newborn calves warm, fell and ignited nearby combustibles (bedding or hay). They believe one calf became tangled in the cord and pulled the lamp down. The fire was jointly investigated by the Westfield Fire Department, the Westfield Police Department and State Police assigned to the Office of the State Fire Marshal.

Cooking Cause of Ludlow Fire and Injuries

The cause of the February 17, 2019 fire at 26 Lawton Street in Ludlow was cooking. Upon arrival, firefighters found a small kitchen fire that was already extinguished. An occupant of the home was cooking when her clothing ignited. She suffered serious burns. Her daughter ran to her aid and was injured trying to help. They were taken to the hospital for treatment. The building sustained minor damage.

The fire was jointly investigated by the Ludlow Fire Department, Ludlow Police Department and State Police assigned to the Office of the State Fire Marshal.

Arrest for Hoax and Actual IED

On March 19, 2019, William O'Neil, age 53, pled guilty to possession of an explosive device, placing an explosive device and possessing or using a hoax device. He was sentenced to 2-4 years at MCI Cedar Junction with 4 years of supervised probation on and after.

The State Police Bomb Squad responded to a hoax device on Wolcott Avenue in Maynard on October 29, 2016. About a block away on Demars Street, on February 20, 2019, they responded to an actual improvised explosive device (IED) that was constructed in a similar manner to the earlier hoax device. Fingerprint evidence helped investigators develop a suspect. He was arrested on February 21, 2019. The case was investigated by the Maynard Police Department and both the State Police Bomb Squad and Fire Investigation Unit assigned to the Office of the State Fire Marshal.

Osterman's Truck Fire Accidental

The cause of the February 7, 2019 vehicle fire at the Osterman's Propane facility at 998 Church Street in Northbridge is accidental. The fire began in one propane delivery truck and spread to two others, causing an estimated \$500,000 in damages. The fire started in an area between the engine and the passenger compartment that contained a large quantity of electrical wiring. Due to the extent of damage to the wiring, investigators cannot say conclusively that it was an electrical fire, but there is no evidence of foul play.

The Northbridge Fire Department, the Northbridge Police Department and State Police assigned to the Office of the State Fire Marshal jointly investigated the fire. An automotive forensic technician provided assistance.

Natural Gas Regulators Donated to DFS

by NECI Emerson

The Massachusetts Firefighting Academy (MFA) recently received three natural gas regulators from NECI Emerson. The MFA and the gas industry have a long-term partnership educating firefighters and industry personnel on natural gas emergency operations. This donation by NECI Emerson is the latest collaboration between the fire service and the natural gas industry.

The natural gas regulators were delivered in the form of a cutaway to use as a static prop for training recruit and seasoned firefighters. The prop helps firefighters understand overall gas delivery operation. These regulators reduce the pressure delivered at the street level to one suitable for the equipment in residences or commercial properties.

The MFA runs a state-of-the-art natural gas and propane training facility. It is operated by trained fire service instructors, who are also firefighters. Fire service and gas industry personnel train side-by-side to create a safer environment for everyone.

MFA and the gas industry have a long-term partnership educating firefighters and industry personnel on natural gas emergency operations.



Left to right: Jeffrey Rome, Director of Natural Gas Business Development, NECI Emerson; George Levesque, NECI Emerson; and Brian Nardelli, Senior Instructor, MFA Flammable Gas Group.

Home Fire Sprinkler Week, *continued from page 5*

join the NFPA for a national media event using the DFS Side-by-Side Sprinkler Demonstration Trailer. The prop is a dramatic teaching tool that demonstrates how sprinklers save time, and time buys life in a fire.

Local fire departments can consider these ideas for Home Fire Sprinkler Week:

- Conduct a fire department open house featuring fire sprinkler information and sprinkler riser display. <https://homefiresprinkler.org/nfpa13d-display/>
- Initiate a media event/walk-through of a sprinklered home in your community.
- Dedicate a fire department staff training session to the myths and facts of home fire sprinklers.
- Advocate for a "Home Fire Sprinkler Day" proclamation in your town.
- Spearhead a social media campaign demanding local legislators and decision makers address local fire problem and support sprinklers.
- Write letters to the editor or op-eds underscoring your local fire problem and fire sprinkler laws or the lack of them.

Contact the National Fire Protection Association, the National Fire Sprinkler Association or the Home Fire Sprinkler Coalition for educational resources.



Home Fire Sprinkler Week

May 19-25, 2019

Fire departments, fire sprinkler coalitions and other home fire sprinkler advocates are urged to join in with local activities during the week to educate the public about the power of, and the need for, home fire sprinklers.

2018 Pride in Performance Awards

Employees Recognized for Distinguished Dedication and Commitment

Each year, a committee of Department of Fire Services (DFS) staff selects full-time employees from among nominees for recognition with Pride in Performance awards. This year, the committee recognized two individuals and one team of contract employees for distinguished dedication and commitment to the agency's mission. Governor Baker recognized the full-time employee award recipients at the State House on December 7, 2018.

Abby Baker was recognized for administration of the Taking Action Against Cancer in the Fire Service program. Her tireless efforts to secure funding and her hard work on logistics and delivery allowed thousands of firefighters to take the program across the state. And this program saves lives. After attending one of the classes, a young firefighter went to his doctor, asked for a test recommended during the training, and was diagnosed with the early stages of bladder cancer. If it weren't for the class, this cancer may not have been found early enough to treat. Abby's work has allowed this life-saving program to flourish.

Christine Dansereau was recognized for administration of the Call/Volunteer Recruit Training Program and the Career Recruit Training Program. Up to six classes run concurrently across the state in these two programs and it takes organization, coordination, professionalism, and personnel management skills to oversee and assist the classes. Because the programs are held in multiple locations, Christine coordinated with instructors, fire chiefs, and support personnel daily to ensure a fluid process for each class. She also took the lead in the transition of the Call/Volunteer program to an online e-blended format that allows students to complete some class work online and preserves contact hours for hands-on training. The online format also allows the MFA to provide more classes each year and gives those in training more flexibility.

The Taking Action Against Cancer in the Fire Service Group is a team of instructors who have devoted themselves to delivering the Taking Action Against Cancer in the Fire Service program. The team includes: Al Beardsley, Richard Cerullo, Frank Falcone, Norman Aubert, Jason Cantara, Robert Ljunggren, Veronica Mard, Brian Nardelli, Michael Ragucci, Robert Rogowski, Patrick Roy, Matthew Sawyer, and John Spillane. Together, they were recognized as the contract employee team of the year.



Above: Deputy State Fire Marshal Fournier, award winner Abby Baker, State Fire Marshal Ostroskey. Below: Deputy State Fire Marshal Fournier, award winner Christine Dansereau, State Fire Marshal Ostroskey.



Taking Action Against Cancer

Taking Action Against Cancer in the Fire Service teaches firefighters actions to reduce the risk of occupational cancer. The program is effective for all ranks. This group of instructors has delivered the program more than 400 times in two years across the state. This is the most requested, and most often delivered, class that the MFA offers. In the last year, the program has received countless testimonials from students who have made changes in their behavior to protect themselves from known carcinogens.

After attending one of the classes, a young firefighter went to his doctor, asked for a test recommended during the training, and was diagnosed with the early stages of bladder cancer. If it weren't for the class, this cancer may not have been found early enough to treat.

Commonwealth Prevails in Appeal of Fatal Fire Conviction

Reprinted from Office of District Attorney Timothy J. Cruz, Brockton, MA

The Massachusetts Appeals Court has affirmed the second degree felony murder conviction of a woman who set a fire in a Brockton triple-decker that left one woman dead and children and tenants jumping for their lives from the burning building. Plymouth County District Attorney Timothy J. Cruz announced on March 27, 2019.

On March 10, 2010, a Plymouth County jury convicted Chiteara Thomas, now 34, of first degree murder, arson and 13 counts of attempted murder for setting the deadly fire in July, 2006 at 779 Montello Street, which left 28 year-old Olinda Calderon dead and injured many others. In September, 2014, the Supreme Judicial Court affirmed Thomas' conviction for arson, but reversed the other convictions. At that time, DA Cruz announced that he would re-try Thomas. At the retrial on May 13, 2017, Thomas was convicted of second degree felony murder. Thomas appealed her conviction to the Massachusetts Appeals Court raising several issues, including that her second degree felony murder conviction was based on legally insufficient evidence, as well as a host of other claims including that the denial of her motion to reduce the verdict was an abuse of discretion and that the holding in *Commonwealth v. Brown* regarding felony murder should apply to her case retroactively.

The Appeals Court issued their decision determining that the evidence was sufficient to support the jury's verdict of second degree felony murder. The Appeals Court rejected the defendant's claim that Ms. Calderon's death was not the natural and probable consequence of her actions, noting that the evidence at her second trial was substantially the same as at her first trial, and that the "natural and continuous sequence" of the fire caused Ms. Calderon's death from smoke inhalation. The Appeals Court also found that the "merger doctrine" was inapplicable to the felony-murder conviction where the predicate felony was arson.

The Appeals Court rejected the defendant's argument that the trial judge abused his discretion by failing to reduce the verdict to involuntary manslaughter. The Court lastly found that the holding in *Brown* should not be applied retroactively.

"We are pleased that the Massachusetts Appeals Court has affirmed the conviction of Chiteara Thomas," DA Cruz said. "Because of a feud with a tenant, when Ms. Thomas set fire to a building full of sleeping families she had the intent to kill. Olinda Calderon lost her life, her baby girl lost her mother, and survivors suffered severe injuries.

The heroic efforts of Brockton firefighters saved the lives of many, and continuing on with this case has been about getting justice for Ms. Calderon, her family, and the survivors of that nightmarish morning."

On July 6, 2006 at 5:45 a.m., Brockton Fire responded to 779 Montello Street for report of a fire. Upon arrival, firefighters found the triple-decker, multi-family residence engulfed in flames. Brockton firefighters rescued three female victims who, at the time the fire started, were sleeping inside the third floor apartment. They were identified as a one-month-old baby girl, and two women, ages 46 and 21. The three victims were transported to Boston hospitals with burns, lacerations and severe smoke inhalation. Brockton firefighters also located Ms. Calderon, in the third floor apartment. She was unconscious and suffered severe burns to her body. She was transported to Massachusetts General Hospital where she was pronounced dead the following day. An autopsy revealed that she died from smoke inhalation and thermal burns sustained in the fire.

At the time of the fire, there were seven people sleeping inside the second floor apartment. A passerby, who saw the house on fire, ran into the burning house yelling for the people to get out. He then positioned himself under a second floor window and caught all three children who were dropped down to him by their parents from the second floor. He then broke the fall of the other second floor victims as they jumped from the second floor apartment. The second floor victims were all transported to various hospitals where they were treated for shock, smoke inhalation, broken bones and lacerations.

The investigation revealed that Thomas had been involved in an ongoing dispute with a tenant of the first floor apartment. Thomas had been arrested by Brockton Police on July 3, 2006 for trespassing at the house and witnesses reported that she had broken several windows in the first floor apartment and had threatened to "torch the place."

Witnesses also reported seeing Thomas travel to that address during the night of July 5, 2006, and just moments before the fire, a witness observed her reach into one of the windows she had previously broken, and then flee the scene. Within minutes, witnesses saw fire engulf the entire dwelling. Massachusetts State Police troopers assigned to the State Police Fire and Explosion Investigation Section of the State Fire Marshal's Office investigated the cause and origin of the fire and determined that it was intentionally set by an open flame igniting curtains at the window.

YouTube™ Burn Awareness Video Contest

Winners Announced

The 11th annual statewide YouTube™ Burn Awareness Video Contest award ceremony was held March 12 at the Shriners Hospital for Children®—Boston. State Fire Marshal Peter J. Ostroskey was joined by contest co-sponsors Ron Meehan from the Mass. Property Insurance Underwriting Association (MPIUA) and Capt. Rick Tustin, president of the Mass. Association of Safety and Fire Educators (MaSAFE), Saugus Fire Chief Michael C. Newbury of the Fire Chiefs' Association of Massachusetts and Peabody Captain Christopher Dowling, president of the Fire Prevention Association of Massachusetts.

Winning Videos

Fifty-eight teams from 15 high schools in Assabet Valley, Ayer-Shirley, Braintree, Hampshire Regional, Marblehead, Masconomet Regional, Maynard, Melrose, Millis, Nauset Regional, Northbridge, Norwood, Sutton, West Bridgewater, and Worcester North submitted entries. While all of the videos were creative and interesting, the winning team was from Masconomet Regional High School for their video *Burn Awareness*. Second-place was awarded to a team from Northbridge High School for their gaming video *Fire Safety is SIMple*. The third place winners were from Melrose High School with a video called *Prevention Detectors*. Three teams from Braintree, Millis and Nauset Regional High Schools received honorable mention for their entries. You can see the winning videos on the DFS YouTube™ channel at www.youtube.com/DFSOSFM.

Video Contest

The contest was open to Massachusetts students in grades 9-12. Submissions had to be from school-sponsored communications courses or sponsored extra-curricular groups. Communications teachers or faculty sponsors were required to review and approve all storyboards before filming started. Videos were required to be one to three minutes long, explore burn prevention topics, be well researched, not demonstrate risky or unsafe behavior, and

to be both educational and informative. The contest addresses learning standard components (Gr.9-10) SL.9-10.5, W.9-10.6, (Gr. 11-12) SL.11-12.5, and W.11-12.6 of the Massachusetts Common Core Standards in English Language Arts and Literacy. School districts offering communications classes which include the design and creation of media productions, were encouraged to promote this contest through independent or group assignments.

Judges

Contest judges included Michael Bonina, representing the MPIUA; Capt. Rick Tustin, president of MaSAFE; Jessie Gehlmeyer, Marketing & Communications Specialist for Shriners Hospital for Children®—Boston; Chief Michael C. Newbury, representing the FCAM; Capt. Christopher Dowling, representing the FPAM, Barbara Digirolamo, representing Boston Children's Hospital Injury Prevention Unit; and Jennifer Mieth and Julie Bergeron, from the state Department of Fire Services.

MA-RI FAIR Plan Grand Prize Sponsor

Ron Meehan, of the Mass. Property Insurance Underwriting Association, also known as the FAIR Plan, said, "Supporting this contest fits with our mission of reducing fires in the Commonwealth and the damage they do to life, property and communities." The FAIR Plan presented the grand prize of a digital video camera to the winning team's school.

MaSAFE Contest Sponsor

"As both a parent and a fire prevention officer, I am appalled at how fire and burns are portrayed in some YouTube™ videos. This contest allows young people to learn about the true life consequences of the misuse of fire by researching it on their own, and using their own language to effectively communicate to their peers," said Capt. Rick Tustin, president of MaSAFE. MaSAFE presented gift certificates from Best Buy™ to the winning teams. The first place team

shared \$200 in gifts cards; the second place team shared \$100 in gift cards, and the third place team shared \$50 in gift cards.



First place team from Masconomet Regional High School.

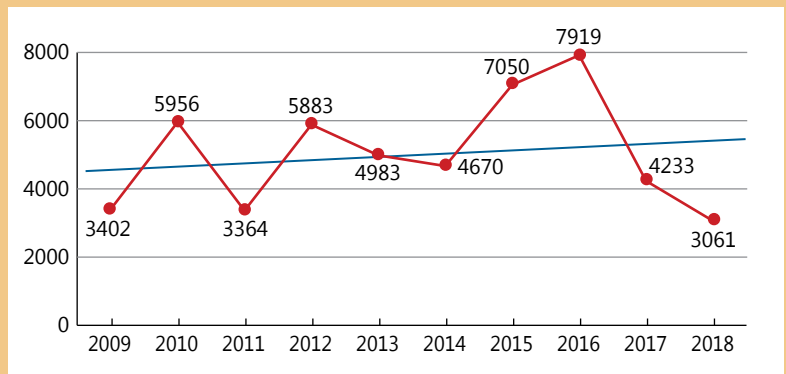
Brush, Woodland and Mulch Fires

Spring weather elevates the hazard of brush fires in Massachusetts. When snow melts, it reveals dried grass, leaves, and fallen branches. This tinder, combined with days of high winds, low humidity and bright sunshine provide ideal conditions for brush and woodland fires.

In 2018, 3,061 brush fires were reported to the Mass. Fire Incident Reporting System (MFIRS) causing one civilian death, two civilian injuries and two firefighter injuries. This is a 28% drop in brush fires from the 4,233 reported in 2017. Data suggests this was the third lowest reported number of brush fires since 1986. The number of brush fires fluctuates each year based on weather conditions.

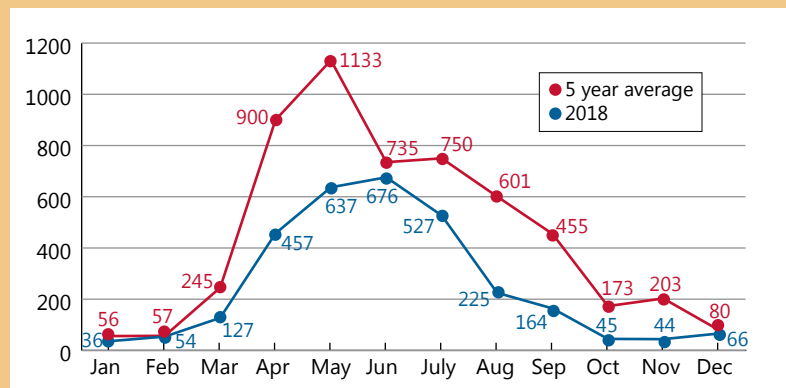
Historically, April is the busiest month for brush fires in Massachusetts. On average, the Commonwealth has 24% more brush fires in April than it does in May, the next busiest month. However, in 2018 the spike in brush fires came in May with 39% more brush fires than in April. Delayed snow melt, below average precipitation, and unusually warm May temperatures contributed to fewer than average brush fires in April and an increase in May. Open burning is usually a contributing factor to the April spike in brush fires, but the season ends on May 1. Unauthorized burning after the season ended may have contributed to the spike as well.

Massachusetts Brush Fires, 2009 - 2018*



*2018 MFIRS data is preliminary.

Massachusetts Brush Fires by Month, 2014 - 2018



*2018 MFIRS data is preliminary.

MFIRS Coding Tips

Brush Fires

Fire vs. Wildland Fire Modules

Third party software must allow reporters to use the Fire Module instead of the Wildland Module. In Massachusetts, we strongly recommend using the Fire Module for brush fires. The Wildland Module is an **optional** module that can be used for the following Incident Types: 140-143, 160, 170-173, 561, 631 and 632. If a software program does not allow this option, contact the vendor to remind them that USFA and MA NFIRS/MFIRS rules allow you to report this way.

Permit Fires and Unauthorized Burning

Code an out-of-control permit fire as Incident Type = 631: Authorized controlled fire or 632: Prescribed fire. If the

fire expands beyond the focus of the permit, then use an Incident Type = 140-143.

- Do not use Cause of Ignition = 1: Intentional. This is reserved for arsons.
- Use either Cause of Ignition = 2: Unintentional or 4: Act of Nature depending on the reason the fire got out of control.

Mulch Fires

There is no specific Incident Type code for a mulch fire. The correct way to code a mulch fire is using Incident Type = 140: Natural vegetation fire, other. On the Fire Module, code Item First Ignited as 72: Light vegetation (not crop). Includes grass, leaves, needles, chaff, **mulch**, and compost.

Massachusetts Firefighting Academy *Graduations*

Chief Fire Officer



Chief Fire Officer

On Thursday, January 31, 2019, 37 fire officers graduated from the 26th offering of the Massachusetts Firefighting Academy's Chief Fire Officer Management Training Program. This 14-week program was developed in accordance with National Fire Protection Association Standards for senior fire officers, and is delivered jointly by the Edward J. Collins Jr. Center for Public Management at the University of Massachusetts and the Massachusetts Firefighting Academy. It is a comprehensive course providing training in the non-fire suppression aspects of managing fire departments. The fire service leaders who complete this program are committed to continually developing their management and leadership skills in order to provide the highest level of service for their communities.

Class #268



The thirty-seven graduates serve the following fire departments: Ashburnham, Ashland, Athol, Belmont, Braintree, Brookline, Carver, Concord, Dennis, Dudley, Duxbury, Easthampton, Falmouth, Foxborough, Hanover, Harwich, Holyoke, Hull, Leverett, Mansfield, Massport, Melrose, Needham, North Reading, Onset, Raynham, Sharon, Somerville, Stoneham, Sturbridge, Tewksbury, West Bridgewater, West Brookfield, Westborough, Wilbraham, and Yarmouth.

Fire Investigation Programs

The Massachusetts Firefighting Academy (MFA) offers tuition-free Fire Investigation programs. The basic and advanced programs provide fire, and state and local police officers with the technical skills to accurately determine the origin and cause of fires in their jurisdictions and together, build solid, prosecutable cases.

Class #269



Basic Fire Investigation Course

Eighty-seven public safety officers completed the Massachusetts Firefighting Academy's six-day *Basic Fire Investigation* course in November, 2018.

The 87 graduates included 72 firefighters, 11 local police officers, three Massachusetts State Police officers, and one state fire code enforcement officer representing the following 59 agencies: Auburn Fire, Berlin Fire, Bridgewater Fire, Brookline Fire, Charlton Fire, Chelsea Police, Chicopee Fire, Concord Fire, Dedham Fire, DFS-Division of Fire Safety, Dighton Fire and Police, Douglas Fire, Dunstable Fire, Fall River Fire, Falmouth Fire, Framingham Fire, Gloucester Fire, Hanover Fire and Police, Haverhill Fire, Lawrence Fire, Lenox Fire, Lexington Fire, Lowell Fire, Lynn Fire, Malden Fire, Mansfield Fire, Mass. State Police, Melrose Fire, Nantucket Fire and Police, Natick Fire, New Bedford Fire, Newton Fire, Northampton Fire, Oxford Police, Raynham Fire and Police, Salem Fire, Somerville Fire, South Hadley-District 1, Southborough Fire, Southbridge Fire, Springfield Fire, Sutton Police, Waltham Fire, Ware Police, Wareham Fire and Police, Watertown Fire, West Bridgewater Fire and Police,

Class #270



Westfield Fire, Westford Fire, Westminster Fire Department, Weston Fire, Weymouth Fire, and Worcester Fire.

Career Recruit Firefighting Training

In the 50-day Career Recruit Firefighting Training program, students receive classroom training in all basic firefighter skills. They practice first under non-fire conditions and then during controlled fire conditions. To graduate, students must demonstrate proficiency in life safety, search and rescue, ladder operations, water supply, pump operation, and fire attack. Fire attack operations range from mailbox fires to multiple-floor or multiple-room structural fires. Upon successful completion of the Recruit Program all students have met the standards of National Fire Protection Association 1001 and are certified to the level of Firefighter I and II, and Hazardous Materials First Responder Operational Level by the Massachusetts Fire Training Council, which is accredited by the National Board on Fire Service Professional Qualifications. Training is held at both the Stow headquarters of DFS and at the new Springfield campus.

Class #268

Members of Career Recruit Firefighter Class #268 graduated on Monday, November 19, 2018 at the DFS Stow campus. The 38 graduates, all men, represent the 28 fire departments of Acton, Burlington, Canton, Chelsea, Danvers, East Bridgewater, Fairhaven, Fitchburg, Gardner, Gloucester, Hanover, Haverhill, Hingham, Hopkinton, Maynard, Methuen, Newton, North Andover, Norwell, Randolph, Scituate, Seekonk, Walpole, Wayland, Wellfleet, West Bridgewater, Westford, and Weymouth.

Class #269

Members of Career Recruit Firefighter Class #269 graduated on Friday, December 21, 2018 at the DFS Stow campus. The 30 graduates, one woman and 29 men, represent the 14 fire departments of Athol, Dennis, Easton, Hanson, Melrose, Milford, North Reading, Norwood, Plainville, Revere, Somerville, Springfield, Wayland and Winthrop.

Class #270

Members of Career Recruit Firefighter Class #270 graduated on Friday, February 1, 2019 at the DFS Stow campus. The 36 graduates, all men, represent the 20 fire departments of Bellingham, Cambridge, Charlton, Cohasset, Falmouth, Hudson, Kingston, Leominster, Lexington, Marshfield, Middleton, Sandwich, Scituate, Somerville, Truro, Waltham, Wayland, Westford, Westport, and Wilmington.

Class #271

Members of Career Recruit Firefighter Class #271 graduated on Friday, March 8, 2019 at the DFS Stow campus. The 35 graduates, two women and 33 men, represent the 22 fire departments of Andover, Attleboro, Bourne, Franklin, Gloucester, Haverhill, Hyannis, Littleton, Malden,

Class #271



Class #272



Class #S10



Marlborough, Medford, Medway, Raynham, Revere, Salem, Sandwich, Stoughton, Wakefield, Waltham, Wayland, West Bridgewater and Yarmouth.

Class #272

Members of Career Recruit Firefighter Class #272 graduated on April 12, 2019 at the DFS Stow campus. The 36 graduates, two women and 34 men, represent the 16 fire departments of Attleboro, Dedham, Framingham, Harwich, Kingston, Malden, Medway, Melrose, Methuen, Middleborough, Peabody, Revere, Somerville, Taunton, Tewksbury and Yarmouth.

Continued on page 20

2019 License Examination Schedule

Fire Safety Division

The Department of Fire Services' Fire Safety Division issues licenses, permits and certificates of competency (licenses) to people and companies engaged in fireworks, blasting, explosives, special effects, cannon and mortar firing, commercial cooking exhaust system cleaning and inspection, special hazard systems, portable fire extinguishers, marine fueling facilities and above ground tanks. Register for exams and see detailed information at www.mass.gov/dfs. Search for *DFS Licensing*. For questions, contact the Licensing Desk at 978-567-3700 or at dfs.licensing@state.ma.us.

Boiler and Pressure Vessel Program

The Boiler and Pressure Vessel Program offers monthly license exams for oil burner technician and all classes of fireman and engineer licenses. Register for exams and see detailed information at www.mass.gov/dfs. Search for *BPV exams*. For questions contact the Boiler & Pressure Vessel Program at (978) 567-3780 or at BPV.Exams@MassMail.State.MA.US.

Licensing Status

To see the licensing status of an individual or company, visit the DFS License Look Up at http://elicense.chs.state.ma.us/DFS_Verification/Search.aspx or go to www.mass.gov/dfs and search for *DFS licensing*.

Examination Schedule	Examination Dates Exams start at 10:00 a.m.	Deadlines for Applications (Fridays)
FSD Exams		
Fire Suppression Commercial Hood Cleaning	May 22 July 17 September 18 November 13	May 3 June 28 August 30 October 25
Cannon/Mortar, Fireworks, Special Effects, Blasting, Blasting R&D	June 19 August 21 October 16	May 31 August 2 September 27
BPV Exams		
Oil burner, fireman & engineer (all classes)	June 26 July 31 August 28 September 25 October 30 November 21 (Thursday) December 18	May 24 June 28 July 26 August 23 September 27 October 25 November 22

MFA Graduations, *continued from page 19*

Class #S10

Members of Career Recruit Firefighter Class #S10 graduated on April 5, 2019 at the DFS Springfield campus. The 24 graduates, one woman and 23 men, represent the twelve fire departments of Auburn, Chicopee, East Longmeadow, Holden, Longmeadow, Ludlow, Pittsfield, Southbridge, Springfield, West Springfield, Westborough and Westfield.

Call/Volunteer Recruit Firefighting Training

The Call/Volunteer Firefighter Recruit Training program is unique in that it delivers a standard recruit training

curriculum, meeting national standards, on nights and weekends to accommodate the schedule of firefighters in suburban and rural areas. Graduates complete 240 hours of training. Bringing the training closer to the firefighters often means more firefighters can participate. The program uses an online format that has students doing more work outside of class and taking quizzes online. This allows students more time to practice training skills with instructors and to better control their own workloads and time commitments. Upon successful completion of this

Continued on page 21

25th Fire & Life Safety Education Conference

Save the Date: September 24 - 25, 2019

Join us as we celebrate 25 years of public fire and life safety education in Massachusetts. The 25th annual Fire & Life Safety Education Conference will be held September 24 – 25 at the Best Western Royal Plaza Hotel and Conference Center in Marlborough. This 25th anniversary of fire education in Massachusetts is a significant milestone. Since the Student Awareness of Fire Education (S.A.F.E.) began in 1995, fire education has influenced the decline of average child fire deaths by 74%. Since 2014, the Senior SAFE program has been educating those citizens who are most at risk of dying in fires. Smoke and CO alarms have been installed in thousands of homes, giving folks early warning of fire or carbon monoxide. We have celebrated 370 young heroes who have alerted fire departments to danger, or because of their actions, saved family members.

This year's conference theme is: *A Quarter Century of Fire & Life Safety Education. Proven Success, Future Challenges.* Workshops will support new and experienced fire

and life safety educators, fire prevention officers, older adult support agency members and teachers with the tools to move forward into the next quarter century of fire and life safety education.

To register, email Cynthia.Ouellette@mass.gov and include "conference" in the subject line of your email. You can also visit www.mass.gov/dfs and type *Public Education Conference 2019* into the search bar.



MFA Graduations, *continued from page 20*

Class #74



Class #75



program, all students have met the standards of National Fire Protection Association 1001.

Class #74

On February 28, 2019 members of the Call/Volunteer Recruit Firefighter Training Class #74 graduated. The 24 graduates, one woman and 23 men, represent the 12 fire departments of: Boxford, Essex, Georgetown, Groveland, Ipswich, Lynnfield, Rockport, Sherborn, Tyngsborough, Wenham, West Newbury and Weston. The ceremony took place at the Masconomet Regional Middle School, Boxford, MA.

Class #75

On February 27, 2019 members of the Call/Volunteer Recruit Firefighter Training Class #75 graduated. The 24 graduates, two women and 22 men, represent the 16 fire departments of: Auburn, Brookfield, Charlton, East Brookfield, Leicester, Lunenburg, Millbury, Monson, Northbridge, Oxford, Paxton, Spencer, Templeton, Uxbridge, Warren and Webster. The ceremony took place at the Department of Fire Services, Stow Campus.

The MFA program for municipal firefighters involves classroom instruction, physical fitness training, firefighter skills training, and live firefighting practice.



Department of Fire Services
Commonwealth of Massachusetts
978-567-3100

www.mass.gov/dfs



2019 FIREFIGHTER SAFETY STAND DOWN

Focusing on Cancer Prevention
in the Fire Service



Safety Stand Down is a joint initiative of the International Association of Fire Chiefs (IAFC) and the National Volunteer Fire Council (NVFC). The event is coordinated by the IAFC Safety, Health and Survival Section and the NVFC, and is supported by national and international fire and emergency service, health and safety organizations. The goal of both IAFC and NVFC is to reduce the number of preventable injuries and deaths in the fire and emergency services. *Safety Stand Down* focuses on responders taking care of themselves on and off the job. The week is designed to increase awareness and action so that safety and health become a priority in all fire and emergency service departments.

Safety Stand Down 2019 (June 16-22), focuses on reducing exposure risks and implementing cancer prevention recommendations in the Lavender Ribbon Report. Fire and EMS departments are encouraged to suspend non-emergency activity during *Safety Stand Down* and to focus on education related to the theme. The event lasts for a week so that all shifts and duty crews can participate. Visit <https://www.safetystand-down.org/> for more information and resources.

DFS Safety Stand Down Week Activities

DFS will host activities that increase awareness, and that allow firefighters to take action on cancer risks. DFS will host seminars on decontamination, cleaning and inspecting personal protective equipment (PPE) for staff and for fire departments at the Stow (June 20)

and Springfield (June 18) campuses. Upcoming changes in the NFPA Standard 1851 that covers PPE will also be reviewed.

MFA has many cancer awareness and wellness activities planned for Stand Down Week. As part of the Senior Fire Officer Forum Series, Dr. Michael G. Hamrock, a leading specialist on firefighter occupational cancer, will present *Promoting a Culture of Health, Safety, and Fitness for the Fire Service in Massachusetts* on June 17. He is a former firefighter and is now the physician for the Boston Fire Department. Dominica D'Avella, a health fitness specialist, will present *The Missing Link: Leveraging Human Factors to Maximize Firefighter Resilience*. Her presentation will focus on behavioral health and wellness for firefighters include sports medicine and the mind-body connection in staying healthy. The MFA will offer four sessions of the very popular cancer awareness class *Taking Action Against Cancer in the Fire Service*; two in Stow (day and evening), one specifically for Recruit Class #S11 in Springfield and one in Turners Falls on Saturday, June 22. In addition, there will be free skin and oral cancer screening sessions for firefighters by Dr. Christine Kannler, a dermatologist, and Lisa Evans, an oral hygienist, in conjunction with the Stow (June 21) and Turners Falls (June 22) awareness classes, and one specifically for the Springfield recruit class. Register through the DFS Learning Management System <https://hraccess-us.technomedia.com/mfa/>.