

# All Hands Herald

Massachusetts Department of Fire Services

September 2018

## Massachusetts Becomes an OSHA State *Impact on Fire Departments*



**Sprinklers Save Lives  
New Demonstration Trailer**

**DFS Receives Federal  
Grant Funding**

**New NFPA Active Shooter/  
Hostile Event Standard**

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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.

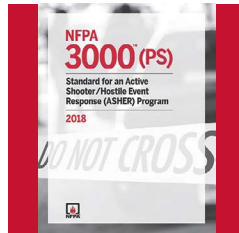
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# From the Fire Marshal

## July 4<sup>th</sup> is No Holiday for Firefighters

The Fourth of July week was busy for firefighters and for DFS. We helped inspect fireworks shows, provided Special Operations support for fireworks displays, parades, road races, other local events and for several major fires. DFS provided bomb squad, special operations, hazardous materials, and fire code compliance resources to support the Boston July 4th concert on the Esplanade, that ran smoothly and safely. DFS Incident Support (ISU) and Rehab Units responded to many fires to assist local fire departments during a week with the hottest stretch of weather in one hundred years.

Fire officials across the state spent hundreds of hours in June and July ensuring that supervised displays of fireworks were safe and that residents had a wonderful holiday. DFS code compliance officers worked alongside local fire prevention officers inspecting 115 fireworks shows, 75% of the shows in the state this season. There was only one minor mishap at supervised fireworks displays, a cinder in an eye. Most injuries continue to be at illegal, unsupervised displays.

The State Police assigned to DFS (bomb techs and fire investigators) were involved in a number of large fireworks seizures and investigations. This work helped remove dangerous commercial and consumer fireworks and bomb-making materials from the state. In some cases, fireworks were stored inside homes where small children lived, putting them, and all residents at considerable risk. Major seizures happened in Beverly, Hadley, Rockland, and Westfield.

People shooting roman candles in the street caused a terrible fire in Lynn that ignited a second floor porch and left six families homeless. States where fireworks are legal like Washington (with about the same population as Massachusetts), have five times as many fires from fireworks as we do. I am sure it does not bring comfort to those left homeless by the Lynn fire, but things could be much worse here without the Model Fireworks Law.

## Training Now Required to Obtain Welding Permit

Starting July 1, 2018, anyone applying for a hot works permit from a Massachusetts fire department must demonstrate they have completed an approved training program. Ensuring that operators are properly trained is an important, common sense step towards making welding, cutting, and hot works safer.

DFS has approved two hot works training programs: the same National Fire Protection Association (NFPA) 1-Day Hot Work Safety Certificate Program that the City of Boston has required since October 2016, and one from the Gould Construction Institute. This accomplishes a major goal of the Welding Commission created in response to the March 26, 2014 fire that killed two Boston firefighters. The fire was sparked by unpermitted and improperly performed welding. At press time, the commission continues to review other issues that require legislative action including whether the fines for failing to obtain a permit should be revised. There has been concern that some in the industry felt that a low fine is easier to manage than the hassle of obtaining a permit and possibly having to pay for a detail, or the expense of training employees properly.

## New NFPA 3000 Standard on Active Shooter/ Hostile Event Response (ASHER)

When most firefighters joined the fire service, they knew they would be facing many dangers. But none of us thought that we'd be wearing ballistic vests as part of our personal protective equipment (PPE).

Unfortunately the dangers firefighters face have changed with the times. As part of the unified public safety response to active shooter and hostile incidents, fire service leaders have to evaluate the risk and provide the appropriate equipment and training for their personnel.

The NFPA 3000 Standard helps get everyone on the same page, use the same terminology, and train to work together in non-traditional environments. The fire service does not normally respond to incidents where we need police protection, but getting EMTs quickly to victims of a mass shooting does. Providing emergency medical services in these situations puts them at risk of becoming victims themselves and patients can be re-injured. The NFPA standard recommends using rescue task forces to successfully move patients from a warm to a cold zone for treatment.

The fire service has long standing plans for responding to mass casualty incidents involving industry or transportation. These rarely occur. Now we face mass



*Continued on page 3*

# NFPA 3000™ (PS): STANDARD FOR AN ACTIVE SHOOTER/ HOSTILE EVENT RESPONSE (ASHER) PROGRAM

State Fire Marshal Peter J. Ostroskey was part of the team that developed NFPA 3000™ (PS), Standard for an Active Shooter/Hostile Event Response (ASHER) Program – the world’s first standard to help communities develop a unified active shooter/hostile event planning, response and recovery program. The National Fire Protection Association (NFPA) released the new standard on May 1, 2018 to help policy makers, first responders, and others organize, manage, communicate, and sustain a holistic active shooter/hostile event preparedness program.

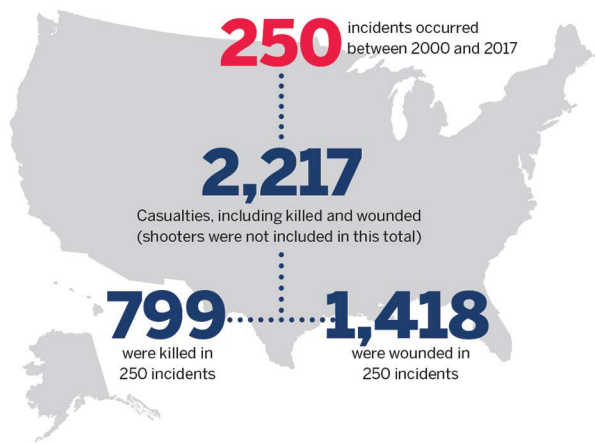
Ostroskey worked with 45 other NFPA Technical Committee members from law enforcement, the fire service, emergency medical services, hospitals, emergency management, private security, private business, the Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), the Department of Justice, and other disciplines to develop the first-of-its-kind standard. During the fast-paced development period, committee members provided job-specific insight and real world perspectives from mass killings at Mandalay Bay Resort, Pulse Night Club, Sandy Hook Elementary, the Sikh Temple, the Boston Marathon, and other less publicized events.

Ostroskey said, “One important aspect of this standard is that as we work together to reduce the risk of incidents by hardening vulnerable occupancies, that we do not lose sight of lessons learned from other tragedies. Preparing for an active shooter should not displace other risk evaluations or lessons learned in fire safety and fire protection. This document helps communities plan to reduce the risk of these incidents using a comprehensive approach.”

“The NFPA 3000 process, from start to finish, has been an exceptional example of emergency responders and other safety-focused practitioners swiftly coming together to provide invaluable perspective and address a significant threat in our world,” NFPA President and CEO Jim Pauley said. “The proactive, integrated strategies recommended and defined in NFPA 3000 will go a long way in helping communities plan, respond and recover from active shooter and hostile events.”

## By the Numbers

### Active shooter events in the US: 2000–2017



*Images courtesy of NFPA.*

After the Pulse Night Club massacre in June of 2016, Chief Otto Drozd of Orange County Fire in Florida requested that NFPA develop a standard to help authorities work together to create a well-defined, cohesive plan that works to minimize harm and maximize resiliency. NFPA responded by establishing the NFPA Technical Committee on Cross Functional Emergency Preparedness and Response. A three-month public comment phase (October, 2016 to January, 2017), garnered more than 100 comments. In mid-April, 2018 NFPA 3000 was issued by the NFPA Standards Council and then published as an American National Standards Institute (ANSI) standard, making it the first consensus ASHER document in the world.

In addition to offering NFPA 3000™ (PS) via a new digital subscription (updated automatically when the next edition becomes available) NFPA is offering an online training series (the first of three courses are available now); a downloadable checklist; a readiness assessment document; and a fact sheet for authorities to learn more about establishing a proactive, collaborative active shooter/hostile event program.

# DFS Receives Federal Grant Funding

## \$434,783 Assistance to Firefighters Grant

In July, DFS was awarded \$434,783 from the U.S. Department of Homeland Security's FY2017 Assistance to Firefighters Grant (AFG) program. The funds will be used to purchase a new training building for the Springfield campus.

A risk assessment and internal review found that improvements were needed in the Springfield burn building and ladder tower so that training would be consistent on both campuses.

DFS will build a 2-story combination burn and search and rescue prop in Springfield. The building will have burn rooms, a hallway, and a bulkhead on the roof to simulate a basement entry. It will complement the current burn building and training tower in Springfield and will result in consistent training at both facilities.

There are several additional benefits of having a new training prop in Springfield. First, it will allow several groups to conduct different training at the same time (for example, live burns and search and rescue). Right now,

**The grant will be used to build a new training tower in Springfield, making firefighter education consistent on both campuses.**

only one group can use the burn building at a time. This slows down training. A second benefit of additional burn rooms is that maintenance on the existing burn building will no longer stop "live burns" needed for training. Finally, having a separate building for search and rescue operations will reduce the exposure of recruits, instructors, and others to possible contaminants in the burn building.

Beginning in FY 2013, DHS expanded eligibility to state firefighting academies for the AFG program funding. Since that time, DFS has been successful every year in their AFG applications and has received \$1,971,740 in federal grant funding to date.

### From the Fire Marshal, *continued from page 1*

shootings with increasing frequency. Massachusetts has experienced violence in the past including in a Wakefield office building; a women's clinic in Brookline; and a private school in the Berkshires.

Preparing for an active shooter should not displace any other risk evaluation or lessons learned in fire safety and fire protection. We also need to be careful not to cause unintended harm through actions such as putting locks on doors that do not conform with the State Fire and Building Codes. Fires happen with more frequency than mass shootings, and people need to be able to get out in a hurry. This document helps communities to reduce the risk of these incidents using a comprehensive approach.

### School ASHER Symposium

In early September, the Governor and Public Safety Secretary Bennett worked with DFS to hold a one-day training for fire, police, and schools on response planning for school active shooter/hostile events. The NFPA hosted the symposium on September 6 and provided an overview of the ASHER standard as a tool for communities to add to their comprehensive emergency plans responding to active shooter and other hostile events.

### HazMat Techs Fight the Opioid Epidemic

Massachusetts Hazardous Materials Response Teams are on the front lines of the opioid epidemic. HazMat Division

Director David DiGregorio presented at the IAFC HazMat Conference in Baltimore on how Massachusetts safely detects fentanyl and its analogs in the field, and discussed the strengths and limitations of available technology. Massachusetts has been able to collaborate with local academic and high-tech resources and has the opportunity to provide feedback to the scientific community on what is needed in the field. We seem to be a leader in the country in responding to fentanyl-related incidents and are happy to share our work.

Soon, HazMat techs will begin to carry Narcan, the overdose reversing drug, to be used for personnel safety in case of accidental exposure at a scene.

### 2018 Edition of NFPA 1

The Board of Fire Prevention Regulations is currently reviewing the 2018 edition of NFPA 1. One of the advantages of using a national code as the basis for the State Fire Code is the ability to keep it updated on a three year cycle. Currently, Massachusetts has adopted the 2015 edition of NFPA 1 with Massachusetts amendments as the State Fire Code. The board is expected to adopt the 2018 edition, with Massachusetts amendments, early in 2019 with a projected effective date of July 1, 2019. Marijuana grow and processing operations, as well as other new areas will be covered in these revisions to the code.



# Massachusetts Becomes an OSHA State

## Impact on Fire Departments

On March 9, 2018, Governor Baker signed into law Chapter 44 of the Acts and Resolves of 2018, *An Act Relative to Standards of Employee Safety*. The bill expanded the definition of “Public Employer” to include political subdivisions (municipalities) and independent state authorities (for example, MassPort). The law:

1. Requires employers to provide a minimum level of workplace safety as is provided by OSHA;
2. Establishes a nineteen (19) member Occupational Health and Safety Board appointed by the Governor which shall evaluate injury and illness data, recommend training and implementation of safety and health programs, and determine where additional resources are needed to protect health and safety of public employees.
3. Requires the Department of Labor Standards (DLS) to promulgate regulations to enforce the new requirements; and
4. Takes effect on February 1, 2019.

This means that municipalities must adhere to the OSHA workplace safety requirements. DFS, the Fire Chiefs' Association of Massachusetts (FCAM) and the state Department of Labor Standards (DLS) have been discussing how to guide communities to implement these requirements in fire departments. The Mass. Firefighting Academy will host a series of workshops for fire officials (also for municipal officials) on understanding and implementing the new requirements. The workshops will include representatives from the DLS (charged with enforcing municipal OSHA requirements) and FCAM.

The goal of the DLS is worker safety. They work with communities to achieve OSHA compliance within a reasonable amount of time. Cooperative work may include developing solid plans to achieve compliance and safe work environments. Fire chiefs may be surprised to learn that the new OSHA requirements ask them to comply with steps they have already taken, or plan to take, in order to reduce firefighter exposure to carcinogens. Most fire departments will find they are already largely in compliance with a large number of the new OSHA requirements.

### DLS Safety Requirements for Fire Departments Frequently Asked Questions

#### 1. Personal Protective Equipment (PPE)

- a. **Are firefighter station uniforms required to be flame retardant?** No. Continue to use the station uniforms that you are using. OSHA does not require station

The new OSHA requirements ask chiefs to comply with steps they have taken, or plan to take, to reduce firefighter exposure to carcinogens. Most departments are already largely in compliance with many of the new requirements.

uniforms to be flame retardant. The selection of PPE is based on hazard of the task. <https://www.osha.gov/laws-regs/standardinterpretations/1991-07-08-0>.

- b. **Are steel toe boots required for station uniforms?** The standard boot is a black uniform boot or black sneaker. No. A safety toe shoe (“steel toe” or “composite toe”) is not required for station uniforms.
- c. **What if bunker gear is older than the recommended NFPA expiration?** The OSHA standard requires that PPE is in good condition, washed, stored and inspected according to manufacturer instructions. The Department of Labor Standards (DLS) will refer to OSHA standards, which do not enforce an expiration date.
- d. **When is hearing protection required?** Hearing loss is a known hazard in the fire service due to truck sirens and pump equipment. However, each fire department will have different noise levels depending upon the types of equipment and types of responses conducted.

DLS will not assume that your department has excessive noise. DLS will conduct noise testing first. There are calculations based on noise level, number of hours exposed, and number of days exposed per year to determine if noise levels are excessive.

Departments that have noise levels above 85 decibels for eight continuous hours and for more than 30 days per year should evaluate workplace noise exposure. The results of testing will indicate whether hearing protection is required.

#### 2. Respirators

- a. **Is facial hair allowed?** DLS will follow OSHA interpretation which allows some, but not all, types of facial hair. A department may elect to have a stricter policy. <https://www.osha.gov/laws-regs/standardinterpretations/2012-09-14>. There can be no facial hair that comes between the sealing surface of a facepiece and the face, and no facial hair that interferes with valve function. This rule stays in effect even if the person passes a fit test with facial hair.

**b. What type of fit test is required for SCBA?**

Qualitative or Quantitative is acceptable.

<https://www.osha.gov/laws-regs/standardinterpretations/1999-01-15>.

**c. Can fire departments administer fit tests?** Yes, fire departments can administer fit tests to their own employees. A vendor is not required. Keep a record of each employee fit test. Fit tests are required annually.

**d. When a firefighter passes the fit test, doesn't this mean that they are medically cleared to wear the respirator?** No. These are different concepts. A fit test confirms that air does not leak into the facepiece. This is required at new hire before a person is assigned to wear a respirator, and on an annual basis.

A medical evaluation for respirator use confirms that the firefighter is physically able to wear a respirator. This is required at new hire before a person is assigned to wear a respirator. See Medical Exams, below.

**e. Can a respirator be used by more than one person?** Yes. Each employee does not need to be issued their own respirator. The OSHA standard requires that a respirator is cleaned and disinfected before being used by another person.

**f. Is a SCBA required for all fires where smoke is present?** No. A SCBA is required for IDLH (immediately dangerous to life and health) conditions.

An OSHA interpretation letter explains that the incident commander may determine choice of respirator based on the hazards of the scene. For example, an incipient stage fire might not require a SCBA, and excessive smoke during overhaul might require a SCBA. <https://www.osha.gov/laws-regs/standardinterpretations/2002-07-08-0>.

**g. The OSHA 2-in/2-out rule: What if 4 personnel are not available on scene?** The 2-in/2-out rule applies when conducting interior structural firefighting, except when performing emergency rescue activities before an entire team has assembled.

- The respirator standard, 1910.134 (g) provides an exception to the 2-in/2-out rule for life saving operations.
- One of the "two out" may be assigned other roles, such as incident commander.
- Non IDLH conditions: The 2-in/2-out rule is



not required. See <https://www.osha.gov/laws-regs/standardinterpretations/1995-11-01>.

**h. What are the requirements to refill SCBA cylinders?** OSHA does not specify who may fill SCBA cylinders. DLS expects the following:

- Periodic inspection is conducted of compressor equipment to ensure quality of breathing air;
- Annual respirator training should include information on using the compressor and refilling SCBA cylinders.
- Fire departments who conduct a periodic skill assessment by observing individuals refill cylinders will be determined by DLS to fulfill the requirement to provide compressor training.
- The OSHA standard provides requirements for air quality, couplings, cylinders, and carbon monoxide alarms on compressors that are oil-lubricated.

### 3. Medical Questions

The OSHA standards require three different types of medical exams for firefighters:

1. Medical exam for performance of job duties
2. Medical exam for authorization to use a respirator;
3. Medical exam for HazMat Team



## Sprinklers Save Lives

### DFS Receives Side By Side Demonstration Trailer

*"To protect lives and property from fire through the widespread acceptance of the fire sprinkler concept."* This is the mission of the National Fire Sprinkler Association (NFSA). One of the ways the NFSA promotes the effectiveness of sprinklers is with a side-by-side sprinkler trailer demonstration prop. The NFSA has donated a new mobile sprinkler prop and \$10,000 to DFS for use by Massachusetts fire departments. The prop contains two identical sitting rooms that are set on fire. One room has a fire sprinkler and one does not. The cash donation will pay for refurbishing it after each demonstration.

On June 27, Shane Ray, president of the NFSA, and Peter Gibbons, business manager for Sprinkler Fitter Local 550, presented the prop and a check to DFS in a formal ceremony at the Stow campus. "It's an honor to assist progressive and proactive leadership who have a desire to properly educate and inform citizens, businesses, and visitors in Massachusetts," said Ray, "This innovative tool will educate citizens, firefighters, and public policy makers on the dangers of modern fire and how best to protect themselves." Secretary of Public Safety and Homeland Security Daniel Bennett and State Fire Marshal Peter J. Ostroskey accepted the donation.

The ceremony included an astonishing demonstration of the new prop that showed the power and speed of an uncontrolled fire and the effectiveness of fire sprinklers in controlling fire quickly.

In the 1970's, it was estimated that a person had 17 minutes to escape from a typical home fire. Through the years and because of the change in construction techniques, plastics in home appliances and foam rubber furnishings, it is estimated the time to escape has been reduced to between 1 and 3 minutes. Shane Ray narrated the demonstration with the help of a timer. He noted when flames appeared, when the smoke alarm went off, and other highlights during the burns. Staff and guests saw the extraordinary effectiveness of fire sprinklers. In the unsprinklered room (on the right), the fire reached flash-over in two minutes. Once a fire reaches flashover, no one survives. In the sprinklered room (on the left), the sprinkler doused the flames in 19 seconds and damage was minimal. The furniture and almost all of the contents of the room were saved. During his narration, Ray also advocated for working smoke alarms and practiced home escape plans. Seeing how fast fire moves, how quickly heat and toxic smoke builds, and how sprinklers contain a fire quickly made a strong impression on observers.

As a result of the generosity of the NFSA, DFS began making the prop available to communities in August. Make your request through the Learning Management System (LMS), or by calling Cindy Ouellette at 978-567-3381. The unit will be available April 15 to November 15. After each use, refurbishing the prop takes about three weeks.





# Fireworks Seizures and Incidents

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*The Fire and Explosion Investigation Unit (Bomb Squad and Fire Investigation Unit), was busy helping local officials with large-scale seizures of illegal fireworks and bomb-making materials leading up to the Fourth of July.*

## Beverly

On June 29 and 30, 2018, the State Police Bomb Squad assisted the Beverly Police Department with a large seizure of fireworks. Police had been called for gunshots or fireworks being shot from a moving van in a nearby cemetery. When police found the van, it was full of consumer grade fireworks, M-class explosive devices, and component and precursor materials (hobby fuse, empty cardboard cylinders, end caps, powders). Some of the improvised explosive devices (IEDs) had exploded already. Christopher Regan, age 32, of Beverly, had rented the van. He will be charged with disorderly conduct, possession of fireworks, possession and creation of incendiary devices, and 5 counts of possession of an explosive device.

## Hadley

On July 3, the State Police Bomb Squad assisted the Hadley Police and Fire Departments with a large seizure of fireworks in a residential garage. They confiscated dozens of cakes of various sizes, nearly 100 canister shells, a dozen M-150 firecrackers and cannon fuse and mortar tubes. Every year, the police are called about illegal fireworks shows at this home. Neighbors alert the police with safety concerns for both people and property.

## Middleton

On July 3, the State Police Bomb Squad responded to Middleton for a large homemade fireworks display that

went awry in a backyard. The Squad dismantled the wire and tubes of the display and safely transported the materials for disposal.

## Marion

On July 13, the State Police Bomb Squad responded to Marion for another homemade fireworks display. Seven mortars attached to plywood were found on the beach. One of the tubes still contained a live shell which was transported for disposal.

## Mansfield

On July 6, 2018, a 39-year old man was seriously injured when a large, illegal firework exploded in his left hand. The incident happened in the parking lot for the Mansfield train station. The State Police Bomb Squad and a fire investigator helped the Mansfield Fire and Police departments to search the scene for additional fireworks and the investigation. The injured man was taken to a Rhode Island hospital and will be charged with possession of fireworks.

## Marshfield

On July 3, 2018, a 10-year old boy was injured on the beach by illegal fireworks. Local fire and police responded to the incident.

## Tewksbury

On July 14, 2018, the Tewksbury Fire Department and Lowell paramedics treated a man who lost half of every finger on his right hand when a firework exploded. A search for the lost fingers did not find any pieces large enough to be reattached.

# Fall Fire Safety Education

## Resources

### College Fire Safety

September is *Campus Fire Safety Month*. Resources for parents and students to help identify safe housing and promote fire safety in off-campus housing include: the Center for Campus Fire Safety, Campus Firewatch, and the Michael H. Minger Foundation. These organizations promote on- and off-campus fire safety. DFS has a web page about college fire safety. Visit [www.mass.gov](http://www.mass.gov) and search for *college fire safety*.

### Change Your Clock, Check Your Alarms

This year we change the clocks on November 4. DFS has changed our smoke alarm messaging to fit with new smoke alarm technology. Not every smoke alarm needs to have its battery replaced every year, as some come with 10-year, sealed, non-rechargeable, non-replaceable batteries. *Change Your Clock, Check Your Alarms* asks people to replace alarms every 10 years, test alarms monthly, and if the alarms are alkaline battery operated, to replace them. This is a good time to remind people to check carbon monoxide alarms, which have a life span of 5-7 years. For more information about smoke and carbon monoxide alarms visit [www.mass.gov/dfs](http://www.mass.gov/dfs) and search for *smoke alarms*.



### Winter Home Heating Safety

As the weather gets colder, we turn on the heat. And many fire fatalities are associated with winter heating. Whether people heat with oil, gas, electricity, coal, wood or propane, they need to *Keep Warm, Keep Safe*. This DFS campaign includes messages about maintaining and using heating equipment, carbon monoxide and smoke alarms. Find the campaign toolkit at [www.mass.gov/dfs](http://www.mass.gov/dfs) and search for *Keep Warm Keep Safe*.



### Smoke Alarms, A Sound You Can Live With

DFS has a smoke alarm campaign and toolkit that is helpful in every season. The messaging reminds people that smoke alarms have a life span of 10-years, that alarms belong on every level of the home, outside bedrooms, at the top of open stairs and at the base of cellar stairs. People have less than 3 minutes to escape a fire and smoke alarms give early warning of danger. For more information visit [www.mass.gov/dfs](http://www.mass.gov/dfs) and search for *smoke alarms*.



### Put a Lid on It for Cooking Fire Safety

Cooking is the leading cause of residential fires. Cooking increases during the fall and winter holiday seasons and cooking fires increase between Thanksgiving and New Years. To stay safe, stay in the kitchen when cooking. If a stove fire begins, remember to *Put a Lid on It!* Keep children and pets at least three feet away from fire or the stove. For more information about cooking fire safety or to find our toolkit for fire departments, visit [www.mass.gov/dfs](http://www.mass.gov/dfs) and click on *cooking fire safety*.



### Fire Prevention Week 2018

Fire Prevention Week is October 7-13, 2018 and this year's theme is *Look. Listen. Learn. Be aware. Fire can happen anywhere.* The campaign educates the public about three essential steps to reduce fires, and how to escape fire safely:

- Look** for places fire can start. Look around your home. Identify potential fire hazards and remove them.
- Listen** for the sound of the smoke alarm. You have only minutes to escape once a smoke alarm sounds. Go to your outside meeting place, which should be a safe distance from the home.



Continued on next page

# LMS Training History

*Now Available*

DFS is pleased to announce the release of the Training History Module in the Learning Management System (LMS). Students can now access their training history for all courses they have attended at DFS since late 1999. The Training History Module will make it much easier for students to get transcripts, see which courses they have taken and which certifications they have earned.

## More Training History Information

- Training history is for late 1999 to the present.
- Students will have access to training certificates, which is very helpful for courses with OEMS continuing education hours.
- Only the student has access to their own transcripts.
- The “No Show” policy is being enforced as of August 2017, when LMS launched. It will not affect earlier training.
- Students have access to training attendance history.
- We continue to perfect the training history database and you may see updates to course numbers, completion dates and attendance status.

## Resolving Training History Issues

If something is incorrect in your history or you recently created a new account but believe you had an old account, it is possible that your training history will be blank. To resolve either issue, fill out the web-based training history verification form and submit it to the MFA registration staff at [Registration.DFS-TM-Academy@mass.gov](mailto:Registration.DFS-TM-Academy@mass.gov). Link to the form in the middle of the student login page on the LMS. Please allow up to three weeks for us to resolve your issue.

## LMS Online Help

Find the job aid *How to Use LMS* in the middle of the student login page. Extensive online help is available through the help menu at the bottom of the login page. The *Frequently Asked Questions* (FAQ) section is another resource. If you still have problems accessing LMS, call the MFA registration team Monday through Friday, 7:00 a.m. to 4:00 p.m. at (978) 567-3200.

# Court Bans Illegal Hoodcleaner

*For Fraudulent Commercial Kitchen Cleaning*

The Hampden County Housing Court has issued a permanent injunction against Jerome Thompson to stop him from performing commercial cooking equipment cleaning and inspections without a certificate of competency and from falsely certifying equipment and defrauding clients and other violations of the State Fire Code. He did business as Thompson Pressure Cleaning and worked all over the state. He was fined \$8,000. DFS issued numerous warnings and notifications to stop him from doing this work in violation of the code before taking him to court. Separately, the hood cleaning certificate of competency of his spouse Brooke Thompson (HC-000583) has been suspended by the Department of Fire Services.

## Fall Fire Safety Education, *continued from previous page*

- Learn** two ways out of every room. Make sure all doors and windows open easily and are free of clutter. Sparky the Fire Dog® has a smart, resourceful new friend, Simon. Simon will help Sparky teach fire safety messages.

Fire prevention week gives families an opportunity to create a safer environment and to plan for an emergency. Visit [www.firepreventionweek.org](http://www.firepreventionweek.org) for more information.

## Candle Safety

Candles are used in many fall and winter celebrations and

candle fires increase between Thanksgiving and New Years. Educators should urge the public to use battery operated candles in carved pumpkins, on holiday tables and in decorating, and to always use the 1-foot circle of safety with every candle. For more information visit [www.mass.gov/dfs](http://www.mass.gov/dfs) and search for *candle safety*.





# Fire Investigation News

## Man Arrested in Domestic Violence Arson

On April 5, 2018, a joint task force made up of the Wareham Police, State Fire Marshal's Office investigators, and the State Police Violent Fugitive Apprehension Section arrested 41-year old Mondel Johnson for setting a house fire at 36 Restful Lane, Wareham, on March 29. Johnson assaulted a woman who lived there, then set the fire with the intent to either cover up the assault or to further injure her. The woman was able to escape the house and called 9-1-1. On May 23, the Plymouth County's District Attorney's office indicted Johnson on two counts of armed assault with intent to murder, two counts of assault and battery with a dangerous weapon, one count of burning of a dwelling, and one count of malicious and wanton destruction of property. This was a case of domestic violence.

## South Shore Serial Arsonist Indicted Again

On April 18, 2018, the south shore serial arsonist, Mark Sargent, age 50, of Fall River, was indicted for the third time for fires he set from 2016-2017. The first indictment came in February for four Plymouth County fires. The second indictment came from the state of Rhode Island for a Tiverton fire, and the third came in April for a fire in Bristol County. The cases were investigated by multiple teams in Massachusetts and Rhode Island. These included the State Police assigned to the Plymouth and Bristol County District Attorney's Office, the Brockton Fire and Police Departments, State Police assigned to the Office of the Massachusetts State Fire Marshal, the federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), along with the Rhode Island State Fire Marshal and the Tiverton Police and Fire Departments. Previously, Sargent plead guilty to setting about 30 fires in 2014 with his stepson. He was released in October 2015 and was still on probation from those fires when he started this most recent wave of arsons. The investigation is ongoing and it is possible that he may face additional charges for other fires.

## Weymouth Fire Intentionally Set

Arson was the cause of the April 23, 2018 fire at 519 Broad Street, Weymouth. The fire was set in a one-bedroom apartment on the fifth floor of the Union Towers II senior housing. Two people were transported to the hospital for non-life threatening injuries. Damages are estimated at around \$75,000. Authorities have identified the responsible person, are aware of the person's whereabouts, and have determined that there is no threat to the public. The

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

## Man Charged with Arson of Westfield Store

Louie Carmel, age 49, was summonsed to court on July 13, 2018 to face charges of intentionally setting fire to the Country Mart convenience store on July 5, 2018. He faces one count of burning a building. The fire occurred at 397 Little River Road at about 2:30 a.m. The store is directly across the street from a Westfield fire station. Firefighters were alerted by a passerby who saw the smoke and the fire was quickly extinguished.

The fire was jointly investigated by members of the Westfield Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal. Investigators determined that the fire was intentionally set on the outside of the back of the building. Investigators believe that Mr. Carmel, a frequent visitor to the County Mart, was upset by conversation inside the store earlier in the day.

## Smoking Caused Fatal New Bedford Fire

Improper use of smoking materials caused a fatal fire on April 11, 2018 at 176 Potter Street, New Bedford. Jaxson Leahy, age 21, died in the fire. At 9:30 a.m., he called 9-1-1 saying he was trapped in a smoke-filled second floor bedroom. He had lit his marijuana bowl with a butane torch, then left the room. When he returned to the room he found the curtains on fire and he tried to fight the fire unsuccessfully. The victim's father and his four other children were able to escape. The fire was investigated by the New Bedford Fire and Police Departments and State Police assigned to both the Office of the State Fire Marshal and the Bristol District Attorney. The Department of Fire Services' Code Compliance Unit provided assistance.

## Smoking Likely Cause of Fatal Waltham Fire

Investigators believe the most likely cause of a fatal fire on June 4, 2018 at 30-32 Rumfield Avenue in Waltham was the improper use or disposal of smoking materials, although the official cause remains undetermined. The victim, Wayne D. Dawson, was rescued by the Waltham Fire Department but was pronounced dead at the hospital. His brother was able to escape the fire. The fire started at 6:45 p.m. in a third floor bedroom. The victim was known to smoke both cigarettes and marijuana and witnesses claim to have seen burn marks on his bedding. The fire was jointly investigated by the Waltham Fire and Police Departments and State Police assigned to both the Office

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# AK9 Training and Research



DFS and the State Police Crime Lab conducted a multi-agency AK9 training in July. Participants included AK9 handlers from the Massachusetts State Police (MSP) Fire & Explosion Investigation Unit, Connecticut State Police, and Boston Fire Department. MSP Crime Lab Chemist John Drugan also participated. Ten AK9 teams successfully completed the training.

The AK9 teams also contributed to an ongoing research project of the State Police Crime Lab. The research is examining whether canines can detect the presence of accelerants in fire debris at lower levels than a gas chromatograph or mass spectrometer equipment. The research found that AK9s can detect ignitable liquid residue at levels lower than traditional equipment. The research is important because when AK9s alert and a lab cannot verify results, the AK9s are subject to accusations of false alerts. The research clearly demonstrates that the AK9s can detect the presence of accelerants at extremely low levels.

## Fire Investigation News, *continued from previous page*

of the State Fire Marshal and to the Middlesex District Attorney's Office.

### Illegal Marijuana Grow Causes Tewksbury Fire

On June 10, 2018, the Tewksbury Fire Department found approximately 150 marijuana plants in the basement of a single family home at 11 Herbert Street in Tewksbury during firefighting operations. One homeowner was home at the time of the fire and escaped, but the family dog was trapped. The two homeowners were arrested by Tewksbury police and charged with unlawful manufacture, distribution, dispensing, cultivation or possession with intent to manufacture of class D controlled substances. While the fire remains undetermined, two possible causes related to the marijuana growing operation have not been eliminated: an electrical fire in wiring or lighting equipment or plants too close to lighting. The fire was jointly investigated by the Tewksbury Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal.

### Lynn Fire Accidental Due to Illegal Fireworks

A June 25, 2018 fire at 39 Congress Street was ruled accidental due to illegal fireworks. Investigators found that

the fire began when individuals set off fireworks. One ricocheted to the second floor porch and ignited nearby combustibles. The fire then spread to the rest of the second and third floors. Six families were displaced. Fortunately, nobody was seriously injured. The fire was jointly investigated by members of the Lynn Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal.

### Men Charged in Amherst Fireworks Fire

An April 29 Amherst fire in off-campus housing seriously injured a sleeping man who was a recent University of Massachusetts graduate. Three men were charged with using illegal fireworks inside the six-unit apartment building. Conor Murnane, age 23, of North Reading was charged with assault and battery with a dangerous weapon, wanton destruction of property over \$250 and unlawful possession of fireworks. Laban K. Christenson, 23, of Waltham and Andrew Ho, 21, of Hyannis, were charged with assault and battery with a dangerous weapon, wanton destruction of property over \$1,200, burning wood, possession of fireworks and another fire violation. Murnane is a 2018 graduate, Christensen is a 2017 graduate, and Ho is a current student of UMass/Amherst.

# Taking Action Against Cancer in the Fire Service

## *New FCSN Program Now Available*



Recent studies show that firefighters have much higher rates of cancer than the general population due to exposure to carcinogens on the fireground and in the firehouse. Materials common in homes today, including plastics, foams, laminated furniture and synthetics mean that residential fires release high quantities of carcinogens. Firefighters are repeatedly exposed to these carcinogens and can unknowingly pass them on to fellow firefighters and loved ones.

In 2013, the Firefighter Cancer Support Network (FCSN) assembled a team of experts to develop a white paper to address firefighter cancer prevention, diagnosis, treatment, and long term implications for firefighters, their families, co-workers, and community. The team found research that demonstrated that firefighters are at greater risk than the general public for the following types of cancer: testicular cancer (2.02 times greater risk), multiple myeloma (1.53 times greater risk), non-Hodgkin's lymphoma (1.51 times greater risk), skin cancer (1.39 times greater risk), malignant melanoma (1.31 times greater risk), prostate cancer (1.28 times greater risk), brain cancer (1.31 times greater risk), colon cancer (1.21 times greater risk), leukemia (1.14 times greater risk), and breast cancer in women\*. These alarming statistics show that cancer is under-recognized in firefighters and a true threat to their health and safety.

The FCSN published actions firefighters can take to reduce their risk of cancer by reducing exposure to carcinogens.

### **Training Firefighters to Protect Themselves**

In 2016, a program presenting cancer risks and ways to reduce exposure to firefighters was piloted in Boston. After the successful program, Kathy Crosby Bell of the Last Call Foundation brought together leaders from the

Massachusetts Department of Fire Services, Professional Firefighters of Massachusetts, Fire Chiefs Association of Massachusetts, and Massachusetts Call Volunteer Firefighters Association, to bring the FCSN program to the remainder of the state. Alfred LeBlanc, retired fire chief and MFA coordinator, worked with the FCSN (funded by the Last Call Foundation) to roll out trainings in Massachusetts, starting at the MFA.

Since 2016, about 20 MFA instructors have been credentialed and are teaching the FCSN program *Taking Action Against Cancer in the Fire Service*. The program is also offered in other states using their own instructors. Credentialed instructors have trained firefighters across Massachusetts in immediate actions that all ranks can take to reduce their risk of occupational cancer. The program also describes how FCSN can help firefighters cope with a cancer diagnosis and addresses the importance of promoting a new culture of safety and fitness in the fire service in order to help prevent cancer, heart disease, and injuries. In Massachusetts, the course can earn 3 OEMS credits, 2 FCC credits, and 1 FPO credit.

The presentation has succeeded in prompting several Massachusetts firefighters to bring the exam checklist to primary care physicians in order to be diagnosed and treated early, allowing them to go on with their careers and lives.

Since May 2016, the MFA has conducted 463 sessions of the program in 136 communities. About 4,925 students have participated. The Career Recruit Program at MFA now includes instruction on cancer risks and prevention for our newest firefighters.

This course has been, and continues to be, the most requested training at the MFA. Some communities in the state have made the training mandatory for their members.

### **Cancer Screenings for Firefighters**

In 2018, the MFA is offering three regional programs, two that include a local dermatologist with SPOTime®, and a dental hygienist to provide free skin and oral cancer screenings to any Massachusetts firefighter. Dermatologist, Christine Kannler, M.D. and dental hygienist, Lisa Evans RDH, FFI/II/EMT, are dedicated to firefighter health and early detection of cancer. MFA is also teaming with the 15-40 Connection (a nonprofit focused on educating and empowering people about early cancer detection) to provide early detection information to individuals to recognize subtle health changes in themselves. If these cancer awareness days are well received, more will be

\* Source: San Francisco Fire Department, preliminary study results.

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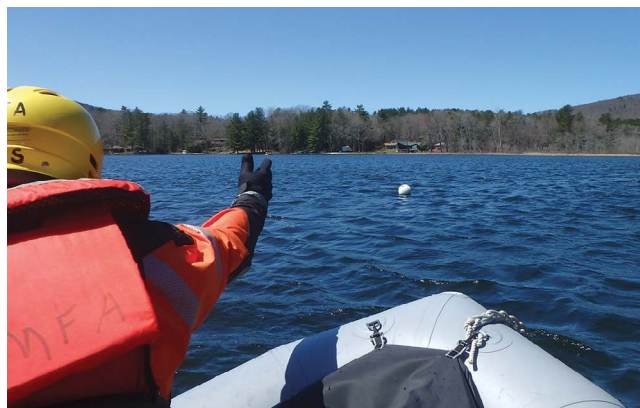
# New Surface & Swift Water Program

## *From Technical Rescue*

In April 2017, the MFA Technical Rescue program introduced a new 4-day Surface Water Rescue Technician Level course. Experts spent over a year developing the new program which replaces the 2-day surface water and swift water program formerly offered by MFA. The new Technician Level Surface Water course meets the 2013 edition of NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications. In addition, MFA now offers two Pro Board examinations: Surface Water and Swift Water Technician.

The new Surface Water Rescue program teaches students to respond safely to growing threats posed by a changing climate: more rain, flash floods, stronger hurricanes, and more intense nor'easters. Students learn about the proper personal protective equipment (PPE) for water rescue, how to conduct a water related size-up, self-survival skills, standing and swift water swimming rescue techniques, and paddle and motor boat operations. All students must pass a swim test to pass the program.

The new program was offered statewide after a



train-the-trainer session that included a boat-operator safety course. So far, the MFA has held seven classes and trained about 150 firefighters from across the state. In the coming year, the Technical Rescue Program will offer four Surface Water Rescue: Technician Level classes. Visit <https://www.mass.gov/massachusetts-firefighting-academy-mfa> and select "Log on to the DFS LMS" for more information and to register.

## State & Federal Action on Firefighter Cancer

### **Massachusetts Occupational Cancer Law**

On July 24, Governor Baker signed into law *An Act Relative to Disability Benefits*. The bill ensures that Massachusetts firefighters receive the treatment and support they need as they battle illnesses sustained in the line of duty. The legislation allows firefighters temporarily incapacitated for work from certain forms of cancer to leave with full pay while they undergo treatment. The leave is made possible by adopting a provision of the pension statute that presumes that certain cancers are a disabling condition sustained in the line of duty (unless the cancer originates from a different cause).

### **National Firefighter Cancer Registry Act**

The Firefighter Cancer Registry Act was signed into law in July 2018 and provides \$2 million in funding for the U.S. Centers for Disease Control to create a cancer registry to track links between firefighter workplace exposures and cancer. The National Institute for Occupational Safety and Health (NIOSH) will take the lead in establishing the registry and conducting a rigorous scientific study of the incidence of occupational cancer in the fire service. For more information go to: <https://www.cdc.gov/niosh/firefighters/health.html>

### **Cancer in the Fire Service**, *continued from previous page*

scheduled. Our last event in 2018 will be November 8 at the DFS Springfield campus. Please see [mass.gov/dfs](https://mass.gov/dfs) for more details.

You can request *Taking Action Against Cancer in the Fire Service* at: <https://www.mass.gov/forms/mfa-course-request-form>. The training is free to any Massachusetts

|fire department. When you make a request, we find an instructor in your area, they get back to you and you work on a mutually favorable date and time.

The MFA and FSCN are dedicated to firefighter health and wellness in order to ensure a long career in the fire service and a long life for every firefighter.

# Peter Senopoulos Retires

After 20 years with the Department of Fire Services, Peter Senopoulos, the agency's chief deputy general counsel is retiring.

Peter's 37-year legal career began as a defense attorney working in Boston Municipal Court. He later joined the Boston Police Department as legal counsel and then the Massachusetts Registry of Motor Vehicles as deputy legal counsel.

After coming to the Department of Fire Services in April 1998, Peter worked alongside the general counsel and was instrumental in the creation, development, and implementation of many important initiatives including the Nightclub Safety Act of 2004, Nicole's Law (carbon monoxide), and clearing the backlog of appeals at the Automatic Sprinkler Appeals Board and the State Board of Electrical Examiners. Serving as the Marshal's designee on the Board of Electrical Examiners, he has been chairman for many years.

Peter's many talents and sage advice will be missed here at DFS and by the Massachusetts fire service community, who have come to know and rely on his counsel. Peter will be busy in retirement, spending time with his wife Jane and children Bianca and Peter Jr., and sailing his boat, Aeolus. Pete – you'll be sorely missed but we wish you fair winds and following seas!



## 2018 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](http://www.mass.gov). Search for *Licensing exams*. For questions, contact the Licensing Desk at 978-567-3700 or at [dfs.licensing@dfs.state.ma.us](mailto:dfs.licensing@dfs.state.ma.us).

### Boiler and Pressure Vessel Program

The Boiler and Pressure Vessel Program offers monthly license exams for oiler burner technician and all classes of firemen and engineer licenses. Register for exams and see detailed information at [www.mass.gov](http://www.mass.gov). Search for *BPV exams*. For questions contact the Boiler & Pressure Vessel Program at (978) 567-3780 or at [BPV.Exams@MassMail.State.MA.US](mailto: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](http://elicense.chs.state.ma.us/DFS_Verification/Search.aspx) or go to [www.mass.gov](http://www.mass.gov) and search for *DFS licensing*.

Examination Schedule	Examination Dates All exams start at 10:00 a.m. on Wednesday	Deadlines for Applications (Fridays)
FSD Exams		
Fire Suppression Commercial Hood Cleaning	Nov 14, 2018	October 26, 2018
Cannon/Mortar, Fireworks	October 24, 2018	October 5, 2018
BPV Exams		
Oil burner, fireman & engineer (all classes)	October 31, 2018 November 28, 2018 December 19, 2018	September 28, 2018 October 26, 2018 November 30, 2018

# Maritime Incident Response Team and Partners

## *Conduct Training Exercise*

*May 3, Gloucester Harbor near Pancake Ground . . .* the Maritime Incident Response Team (MIRT) and the Technical Support Unit (TSU) of the Department of Fire Services' Hazardous Materials Emergency Response Program were hard at work. The U.S. Coast Guard, the Gloucester Harbormaster, five members of the District 6 HazMat team, and the Beverly, Gloucester, Marblehead, Newburyport, and Salisbury Fire Departments all participated in an exercise simulating a response to a hazardous material on an off-shore vessel.

During the exercise, team members practiced their response skills in an incident that requires interagency cooperation. One goal of the exercise was to establish and improve working relationships and responses among the agencies. The exercise included moving responders and equipment to a seaside offshore vessel, vessel to vessel boarding, communications, and learning to maneuver on board a vessel while wearing hazardous materials protection. The exercise helped all participants to be ready to respond to offshore incidents, an important skill in a state with 1,519 miles of coastline.

The Hazardous Material Emergency Response Division of DFS has six regional HazMat teams that respond primarily to industrial and transportation incidents. The MIRT was created after a 2010 incident when a fishing boat offshore near New Bedford hauled in WWI era mustard gas canisters along with its catch. One man was seriously injured.



## Board of Electrical Examiners Begins Review *of New Technologies*

The Board of State Examiners of Electricians recently established a Planning and Research Committee that will make recommendations to the full board on updates and improvements to regulations and may lead to statutory updates. The committee was created to clarify and update the scope of the board's regulatory oversight due to advances in areas including photovoltaics, fiber optics, and wireless technology. The committee will survey laws and regulations in other states to determine the most effective approaches consistent with the board's jurisdiction. The board seeks to protect public safety and assure consumer

confidence in those who conduct electrical and systems installations, while facilitating use of the latest technological advances.

By law, the State Fire Marshal is a member of the Board of State Examiners of Electricians which licenses and oversees over 37,000 electricians. The board grants licenses to master electricians, systems contractors and technicians who install intrusion and fire alarms. It also conducts appeals of decisions by local wiring inspectors. The marshal's designee on the board is DFS Deputy General Counsel Peter Senopoulos, who is the board's current chair.



# Massachusetts Firefighting Academy *Graduations*

Class #262



## 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.

## Advanced Fire Investigation Course

Twenty-four public safety officers completed the Massachusetts Firefighting Academy's six-day *Advanced Fire Investigation* course on May 27, 2018. This rigorous professional training provides fire, and state and local police officers with the advanced skills to accurately determine the origin and cause of fires in their jurisdictions and together, build solid, prosecutable cases.

The 24 graduates included 15 firefighters, 7 local police officers, one Massachusetts State Police officer, and one DFS code compliance officer representing the following 24 agencies: Amherst Fire and Police Departments, Boston Fire Department, Boxford Fire Department, Cambridge Fire and Police Departments, Department of Fire Services, Everett Fire Department, Gardner Fire and Police Department, Haverhill Fire Department, Hudson Police Department, Lawrence Fire Department, Marlborough Fire Department, Massachusetts State Police, Methuen Fire Department, Northampton Fire and Police Departments, Saugus Fire Department, Somerville Police Department, Springfield Police Department, Stoneham Fire Department, Waltham Fire Department, and the Weymouth Fire Department.

Class #263



Class #264



Class #S07



## Career Recruit Firefighting Training

Students receive classroom training in all basic firefighter skills in the 50 day Career Recruit Firefighting Training program. 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 #262

Members of the Career Recruit Firefighter Class #262 graduated on March 30, 2018 at the Department of Fire Services.

The 34 graduates, two women and 32 men, represent the 23 fire departments of: Acton, Blackstone, Braintree, Cambridge, Clinton, Easton, Framingham, Haverhill, Ipswich, Lakeville, Marblehead, Mashpee, Milton, New Bedford, Reading, Seekonk, Sharon, Somerville, Springfield, Stoughton, Sudbury, Truro and Yarmouth. Retired Hamilton Firefighter and MFA instructor Edmund “Skip” Mullin was the guest speaker.

#### *Class #263*

Members of the Career Recruit Firefighter Class #263 graduated on May 11, 2018 at the Department of Fire Services. The 30 graduates, two women and 28 men, represent the 21 fire departments of: Ashland, Billerica, Boxford, Cambridge, Centerville-Osterville-Marston Mills, Fitchburg, Harwich, Leominster, Lexington, Mashpee, Medford, Methuen, Natick, Peabody, Revere, Sandwich, Scituate, Stoughton, Watertown, Wayland and Woburn. The guest speaker was Cambridge Fire Captain Ray Vaillancourt.

#### *Class #264*

Members of the Career Recruit Firefighter Class #264 graduated on June 15, 2018 at the Department of Fire Services. The 35 graduates, all men, represent the 22 fire departments of: Avon, Bridgewater, Burlington, Danvers, Devens, East Bridgewater, Gloucester, Hyannis, Marblehead, Milton, Nantucket, Natick, Newton, North Andover, Peabody, Sandwich, Seekonk, Somerville, Truro, Walpole, Watertown, and Westminster. The guest speaker was Hyannis Fire Captain Thomas Kenney.

#### *Class #S07*

Members of the Career Recruit Firefighter Class #S07 graduated on May 25, 2018 at the Department of Fire Services, Springfield campus. The 22 graduates, one woman and 21 men, represent the ten fire departments of: East Longmeadow, Greenfield, Longmeadow, Northampton, Oxford, Palmer, South Deerfield, Springfield, West Springfield, and Westfield. The guest speaker was Springfield Fire Lieutenant Anthony Santaniello.

### **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

*Class #70*



*Class #71*



time commitments. Upon successful completion of this program, all students have met the standards of National Fire Protection Association 1001.

#### *Class #70*

On June 26, 2018 members of the Call/Volunteer Recruit Firefighter Training Class #70 graduated. The 35 graduates, four women and 31 men, represent the 15 fire departments of: Acushnet, Avon, Berkley, Dartmouth Districts #1, #2, and #3, Dighton, Freetown, Marion, Mattapoisett, Raynham, Rehoboth, Rochester, Truro and Wareham. The ceremony took place at the Kuss Middle School in Fall River, Massachusetts.

#### *Class #71*

On June 27, 2018 members of the Call/Volunteer Recruit Firefighter Training Class #71 graduated. The 34 graduates, three women and 31 men, represent the 17 fire departments of: Ashburnham, Berlin, Bolton, Boylston, Carlisle, Groton, Hopedale, Lincoln, Lunenburg, Northborough, Pepperell, Princeton, Sherborn, Shrewsbury, Tyngsborough, Uxbridge and Webster. The graduation ceremony took place at DFS in Stow, Massachusetts.



# Massachusetts Becomes an OSHA State

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## 3.1 Medical Exam for Performance of Job Duties

OSHA regulation 29 CFR 1910.156(b)(2) states that “the employer shall assure that employees who are expected to do interior structural firefighting are physically capable of performing duties which may be assigned to them during emergencies.”

### What DLS expects for Medical Fitness for Duty

1. **Contents of Exam:** Provide a “new hire” medical exam which complies with HRD initial-hire medical standards for municipal firefighter positions;
2. **Documentation:** For each firefighter, DLS may request a copy of “Section I – Medical Verification” of the HRD medical evaluation form. This section includes the firefighter’s name, physician information, date of exam, and physician statement that the examinee has passed the medical exam. This section does not include personal medical information.
3. **Exams:** An annual physical exam is not required in OSHA standards for firefighting personnel who are not assigned to HazMat teams. NFPA 1582 contains an annual fitness evaluation, but the OSHA standards do not. Repeat the medical exam for performance of job duties when the firefighter demonstrates difficulty performing duties, or the firefighter has known heart disease, epilepsy, or emphysema. It is the employer’s responsibility to confirm that individuals can physically perform their job duties, so DLS will expect that each fire department has a policy in place to provide new hire, and repeat medical fitness exams when indicated. DLS will not single out individual firefighters and require a repeat medical exam.
4. **Use of SCBA more than 30 days per year:** The OSHA respirator standard 1910.134 does not require annual medical exams for persons who wear a SCBA more than 30 days per year. This language is contained in the HazMat standard for HazMat personnel only.

## 3.2 Medical Exam for Authorization to use a Respirator

OSHA regulation 29 CFR 1910.134 (e) requires medical evaluation before a person is authorized to use a respirator. This is a different and separate concept from a fit test. A fit test confirms that air does not leak into the facepiece. The medical respirator approval confirms that the individual is physically capable of wearing a respirator. These are two different concepts in the OSHA respirator standard. Both must be passed in order to wear a respirator.

### What DLS expects for Respirator Approval

1. **Contents of Exam:**

- a. Provide the OSHA Respirator Questionnaire at new hire, before an individual is assigned to wear a respirator. The questionnaire is evaluated by a licensed healthcare provider.
  - b. Based on the results of the questionnaire, the healthcare provider may approve the individual for respirator use, or may request an in-person exam that includes spirometry.
  - c. Provide an in-person respirator medical exam when requested by the healthcare Provider.
2. **Healthcare providers:** The licensed healthcare provider for respirator approvals can be an MD, RN, PA or NP. It may also be performed by other healthcare provider (such as a town’s public health nurse), but not by paramedics or EMTs. There are several vendors that offer the respirator questionnaire online.
    - a. **Respirator Approval vs. New Hire Medical:** The Respirator Questionnaire contains information that is not contained in the HRD new hire medical exam. The HRD “Medical Examination Form Initial-Hire Medical Standards (2014)” does not satisfy the documentation requirement for respirator approval.
    - b. **Documentation:** DLS may request a copy of the healthcare provider’s statement that an individual is approved to wear a respirator. This document includes the firefighter’s name, healthcare provider information, date of exam, and healthcare provider’s statement that the examinee is cleared to use a respirator. This document does not include questionnaire answers, spirometry results or other personal medical information.
    - c. **Repeat Exams:** The respirator approval is not annual under OSHA requirements. The respirator approval must be repeated when:
      - i. Employee reports signs or symptoms that are related to ability to wear a respirator;
      - ii. A healthcare provider, Fire Department supervisor, or the Fire Department respirator program administrator informs the employer that an individual needs to be reevaluated;
      - iii. Information from the respirator program, including observations made during fit testing, indicate the need for a reevaluation;
      - iv. A change occurs in work conditions (i.e. physical work effort, protective clothing, temperature) that may result in substantial increase in the physiological burden placed on an individual while wearing a respirator.



### 3.3 Medical Exam for HazMat Team

OSHA regulation 29 CFR 1910.120(f) requires medical exams for individuals assigned to HazMat teams.

#### What DLS expects for HazMat medical evaluation

1. Contents of Exam: Provide a medical exam consistent with 29 CFR 1910.120(f)(4).
2. Documentation: DLS can request documentation that a medical exam has been provided. DLS will not request personal medical information.
3. Repeat exams: Repeat the exam annually, and whenever an individual reports symptoms of chemical overexposure during a HazMat response.

### 4. HazMat Questions

- a. **When firefighter responds to a carbon monoxide alarm, is this a HazMat incident?** No. Carbon monoxide is not included in the scope and definitions of the OSHA HazMat standard. Since carbon monoxide is a combustion byproduct and not a traditional chemical spill, it does not meet scope of the OSHA HazMat standard.
- b. **As part of minimum training, all firefighters receive a 16-hour HazMat awareness training. Does this make them HazMat team (i.e. trigger requirement for annual medical exam)?** No. The OSHA requirements for HazMat teams are triggered when an employee is assigned to perform HazMat tasks.
- c. **If a firefighter wears a SCBA more than 30 days a year, does this make them HazMat category under OSHA (i.e. trigger requirement for periodic medical exam)?** No. The scope of 29 CFR 1910.120(a) governs which tasks are considered HazMat. Wearing a SCBA more than 30 days per year does not trigger the scope of the HazMat regulation.

The concept of a 30-day trigger is in the medical section of the HazMat standard, CFR 1910.120(f)(2). For persons assigned to a HazMat team, a medical exam is required if they wear a respirator during HazMat activities more than 30 days per year, are exposed to hazardous substances during HazMat activities above OSHA permissible limits more than 30 days per year, or show symptoms of overexposure to a hazardous substance.

- d. **Can the medical exam used for authorization to wear a respirator be used to satisfy the medical requirements in the HazMat standard?** No. The evaluations are different. <https://www.osha.gov/laws-regs/standardinterpretations/1999-01-15-1>

**The updated law for OSHA compliance does not change Massachusetts Firefighting Academy requirements. OSHA requires that firefighters are trained commensurate with those duties and functions they are expected to perform.**

- e. **Is training required on Hazard Communication GHS, SDS, and labeling?** Yes, and this has been a part of standard training at the MA Firefighting Academy for several years.

### 5. Employee Qualifications

- a. **Training:** The updated law for OSHA compliance does not change Massachusetts Firefighting Academy requirements. OSHA requires that firefighters are trained commensurate with those duties and functions they are expected to perform.
  - i. OSHA 10 training is not required for fire departments.

### 6. Fall Protection

- a. **Workers routinely climb over trucks to repack hoses, axes and other equipment. The walking surface is higher than 4 ft. off the ground. When do they need to be tied off to Fall Protection?** Falling from the truck is a known hazard, and we know that firefighters in Massachusetts have been injured when falling off trucks. DLS will ask fire departments to assess the danger and explain their strategy for keeping firefighters safe on vehicle tops.

Each fire department should evaluate their stations and apparatus, and implement methods to prevent falls from the top surface of equipment.
- b. **Firefighters routinely climb onto the roof of a burning building to cut a vent hole. When do they need to be tied off to fall protection?** DLS will ask fire departments to explain their strategy for keeping firefighters safe on roofs and minimizing their exposure to the risk of falling. The OSHA Standard 29 CFR 1910.28(b) (1) (ii) allows employers to develop an alternative fall protection plan when tying off to fall protection is not feasible.
- c. **Is fall protection required in ladder trucks and aerial platforms?** Yes. OSHA 1910.67 requires fall protection and operator training in elevated and rotating work platforms.
- d. **Is fall protection required around the pole in the**

*Continued on page 20*

# DFS Testing New Thermal Imagers

The Crib room has three Scott® Sight Hands-Free In-Mask thermal imagers on loan from the manufacturer. The masks allow firefighters to search for hot spots using a small viewing eye mounted inside the mask. This provides the same features of a traditional thermal imager but keeps both hands free. Just as they would with a traditional thermal imager, the firefighter can look for hot spots, fire conditions, or victims not visible to the naked eye. If a hot spot exists, the firefighter sees an infrared image and the current temperature without removing the mask. The mask also uses a Bluetooth® connection to a cell phone app, which allows each firefighter to customize brightness, layout and color to suit their personal preferences. Recruit Program instructors have been testing the technology during training, providing feedback to the manufacturer, and gaining experience with the new technology.



## Massachusetts Becomes an OSHA State, *continued from page 19*

station? Yes. Railings or some other type of protection are required at floor openings.

### 7. Is a Plymovent® ventilation system now mandatory in all fire stations?

Diesel exhaust is a known human carcinogen. Each station should have a strategy to reduce the migration of diesel exhaust in the fire station. A flexible ventilation hose attached to vehicle exhaust is the most effective method. DLS bulletin "Engine Exhaust Fumes in Fire Stations: Health Effects and Recommendations (1997)" contains information on ventilation and other strategies.

### 8. CDL: Is a commercial driver license required to operate fire trucks?

The Registry of Motor Vehicles (RMV) has jurisdiction over this question. The updated law for OSHA compliance in public sector does not change RMV requirements.

### 9. Hoist License: Is a hoist license required to operate the ladder truck?

The updated law for OSHA compliance in public sector does not change 520 CMR 6.00 which is overseen by the Division of Professional Licensure.

### 10. Department of Labor Standards (DLS)

Currently, DLS is inspecting public sector workplaces due to accident reports, complaints, and on a voluntary

basis. Fire departments are encouraged to contact DLS for a voluntary, non-enforcement, site visit to prepare for implementation of the new law on February 1, 2019. Starting on that date DLS will begin to conduct programmed (random) inspections to address hazards found consistently at similar workplaces.

Regardless of the reason for the inspection they are all conducted in the same manner.

1. DLS contacts agency and makes appointment for inspection.
2. DLS meets with leadership and labor, from the agency for an opening conference to discuss the inspection and review paperwork.
3. DLS conducts a walkthrough with management and labor of the workplace to evaluate tasks, equipment and conditions to determine if any could cause a work related injury or illness.
  - a. Noise and air testing may be conducted.
  - b. Photos may be taken.
  - c. Questions are encouraged.

As a matter of policy if DLS finds a violation it will issue a Written Warning first. A Civil Citation with Civil Penalty (fine) will only be issued when the employer is found to willfully create an unsafe workplace, has repeat violations or fails to abate violations found during previous inspections.

# New K-9s Join F&EIU Teams

The Fire & Explosion Investigation Unit added several new canines this year. The canines and their handlers are in intensive training to become certified teams. Ritz, a black Labrador retriever is training as an accelerant detection dog (AK-9) and will work with Trooper Greg Spahl of the Central Team. Ritz' certification will allow Spahl's current A-K9 Miranda to retire. Vasco, a yellow Labrador retriever, is also training as an A-K9 with Trooper Justin Peledge of the North Team. Lola is a new explosive detection dog (E-K9) working with Trooper Michael Rogowski on the Bomb Squad. Two additional E-K9s are in training: Jagger who will work with Sgt. Horgan (allowing his older dog Flynn to retire), and Nancy who will work with Trooper Rockett, the newest member of the Bomb Squad.



Currently, the Fire Investigation Unit has six accelerant detection dogs and the State Police Bomb Squad has nine explosive detection dogs. Sgt. Paul Horgan and Trooper Michael Fagan are certified trainers which allows them to conduct dog training in Massachusetts. Previously, all dogs and handlers had to travel out-of-state for training.

*Left to Right: Sgt. Horgan with EK-9 Jagger, Tpr. Spahl with AK-9 Ritz, and Tpr. Peledge with AK-9 Vasco.*

## NY Thermal Recalls Boilers

### *Due to Carbon Monoxide Hazard*

NY Thermal, a manufacturer of residential and commercial boilers, in conjunction with the U.S. Consumer Product Safety Commission (CPSC), announced a recall of certain boilers due to potential carbon monoxide hazard.

This recall includes NY Thermal (NTI) manufactured gas boilers sold under the Trinity TFT and Slant/Fin CHS brand names used for residential and commercial use. The Trinity TFT models have the name "NTI" printed on the front and were sold in metallic-grey. The Trinity TFT60 through TFT250 model boilers are 33 inches tall by 20 inches wide. The Trinity TFT300 through TFT399 model boilers are 36 inches tall and 25 inches wide.

The Slant/Fin CHS models have the name "Slant/Fin" and "CHS" printed across the front bottom and are white. The Slant/Fin CHS-85 through CHS-250 model boilers are

33 inches tall by 20 inches wide. The Slant/Fin CHS-300 through CHS-399 model boilers are 36 inches tall and 25 inches wide.

Consumers with recalled boilers should immediately contact the installer or distributor to schedule a repair. Consumers who continue to use the boilers while awaiting repair should have a working carbon monoxide alarm outside of sleeping areas and on every level of the home.

Visit the Consumer Products Safety Commission for more information at

<https://www.cpsc.gov/Recalls/2018/NY-Thermal-Recalls-Boilers-Due-to-Carbon-Monoxide-Hazard>. Consumers can also call NY Thermal (NTI) at 1-800-688-2575 or visit [www.ntiboilers.com](http://www.ntiboilers.com).





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

[www.mass.gov/dfs](http://www.mass.gov/dfs)



## New Online Courses

For the past several months, the Department of Fire Services (DFS) has been busy creating online courses. Soon, four new courses will be available through the DFS Learning Management System (LMS).

### Human Trafficking

Human Trafficking is a national problem. Raising awareness of the issue is a major focus of the Department of Homeland Security's Blue Campaign. The National Registry for Emergency Management Technicians has made training in human trafficking identification and intervention a mandatory requirement for recertification for all EMT's & Paramedics but the DFS online course is specifically for first responders. First responders may be the first outside contact a trafficked person has, and are well positioned to see the signs of trafficking if they know what to look for.

### Fentanyl

Fentanyl is an ongoing problem in Massachusetts and the nation. This course focuses on the hazards of Fentanyl and how first responders can protect themselves from exposure. The course was developed in a collaborative effort between the MFA's HazMat training staff and the Hazardous Material Emergency Response Division.

### Confined Space

This awareness level training focuses on confined space and how to be safe during a rescue (using Occupational Safety and Health Administration (OSHA) and National Fire Protection Association (NFPA) definitions of confined space). There have been many rescuer fatalities in confined space emergencies. This training is targeted for all first responders.

### Positive Pressure Ventilation

This course focuses on types of ventilation, location of vents, and how to properly execute ventilation as a team. This is an awareness level training for firefighters.

## Senior Fire Officer Forums

Senior Fire Officer Forums give Massachusetts senior officers the opportunity to learn from national fire service experts without the time and expense of traveling to national conferences. All Massachusetts officers can attend. The 2018 Forums include:

### DFS Resources for the Fire Officer

September 12, 2018. Department of Fire Services staff

### Leadership and Development for Fire Officers - No Exceptions Leadership for the Fire Officer

October 16, 2018. Jason Hoevelmann, Battalion Chief, Florissant Valley Fire Protection District, St. Louis County, MO

### High Rise Operations

November 1, 2018. Gerald Tracy, Ret. Battalion Commander, FDNY

### ReBooting the New Millennium Company and Commanding Fire Officer

December 11, 2018. Christopher Naum, Chief of Training, Command Institute (NY/DC)

Visit the DFS Learning Management System at <https://hraccess-us.technomedia.com/mfa/> for more information and to register.