

SEPTEMBER 2012

All  
Hands

DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS

HERALD



PUBLIC EDUCATION

FIRE PREVENTION

FIRE INVESTIGATION

TRAINING

BOMB SQUAD



### 3 Fire Prevention Officer - Level I Training Launched

DFS has announced the initial six offerings of the full Fire Prevention Officer - Level I training programs starting this fall.

### 4 Beat the Beep: Replace Aging CO Alarms

DFS is rolling out a new campaign to educate both the public and first responders about the expected surge in CO alarms reaching the end of their lives.



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Cover Photo by Williamsburg Fire Department

## ABOUT The All Hands Herald

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The *All Hands Herald* is published three times a year by the Department of Fire Services. The newsletter is meant to incorporate the traditional fire service meaning – all hands working to extinguish the fire. In the case of our newsletter, all hands includes the DFS staff providing each of you with information, training and assistance in dealing with the fire service issues which confront all levels of the fire service.

We hope that you enjoy our new look and feel and we encourage you to 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:

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Later this fall the acquisition of the Springfield Training Academy by the Commonwealth should finally be completed. The Department of Capital Asset Management (DCAM) will then start working with architects and contractors to conduct the renovations. This will be a major step forward to providing a state fire training facility that is more convenient to the western Massachusetts fire departments. We'll all be anxiously watching this project as it progresses over the next year.

### SCHOOL SAFETY PLANNING

The beginning of another school year is a good time for fire departments to work with their school administrators and principals to help them ensure the safety of their students and staff. You'll find information in this issue about fire prevention in schools, the school fire reporting law, the Multi-Hazard Plans and meetings that are required between school, fire and police officials before school starts, and a new law that requires schools to have an EMS plan as well. These meetings are also a good time to plan for the Student Awareness of Fire Education Program which was funded again in FY '13.

### S.A.F.E.

The FY '13 Student Awareness of Fire Education Program grant application process should be underway by this printing. I want to thank the administration and the Legislature for their continued support for this vital

program. I also want to thank the fire educators and school teachers who work together to raise our now second generation of fire safe children. In 2012, we lost no one under the age of 18 in a building fire in Massachusetts. This is a huge accomplishment that is a direct result of this work to continually educate our children and youth about fire prevention and fire survival. Sadly, the one person under 18 who died in a fire last year, died in a motor vehicle fire.

### PROFESSIONAL TRAINING

This fall there will be a number of exciting training opportunities for firefighters continuing their professional training including the Chief Fire Officer Management Training Program, the 18th annual Public Fire and Life Safety Education Conference and the 21st Hazardous Materials Technicians Conference. In addition, the Fire Prevention Officer – Level I Credentialing Program will be rolled out this fall. Massachusetts' State Weekend at the National Fire Academy will be November 9-11. In addition, we have Recruit Class 196 and two Call/Volunteer Firefighter Training classes taking place, one at DFS Stow and one in Hamilton.

### RESIDENTIAL SPRINKLERS

On September 11, 2012 the Board of Building Regulations (BBRS) will have held a public hearing on two proposals I submitted on residential sprinklers that

CONTINUED ON PAGE 2

would require residential fire sprinkler systems statewide in newly constructed homes by lowering the previously adopted floor area thresholds. One would immediately lower the threshold triggering sprinkler protection in homes, from the current 14,400 square feet of floor area, to 7,500 square feet. This would make the threshold for installing fire sprinklers in residential buildings the same as the threshold currently in place for commercial buildings – 7,500 square feet. I strongly believe that sprinkler protection should be available to everyone – not just those who can afford McMansions. But at the very least, it makes sense to provide the same level of fire protection for homes, where the majority of fires and fire deaths take place, as we do for commercial buildings. The second proposal would lower the floor area threshold triggering sprinkler protection to 10,000 square feet starting in 2014 and then, in increments annually, down to 0 square feet 2017.

### MULCH REGULATION

The so-called mulch regulation or revised 527 CMR 17 – Forest Products received final approval earlier this summer. On September 1, 2012 the requirement for mulch to be 18” away from combustible exteriors of buildings (such as wood or vinyl but not brick or concrete) took effect. This provision was added to the regulation as a result of several fire events within Massachusetts that were related to the combustion of mulch-wood products. Residential buildings with less than six units are exempted from this regulation, but we should encourage all homeowners to adopt these safety practices. Permits are required from the fire department wherever more than 300 cubic yards of mulch is produced or stored.

It is important to note that this revised regulation governs more than mulch. It also covers items such as lumber storage, logs and other forest products.

### FIRE PREVENTION WEEK

While we all know that fire prevention is a year-round process not a one-week event, Fire Prevention Week gives us an opportunity to focus the public and the media on our messages. This year’s theme *Have 2 Ways Out* focuses on one of the key home escape planning messages. Our Public Education Unit, the National Fire Protection Association and the U.S. Fire Administration all have great resources to help you encourage people to not only make their home escape plans but to practice them. Since the Station Nightclub fire, many fire educators are reinforcing the need to make an escape plan wherever people go.

### WORKING WITH OLDER ADULTS

I was honored to receive an award from the Mass. Councils on Aging for the long standing partnership DFS has had with them, and for supporting and encouraging the close working relationships between local fire departments and councils on aging (COAs) and senior centers. Local fire departments and COAs collaborate on so many levels to improve elder safety from general education presentations on fire safety, cooking safety, using home oxygen safely, and fall prevention to smoke alarm installation programs, the File of Life program, and training home visitors. Since older adults (people over 65), are the most at risk of dying in a fire in our state, this work is critical.

### NEW SEARCH AND RESCUE PROP

Students from the Minuteman Regional High School will spend this year building a new search and rescue prop in the drillyard of the Massachusetts Firefighting Academy. This is a wonderful partnership between our agency and the school, giving the vocational education students a hands-on project that will have lasting benefits to our firefighters for years to come. ■

# FIRE PREVENTION OFFICER - LEVEL I TRAINING LAUNCHED

The Department of Fire Services has announced the initial six offerings of the full Fire Prevention Officer - Level I training programs starting in September and October. Three classes are scheduled for Stow and one in Topsfield, Bourne and Springfield. Additional programs, including night and weekend offerings, will be added after January 1, 2013.

Upon successful completion of this 40-hour blended program (three days in the classroom combined with 16 hours of on-line study and testing) participants will receive the State Fire Marshal credential to the level of Fire Prevention Officer - Level I.

### FPO-LEVEL I BRIDGE

In addition to the full program, we have scheduled four additional offerings of the Fire Prevention Officer - Level I Bridge. This one-day program will allow members of the fire service who have been previously certified to the level of Fire Inspector I (through either the Pro Board or IFSAC) to receive the State Fire Marshal credential to the level of Fire Prevention Officer - Level I.

### TOPICS COVERED

Topics include: authority and jurisdiction, testimony, interpretation of codes, building construction, fire behavior, reading and using plans, conducting inspections, occupancy classifications, inspecting means of egress, occupant load, emergency planning and preparedness, fire protection systems including water based and special agent, fire detection and alarm systems, fire extinguishers, storage, handling and use of hazardous materials, properties of hazardous materials, classification of hazardous materials, and fire prevention practices for hazardous substances and processes. This program is based around NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner, Chapter 4 (Fire Inspector I).

Prior to applying for either one of these programs applicants must have successfully completed the Fire Prevention Officer - Basic program.



Fireworks cannisters ready for inspection.



Classroom training. Photos by Barry Hyvarinen.



These programs are priority selection. Fire chiefs are requested that for these initial offerings, they try to prioritize department members who attend the training so that we can focus first on those members of the fire service who are performing fire prevention duties within the cities and towns of the Commonwealth.

As this process moves forward, feel free to direct any questions related to these programs to Ed Walker, division director, Massachusetts Firefighting Academy.

To access the Basic Program, for information about the specific dates and the application form or for additional information, please look on our website at <http://www.mass.gov/eopss/agencies/dfs/fpo-training.html> ■

# BEAT THE BEEP: REPLACE AGING CO ALARMS

*They Don't Last Forever*

Carbon monoxide (CO) alarms have been required in nearly every residence since March of 2006. The life expectancy of carbon monoxide alarms is 5-7 years, and many CO alarms installed as a result of this recent law are now reaching the end of their useful life and need to be replaced. No home appliance lasts forever.

## LAUNCHING NEW CAMPAIGN

The Department of Fire Services is rolling out a new campaign this fall to educate both the public and first responders about the expected surge in CO alarms reaching the end of their lives.

## WHY FIRST RESPONDERS NEED TO KNOW ABOUT 'BEAT THE BEEP'

It's important for first responders to know about the surge of CO alarms that will be reaching this end of life stage and to help educate residents to "Beat the Beep." Fire departments are often called to homes

where the CO alarm is beeping. It may not just be the normal case of teaching residents to replace the batteries, but in fact it may be time to replace the entire alarm.

Consumers should contact the manufacturer for information about their specific CO alarms.

## SIGNS THE CO ALARM NEEDS REPLACING

One of the signs that a carbon monoxide alarm has reached the "end of life" stage will be a "chirping" that does not stop until the unit is powered off and for models with a digital read out, it will have an "ERR" or "EO9" or "END" message. Another sign could be if it makes the low battery signal even after brand new batteries are installed. That's the main reason behind the "Beat the Beep" campaign.

## BEAT THE BEEP - DON'T GO WITHOUT PROTECTION FROM THE INVISIBLE KILLER

It is important that people **Beat the Beep** and replace their aging CO detectors to ensure uninterrupted protection from an invisible killer. CO alarms won't detect carbon monoxide when they are in the end of life mode.

## MANY LIVES SAVED BY "NICOLE'S LAW"

Since Nicole's Law took effect in 2006, we know of many people who have been saved from CO poisoning. The CO alarms notified them that something was wrong at the earliest possible stages with low levels of CO detected. There have still been deaths from CO poisoning, but in most cases those homes had no CO alarm installed yet. ■

# MARSHAL URGES SUPPORT FOR BUILDING CODE CHANGE

*for Proven Life Saving Systems*

State Fire Marshal Stephen Coan has submitted code change proposals to the State Building Code that would require the installation of residential fire sprinkler systems in certain newly constructed one- and two-family homes. These proposals are all about safety for both occupants and responding firefighters. Recorded fire data for decades has shown that approximately 85% of fire deaths occur in homes. Residential fire sprinkler systems can respond quickly to reduce heat, flames, and smoke, giving occupants a chance to get to safety, and would significantly reduce the likelihood of dying in a home fire if installed. In spite of the fact that both nationally recognized model building codes require sprinkler systems be installed in all new one- and two-family homes, Massachusetts has not yet adopted these provisions for homes under 14,400 square feet of floor area. The marshal has submitted two code proposals for the state to consider through the Board of Building Regulations and Standards (BBRS) starting at their September 11, 2012 hearing.

The two proposals would require residential fire sprinkler systems statewide in newly constructed homes by lowering the previously adopted floor area

Residential fire sprinkler systems can respond quickly to reduce heat, flames, and smoke, giving occupants a chance to get to safety. . .



North Andover home saved from serious fire damage by sprinkler system. Photo courtesy of the North Andover Fire Department.

thresholds whereby sprinkler systems are required. One proposal would immediately lower the threshold triggering sprinkler protection in homes, from the current 14,400 square feet of floor area, to those that exceed 7,500 square feet. This would make the threshold for installing fire sprinklers in residential buildings the same as the threshold currently in place for commercial buildings – 7,500 square feet. It makes sense to provide at least equal protection for homes, where the majority of fires and fire deaths take place, as we do for commercial buildings.

The second proposal would lower the floor area threshold triggering sprinkler protection to 10,000 square feet starting in the year 2014 and then, in increments annually, down to 0 square feet by the year 2017. These proposals are intended to give the state options to consider in adopting requirements for these life saving systems, given that the BBRS would not adopt a previous proposal to immediately require sprinklers in all newly constructed homes, to make it consistent with the national building code it has adopted. ■



# SCHOOL FIRE PREVENTION

August 1, 2012 - As we approach the beginning of another school year it is an opportune time for fire departments to work with their school administrators and principals to remind them of their obligation to ensure the safety of their students and staff.

To assist fire officials, included in the August *DFS Briefs* was a memo on the mandatory requirements for reporting school fires along with the form (FP-200) which is to be used by the schools to report fires, a memo on special effects in school productions, the Multi-Hazard Plans required by the Massachusetts Legislature under Section 363 of Chapter 159 of the Acts of 2000, the 527 CMR regulations in regard to schools and the Fire Prevention in Schools pamphlet. You are encouraged to download this information and have discussions with your school administrators prior to the start of the school year.

## MULTI-HAZARD EVACUATION PLANS

Section 363 of Chapter 159 of the Acts of 2000, by the Massachusetts Legislature, requires all school districts to formulate specific school emergency plans, prior to the start of the school year. This act places the responsibility to develop these plans upon the superintendent of each school district and requires that superintendent work with local fire and police departments in its development. Fire chiefs are encouraged to work closely with the police chief and school superintendent and to initiate these meetings. The law says, in part, "Notwithstanding any general or special law to the contrary, the superintendent of each school district shall, prior to the beginning of the school year, meet with the **fire chief** (emphasis added) and police chief of the city, town or district to formulate a school specific 'Multi-hazard evacuation plan' for each school under the superintendent's supervision. Said multi-hazard evacuation plan shall encompass, but not be limited to, evacuation for fires, hurricanes and other hazardous storms or disaster in which bodily injury might occur, shootings and other terrorist activities, and bomb threats. Said plan shall be formulated for each school building after a review of each building.

Said plan shall include, but not be limited to: (1) establishment of a crisis response team; (2) designation as to who is in charge of said team and designated substitutes; (3) a communications plan; (4) crisis procedures for safe entrance to and exit from the school by students, parents and employees; and (5) policies for enforcing school discipline and maintaining a safe and orderly environment during the crisis. Each district, with the assistance of the local police and fire departments, shall annually review and update as appropriate said plan. At the beginning of each school year, students at each school shall be instructed as to the plan that is developed."

## NEW LAW REQUIRING SCHOOLS TO HAVE EMS PLANS PLUS MULTI-HAZARD EVACUATION PLANS

Chapter 77 of the Acts of 2012 amended Chapter 69 of the General Laws requires school to have an EMS plan in place at the start of this school year. This is in addition to the required multi-hazard evacuation plan.

"Section 8A. (a) Each school committee and commonwealth charter school board of trustees shall ensure that every school under its jurisdiction has a written medical emergency response plan to reduce the incidence of life-threatening emergencies and to promote efficient responses to such emergencies. The plan shall be in addition to the multi-hazard evacuation plan required under section 363 of chapter 159 of the acts of 2000."

## SCHOOL FIRE REPORTING LAW

MGL Chapter 148, Section 2A requires that the principal of any public or private school of grades 1-12 shall immediately report any incident involving the unauthorized ignition of any fire within the school building or on school grounds, to the local fire department. It also requires fire departments to report all school fires to the Massachusetts Fire Incident Reporting System (MFIRS).

When a fire occurs in a public or private school, the principal should immediately submit a written report of the incident to the head of the fire department within

24 hours on a form provided by the Department of Fire Services. The report should be filed without regard to the extent of the fire or whether there was a response by the fire department.

The law was created to mandate that schools report fires that may have previously gone unreported. The effect will be greater protection of our children and the ability to identify possible juvenile firesetters to provide appropriate early intervention.

Juvenile firesetting is one of the most common causes of school fires (although cooking is the #1 cause), so fire and law enforcement authorities stress the need to react appropriately and swiftly to intentionally-set fires in schools, no matter how big or small the fire may be. All fires start small. If you have any questions please contact our Public Education Unit at 978-567-3380 or Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA 413-587-3181.

## SPECIAL EFFECTS

As we approach another school year, we suggest you meet with your public and private school officials to review the state law regarding the use of special effects in school plays and at special events. We have recently received inquiries about the use of flash paper and flash powder. This is a reminder that the use of flash paper and flash powder is prohibited by law, unless under the direct supervision of a person holding a current Certificate of Competency for Special Effects.

Because of the obvious hazards in working with special effects devices by unlicensed individuals, the Office of the State Fire Marshal is asking that you reach out to the schools in your community to alert them to the fact that any type of special effect in their productions must be conducted by properly licensed and permitted individuals. School officials should closely review the plans for each production, and notify the fire department



Officers teach fire safety and prevention in an elementary school classroom. Photo courtesy of the Berkley Fire Department.

to determine permitting requirements, regardless of quantity of materials involved.

Further assistance is always available through the Office of the State Fire Marshal on this and similar issues. Feel free to call the Code Compliance and Enforcement Unit or Technical Services at either (978) 567-3300 or in Western Mass. (413) 587-3181.

## CROWD MANAGER REQUIREMENTS MAY IMPACT SCHOOL DANCES

A crowd manager is needed in facilities that feature entertainment with a live band or recorded music producing above normal sound levels. These facilities also have a specific area selected for dancing. Although the crowd manager requirements usually apply to nightclubs, dance halls, discotheques and bars, schools might need a trained crowd manager on-duty when holding school dances. To determine whether a crowd manager is required for a school dance or other event, schools should discuss this with their local fire departments early in the school year. ■

# NARROW BANDING DEADLINE DECEMBER 31, 2012

By Chief Gerald R. Reardon, Cambridge Chief of Department/ Chief Engineer

By now every public safety entity has heard many times about the Federal Communications Commission narrow banding (FCC NB) deadline.

This was an initiative that was driven many years ago primarily by public safety by the lack of frequencies available for expansion.

The FCC has now enacted the NB project over the past ten years with a deadline of December 31, 2012 as a way of expanding the number of channels available for licensing without actually adding more radio spectrum.

How does this happen? Well the change in technology has now made this possible. Without getting technical, the equipment being produced now is far more selective and accurate, and will actually work in half the channel spacing that was previously used by traditional radio equipment. The terms you hear bantered about are 25 kHz and the new 12.5 kHz half spacing.

The analogy I have used several times is simplistic but accurately describes the issue.

You have a parking lot for your employees that accommodates fifty cars, and due to the growth in your business you now need a lot with a capacity of a hundred cars. The solution could be getting an additional fifty car lot, at great expense, as well as the unlikely availability of finding a lot close to your business.

Then someone suggests a solution; your lot has parking spaces that are striped at 25 feet in width and the solution would be to split the spaces into spaces 12.5 feet in width, This now gives you the one hundred car capacity using the same footprint.

This is the process that the FCC has chosen to gain the additional channels that will be made available.

This is an FCC mandate for all entities; there is and will be penalties and fines for those who do not comply. There is no exception for public safety and the FCC will enforce the regulations.

## MYTHS AND TRUTHS

There is no requirement to implement digital technology as part of NB.

You do not need to get a new frequency as a result of NB.

You do not get the new channels automatically created by NB; those will still be coordinated and assigned by the FCC using the current methods.

Waivers will be extremely difficult to obtain from the FCC. Funding will not be an acceptable excuse. Waivers will be considered for situations beyond the control and scope of the licensee.

You will need to modify your existing FCC license to add the emissions designators that indicate your transmitters are now transmitting in narrow mode. This is very important as the FCC system will automatically purge all licenses that do not have the new narrow band designators at midnight December 31.

You can add these designators without cost using the FCC Universal Licensing System on-line service.

If you are changing transmitter locations, antenna heights, or adding sites you will have to go through coordination and submit a full license package.

## T- BAND ISSUE: THE 11TH HOUR CHANGE

Just when you thought you finally had a handle on and an understanding of this narrow banding program, an FCC change has appeared.

As hopefully all public safety officials are aware, we have fought for and secured additional spectrum for nationwide public safety broadband; this has been called D Block.

As you know the lack of channels has been an ongoing issue for public safety for dozens of years.

It is the shortage of channels that has caused the interoperability problem that we presently face. Over the past fifty years there has been a constant lack of spectrum made available; this has led to additional channels being made available in different bands.

We have low band 30-50 MHz, high band 147-160 MHz, UHF 460-470 MHz, T-Band 470-512 MHz, 800 Band, 700 and 900 MHz in some locations.

The securing of D-Block is important to the future of public safety; at the eleventh hour there was a change that was required by the Middle Class Tax Relief and Job Creation legislation.

This law requires neutral funding.

It will be the source of funding for D-Block.

It will require the return of the T-Band channels to the FCC for auction.

T-Band channels need to be vacated for this purpose in 9 to 11 years.

The auction proceeds will fund D-Block and provide funding to re-locate the T-Band users. The anticipated costs will be around \$11 billion.

## WHAT DOES THIS MEAN?

This means nothing unless the channels you operate on are in the 470-512 MHz. There are over two hundred licenses in Massachusetts that fall into this category. Many of our larger mutual aid radio systems use these channels.

This is a change that public safety needs to be concerned about as it affects many of our systems; it will not be easy to convert all the channels without good coordination.

This is not scheduled to happen for approximately 10 years, which gives time to formulate a plan.

Understanding that most radio manufacturers are now no longer supporting equipment after 7-8 years, even newly installed systems will be slated for replacement by the time of the auction deadline.

The auction proceeds will support the costs associated with the required changes, however as this is still a recent change many details still need to be vetted.

## FCC WAIVER FOR T-BAND USERS NOT REQUIRING NARROW BANDING

FCC Order RM-9332, dated April 25, 2012, will waive the requirement for licensees to narrow band if they are in the T-Band spectrum 470-512 MHz.

The FCC has lifted the mandatory requirement for the T-Band users to narrow band now that they will require this band to be vacated in 10 years.

Public safety users need to carefully follow the evolution of the T-Band issue as it will require concerted, careful, cooperative decisions to make this major transition successful.

Virtually all T-band users have either already narrow banded, or are funded and will change shortly.

Please be cognizant that all regional mutual aid systems have agreed to narrow band in light of the recent FCC order. With this in mind all public safety entities in Massachusetts need to narrow band.

The only licensees who can choose not to narrow band are those users that have only single channel radios on their own frequencies that no other users have access to their channel. I don't believe there are any such situations in the Commonwealth.

Unless the above applies to your system, then you must modify all your subscribers. All portables and mobiles need to be compliant, that is transmitting narrow band on any channels that have been converted, including all the mutual aid public safety systems in the Commonwealth.

The biggest and most difficult part of NB is dealing with the portables and mobiles. Remember these systems will be used possibly for the next ten years. If you have funding, it is recommended the work be done.

You do not want to be in a position of seeking funding in several years to replace or update radio equipment that will not last until the replacement funding.

We as public safety users need to carefully follow the evolution of the T-Band issue as it will require concerted, careful, cooperative decisions to make this major transition successful. ■

## S.A.F.E. EVALUATION

A firefighter-educator recently said, “When DFS first rolled out the 3rd grade evaluation tool, I thought you guys were crazy. Once I used it and saw the results, I was stunned, and I am changing my lesson plans as we speak.” Firefighter-educators are always welcome guests in the classroom. They provide a change of pace, are interesting members of the community, and have important safety information to share. But do the students actually learn the key fire safety skills and behaviors fire educators think they are teaching? This particular firefighter-educator found out that the students were not learning what he thought he was teaching as well as he thought, so he reacted in exactly the right way – adjusted his lesson plans. He is looking forward to seeing the results in the following year to see if learning improves using the improved lesson plans.

Massachusetts is a leader in evaluating public fire education in such a systematic way.

We refer to the results of the new evaluation tools as the good, the bad and the ugly, but in fact it is all good. We never had this sort of information before, so this feedback is incredibly useful even when the results point to areas that need refining.

The Student Awareness of Fire Education (S.A.F.E.) Program has developed a 3rd grade evaluation tool, a 6th grade evaluation tool and is finishing a 10th grade evaluation tool. These allow us to measure what students know about fire safety by the end of the 3rd, 6th and 10th grades. It’s not a test of the students individually, but rather gives a snap shot of learning as a

whole at three different stages. Communities can define realistic strategies to conduct the assessment. For example, instead of evaluating every single student in these particular grades, they can pick one grade at a few representative schools to get a good sampling each year.

The evaluation tools were developed by looking at what the Health Curriculum Frameworks from the Massachusetts Department of Elementary and Secondary Education (DESE formerly the Dept. of Education) say students should know about fire and burn safety at these key developmental levels, as well as the Department of Fire Services’ Curriculum Planning Guidebook, and National Health Education Standards. The MA Public Fire and Life Safety Education Task Force worked closely with the consultant to decide which key concepts to measure, focusing on what is actually taught by S.A.F.E. educators. To be sure that students understood and could answer test questions, the consultant and Task Force members conducted pilot tests in classrooms with students. The kids in the pilot tests gave great feedback when asked questions about whether the test questions made sense.

The 3rd grade evaluation was first implemented by a few communities in the spring of 2010, more did so in the spring of 2011 and an even larger number chose to use it in 2012. DFS is compiling the results from the FY 2011 reports that came in this spring.

Reports we have so far show that more than 7,100 third grade students achieve and average overall correct score of 81%.

Here are examples of what we’ve learned:

Most students regardless of grade do not know what the word ‘scald’ means. They do know that hot liquids can cause burns, but they don’t know that they should turn on the cold water first then add hot water. This is a concept we drew from the Health Curriculum Framework. The low scores on this concept have led several fire educators to include it in their own burn prevention talking points.

Stop, Drop and Roll is a behavior that firefighter-educators think they teach very well. It’s so kinesthetic

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## FIRE PREVENTION WEEK

October 7 -13, 2012

October 7 - 13 is **Fire Prevention Week**. Fire Prevention Week gives the fire service the opportunity to reach out to the community and empower its citizens to prevent home fires and protect their families. This year’s theme “Have 2 Ways Out!” reminds us how important it is to have two ways out of every building we’re in – especially our homes, where most fires take place. For children they have adapted the message to “Be Rabbit Ready” because rabbits have two ways out of their burrows. National Fire Prevention Week is sponsored by the National Fire Protection Association. For more information go to: [www.firepreventionweek.org](http://www.firepreventionweek.org) or the Department of Fire Services website [www.mass.gov/dfs](http://www.mass.gov/dfs) and click on Public Education or the U.S. Fire Administration’s Learn About Escape Plans [www.usfa.fema.gov/campaigns/smokealarms/escapeplans/index.shtm](http://www.usfa.fema.gov/campaigns/smokealarms/escapeplans/index.shtm).



## FIRE SERVICE GUIDE TO REDUCING UNWANTED FIRE ALARMS

August 7, 2012 – The **National Fire Protection Association (NFPA)** and the International Association of Fire Chiefs (IAFC) released the *Fire Service Guide to Reducing Unwanted Fire Alarms*, a free 17-page downloadable PDF document that offers guidance to members of the fire service to reduce unwanted fire alarms. It is available through NFPA’s catalog at [www.nfpacatalog.org/redgd](http://www.nfpacatalog.org/redgd).

Fire departments are often faced with challenges presented by unwanted alarms as they strive to allocate limited resources to fulfill their core mission of protecting lives and property and deal with these types of notifications which do not require emergency services. An *unwanted alarm* is defined by **NFPA 72<sup>®</sup>, National Fire Alarm and Signaling Code**, as *any alarm that occurs that is not the result of a potentially hazardous condition*. A recent NFPA study found that in 2009, U.S.

fire departments responded to an estimated 2.1 million false alarms, which included 979,500 responses due to unintentional activations and 698,000 due to system malfunctions.

This new guide offers fire service personnel basic knowledge on how fire alarm systems and detection devices operate and how to assess the cause of alarms where no emergency condition is apparent. The guide can assist authorities having jurisdiction (AHJ’s) in developing strategies to manage response to unwanted alarms through practices reflective of risk assessment, resources management, and current code recommendations. It addresses commercial and residential building fire alarm systems, as well as single-family dwellings and single- or multiple-station smoke alarms within dwelling units. ■



# A STORY TO TELL: FIRE PROTECTION NARRATIVES

As part of any fire protection system submittal, a fire protection narrative report must be submitted according to Section 901.2.1(1) in the *Massachusetts State Building Code* (780 CMR). Fire and building officials, property owners, system designers, and installing contractors, should not underestimate the value of a narrative report.

Officials need to require a narrative for each project, and enforce that these reports be accurate and meaningful. For those of us familiar with narrative reports, we have probably all seen those reports where it is indicated that the fire alarm system signals will be transmitted to the wrong fire department. This can occur when the author of the report, typically the system designer, cuts and pastes the report from a previous project and has forgotten to change such references. It may seem trivial, but such errors need to be corrected prior to occupancy because the narrative report will serve as “birth certificate” for the fire protection and life safety features throughout the life of the building.

The narrative report needs to contain five main pieces of information:

- information about the building and hazards present;
- the fire protection and life safety features present;
- methodology behind the designs of the systems;
- how the systems are interconnected and the sequence of operations; and,
- how the systems will be tested for final acceptance.

In 780 CMR:901.2.1(1), one of the Massachusetts amendments to the 2009 *International Building Code*, you will find the detailed requirements for the narrative report.

A great narrative report addresses the features unique to the project rather than focusing on common information already in the standards. For example, a

report that repeats most of the test requirements for fire sprinkler systems already delineated in NFPA 13, and fails to mention the clean agent suppression system that will be installed, does not help anyone and defeats the purpose of the report. The report, however, needs to give enough details that the methodology behind how the designer got to the specifications is indicated in the report. For example, for a fire sprinkler system protecting a flammable liquids warehouse, the report needs to indicate which table out of NFPA 30, which row of that table, and which edition of NFPA 30, is the sprinkler system demand based on. Only then would one be able to verify that the type of flammable liquids, containers, and storage arrangement, is consistent with the proposed use of the building.

How to contact a fire protection specialist in the Division of Fire Safety (formerly the Office of the State Fire Marshal): if your jurisdiction contains or is south of the Mass. Pike - contact Jake Nunnemacher at 978-567-3377 or [Jacob.Nunnemacher@state.ma.us](mailto:Jacob.Nunnemacher@state.ma.us). For jurisdictions north of the Mass. Pike - contact Dana Haagensen at 978-567-3376 or [Dana.Haagensen@state.ma.us](mailto:Dana.Haagensen@state.ma.us) ■

## MINUTEMAN TECH TO BUILD SEARCH AND RESCUE PROP

This year, students from Minuteman Regional High School will be building a search and rescue prop in the MFA drill yard. It will be the size of a 1200 sq. ft. ranch house, half with a peaked roof, and half with a flat roof and deck. Inside will be open and eventually will have moveable partitions. This prop will be used solely to train on search and rescue, there will be no live fire or water used. This is an exciting collaboration between MFA and the high school.

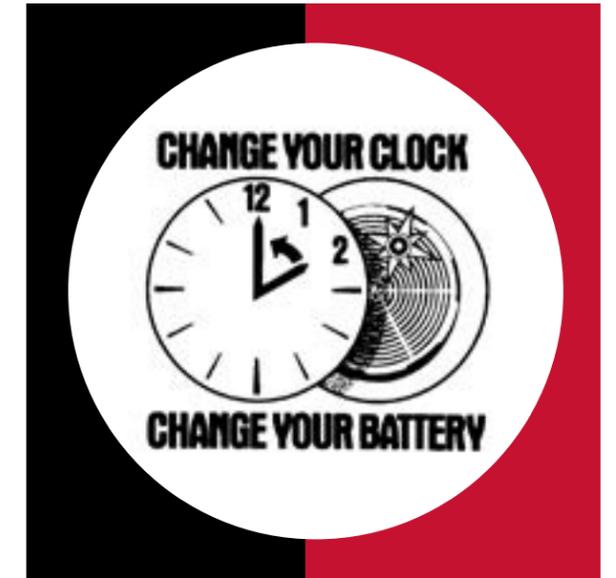
# 25TH ANNIVERSARY OF THE CHANGE YOUR CLOCK CHANGE YOUR BATTERY CAMPAIGN

On Sunday, November 4, 2012 we will be changing our clocks to standard time. This is a terrific opportunity to remind people to not only change their clocks but to also change the batteries in their smoke alarms and carbon monoxide detectors.

The Halloween Safety flyer put about by the Department of Fire Services also includes this reminder. The Smoke Alarm FireFactor does as well.

2012 is the 25th anniversary of the Change Your Clock, Change Your Battery campaign. Energizer and the International Association of Fire Chiefs (IAFC) have lead this campaign to remind people of the simple, life-saving habit of changing and testing the batteries in smoke alarms and carbon monoxide detectors when setting the clocks back from daylight-saving time. They provide free materials and fire departments can request free batteries to use in neighborhood canvasses, community events and home visitors.

If you have questions, please call the Change Your Clock Change Your Battery® Hotline at (314) 727-5700,



ext. 108 or e-mail: [cycyby@blickandstaff.com](mailto:cycyby@blickandstaff.com). The website for the campaign is: <http://www.energizer.com/learning-center/Pages/change-your-clock-change-your-battery.aspx> ■

## S.A.F.E. EVALUATION CONTINUED FROM PAGE 10

– learning by doing with the body. In fact, what’s the number one answer to the question, “What should you do when the smoke alarm sounds?” Too often the answer given is the incorrect “Stop, drop and roll”. The 3rd grade tool also showed some firefighter-educators that they need to include more emphasis on “stop, drop, COVER, and roll” as most students knew that this was the correct response to “when fire gets on them,” but many were unable to select the correct picture of the behavior that showed covering the face.

S.A.F.E. staff is compiling a full report on these statistics, but preliminary data shows that we are doing

a good job teaching about escape planning, responding to clothing ignitions, reporting emergencies and smoke alarms. Fire educators are using these tools as feedback, refining their lesson plans, and using them to set goals for next year in their grant applications. Communities with a low baseline score know they have nowhere to go but up. Communities doing well can aim their sight a little higher each year on a particular key concept.

To download the evaluation tools, implementation guides, or data collection spreadsheets, please go to the DFS website [www.mass.gov/dfs](http://www.mass.gov/dfs) and click on *Public Education and Resources for Fire Educators* or *S.A.F.E. News*. ■

During the past few months, the Fire and Explosion Investigation Unit has made numerous arrests for fires and explosives. Summaries follow for a few of these cases.

## NEW BEDFORD JUVENILE CHARGED

On Friday, July 27, 2012 investigators from the South Team, New Bedford Fire and Police Departments arrested a juvenile male for setting a fire at 8 Wing Street in New Bedford, a multi-family dwelling. He was also charged with setting a previous fire at the same address for two counts of burning a dwelling.

## SPRINGFIELD YOUTHS ARRESTED IN SPREE THAT TERRORIZED FOREST PARK NEIGHBORHOOD

Early in the morning of Wednesday, July 25, 2012, State Police fire investigators including an accelerant canine handler responded to the Forest Park section of Springfield for a report of a gang of youths setting numerous fires using Molotov cocktails. There had been a series of such incidents in the neighborhood over the past ten days, setting residents and city officials on edge. This night the fires included a residential structure at 28 Martin Street in Springfield, an Elks Lodge statue, a motor vehicle and numerous shrubs and bushes. Fortunately, no injuries had been reported. A gang of youths was quickly identified and Mass. State Police K-9 units working closely with Springfield and neighboring Longmeadow Police officers detained six youths aged 15-19. The accelerant detection dog had positive alerts on several of the suspects.

## BROCKTON MOTOR VEHICLE FIRE ARSON

On Monday, July 23, 2012 South Team fire investigators responded to a reported past motor vehicle fire at 33 Dover St. in Brockton and determined the cause was arson. The vehicle was destroyed. A suspect was quickly developed and the man admitted to setting his girlfriend's car on fire during an interview and he has been summonsed to Brockton District Court on one count of burning a motor vehicle.

## ARREST IN NORTHAMPTON DOMESTIC VIOLENCE

On Tuesday July 17, 2012 at 10 a.m. West Team fire investigators responded to the Meadow Brook Apartments, 921 Bridge Street, in Northampton for

a report of a working fire in a multi-unit residential structure. A woman had been transported to Baystate Medical Center for non-life threatening stab wounds. There was minimal damage to the building although the fire was determined to be intentionally set with multiple points of origin. Her husband was arrested and charged with burning a dwelling, attempted murder and assault and battery with a dangerous weapon.

## MARLBOROUGH ARSON ARREST

On Monday, July 16, 2012 North Team fire investigators responded at around 6 p.m. to a rooming house fire at 8 Coddington Avenue in Marlborough. No injuries were reported and there was minimal damage to the structure. The fire was determined to be arson and a 41-year old woman who lived in the rooming house was arrested and charged with one count of arson of a dwelling and two counts of assault with a dangerous weapon (fire).

## CHESHIRE ARSON ARREST

On Sunday, July 15, 2012 West Team fire investigators responded to a motor vehicle fire in Cheshire. When State and local police arrived they encountered a naked adult male under the influence of drugs. Numerous officers were needed to take subject into custody. The motor vehicle was destroyed. Cause of the fire remains undetermined and under investigation.

## MAN ARRESTED IN FOXBOROUGH HOTEL FOR EXPLOSIVES

On Friday, July 13, 2012 South Team fire investigators and members of the Bomb Squad responded the America Best Value Inn, 105 Washington Avenue in Foxborough. Local police had executed a search warrant to arrest one of the occupants and found eight M-Class explosive devices - M-80s to M-1000s. The State Police Bomb Squad rendered all eight items safe and the man was charged with eight counts of possession of explosives in addition to charges in the warrant. The investigation is on-going.

## PLYMPTON ARSON

On Friday, July 13, 2012 two men were summonsed to court as a result of South Team investigation that determined the March 21, 2012 fire at 149 Brook Street, Plympton was arson. They have been charged with malicious damage to property over \$250, breaking and entering in the nighttime and trespassing.

## MAN ARRESTED IN PLYMOUTH FOR BOMB MAKING

On Thursday, July 5, 2012 the State Police Bomb Squad responded to a wooded area in Plymouth for a report of an intoxicated adult male making bombs. The investigation revealed he was making explosive devices using match heads. He was arrested and charged with being a disorderly person and making of explosives. The Bomb Squad took the items and rendered them safe.

## JUVENILE FIRESETTER IDENTIFIED IN LAWRENCE

On Thursday, June 28, 2012 North Team fire investigators responded to a 3-alarm fire in three multi-unit residential structures at 267-269 Water Street in Lawrence. The original structure was destroyed and the two adjacent structures damaged. While there were no injuries, 45 people were displaced. The fire was determined to be intentionally set by at least one juvenile who was igniting perfume on a first floor bedroom floor with a lighter. One juvenile will be summonsed to court and charged with arson of a dwelling and the investigation continues.

## 14,000 LBS OF ILLEGAL FIREWORKS SEIZED ON THE MASS. PIKE

Working on a federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) informant's tip, North Team investigators and ATF agents conducted surveillance of a rented van transporting a large quantity of consumer fireworks. The tip was that the subject stored the fireworks in a Malden storage unit and then sold them out of the van. On June 21, 2012, the van was stopped on the Mass. Pike westbound with the assistance of the State Police Bomb Squad, Truck Team and Troop E patrol and found to be loaded with over 14,000 pounds of fireworks, which were seized. The driver gave consent to search the storage unit in Malden on Route 1 which yielded another 5,000-6,000 lbs. of fireworks. The man will be charged with possession of class C fireworks with intent to distribute and transporting explosives without a permit.

## SOUTH TEAM ARRESTS BOSTON RAPIST

On Wednesday, June 20, 2012 a South Team fire investigator was working a paid detail when he heard

a "BOLO" (Be On the Look Out) given out by the Bunker Hill Community College Campus Police Department for a sexual assault. The trooper and Campus Police responded to the Gilmore Bridge where a subject matching the description of the possible suspect was found. Officers brought him back to the scene where the victim identified him as her assailant. He was immediately arrested and has been charged with kidnapping and assault and battery. The investigation revealed he had followed the woman into a restroom on the Bunker Hill Community College Campus and assaulted her. She was able to fight off the attacker and call police. The Suffolk County State Police Detective Unit was also called as the man matches the description of an individual wanted for sexual assaults along the Esplanade in recent months.

## WAREHAM ARREST

In the early morning hours of Friday, May 25, 2012 South Team investigators went to an intentionally set residential structure at 210 Blackmore Pond Road in Wareham. There were no injuries and there was minimal damage to the structure, but there were multiple points of origin. The cause of the fire was determined to be arson. A criminal complaint was sought for a woman who was charged with one count of arson of dwelling.

## BOMB SQUAD ARREST

On May 21, 2012, members of the State Police Bomb Squad assisted Metro-LEC and Duxbury Police investigate a home invasion at an off-duty Duxbury police officer's home where shots had been fired at pursuing police officers. Several additional State Police as well as Marshfield, Pembroke and Kingston Police officers responded and set up a perimeter along Route 3. At approximately 2 a.m. the suspect emerged from a cranberry bog and surrendered to troopers without incident.

## ARREST IN GARDNER FIRE

On Friday, May 18, 2012 several North Team fire investigators arrested a man after a Worcester County Grand Jury indicted him on two counts of arson of a dwelling. The charges stem from arson fires at 56 Nichols St. and 72 Nichols St. in Gardner on June 21, 2010. The defendant was arrested by troopers without

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**INVESTIGATIONS** CONTINUED FROM PAGE 15

incident. He is also charged with two counts of attempted murder and two counts of assault with intent to murder.

**ARREST IN REVERE ARSON**

In the early morning hours of Thursday, May 17, 2012 private security officers and Revere Police were investigating a case of indecent assault and battery and slashing vehicle tires in the garage of a high-rise condo complex at 364 Ocean Avenue in Revere. Witnesses had reported someone running from the scene, entering Unit #209 who refused to come out. As investigators entered, they found a 39-year old man had set a fire in two rooms of the apartment, putting everyone in the fully-occupied building at risk. He was immediately arrested and charged with indecent assault and battery, arson of a dwelling, malicious damage to property, and

disorderly conduct. North Team fire investigators were involved with this fire investigation and arrest.

**WAREHAM ARSON ARREST**

On February 18, 2012 a man attempted unsuccessfully to solicit drugs or alcohol from several tenants at the Silver Lake Motel on Cranberry Highway in Wareham. After being rebuffed, he kicked in the backdoor of the building and set a fire to a mattress using a lighter. The fire quickly extended to the basement ceiling and burned the floor joists. On April 17, 2012, South Team investigators were involved in the arrest of a man who was charged with burning a dwelling, breaking and entering in the nighttime with intent to commit a felony, and malicious destruction of property of \$250 in connection with this case. ■

# STATE POLICE BOMB SQUAD VISITS SCIENCE CLASS

On Wednesday, June 13, 2012 Trooper Sicard visited North Attleboro Middle School to demonstrate his “bomb-sniffing dog” Sierra, and his robot to the students in the Science Tech Studies. The robot, which is used by the Massachusetts State Police Bomb Squad, was part of a presentation on careers that use science, technology, engineering and mathematics for students in Tanya Erban’s science class. The visit was an outgrowth of the Science, Technology, Engineering, and Mathematics (STEM) Expo that selected middle school students attended at Bridgewater State University in May. Since the expo, students have made presentations, performed a skit and created posters to share the information they learned. Trooper Sicard sold the students on his job, saying: “I have one of the coolest jobs around.” He urged them to work hard in school. The robot was hooked to a monitor where students could both see and hear what was in front of it. It also has an arm and a gripping mechanism. Sierra, Trooper Sicard’s black Labrador, is trained to sniff for explosive materials. After putting on a demonstration that

showcased the effectiveness of Sierra’s nose, he noted she had flunked out of guide dog school because of a propensity to chase squirrels and chipmunks, however, her enthusiasm for food and hugs makes her the perfect bomb-sniffing dog. ■



Bomb squad robot demonstrated for North Attleboro students by Trooper Sicard.

# GRADUATIONS

**RECRUIT CLASS #195**

Recruit class #195 graduated from the Massachusetts Firefighting Academy’s sixty-day Recruit Firefighting Program on June 22, 2012. “This rigorous professional training provides our newest firefighters with the basic skills to perform their jobs effectively and safely,” Coan said. The Massachusetts Firefighting Academy (MFA), a division of the Department of Fire Services, offers this program, tuition-free.

**67 Graduates From 32 Fire Departments**

The 67 graduates, all men, represent the 32 departments of Andover, Arlington, Canton, Chelmsford, Duxbury, Greenfield, Holden, Lawrence, Lowell, Malden, Marlborough, Mashpee, Melrose, Methuen, Middleborough, Natick, New Bedford, North Andover, North Reading, Norton, Orleans, Oxford, Peabody, Revere, Sharon, Shrewsbury, Somerville, Swampscott, Tewksbury, Waltham, West Springfield, and Weymouth.

**Saugus Fire Chief James Blanchard, Guest Speaker**

The guest speaker was Saugus Fire Chief James Blanchard. Chief Blanchard has been an instructor in the recruit training class for 25 years and reflected on the importance of the training that firefighters will instinctively rely on in difficult situations and how it allows firefighters from different communities to work cohesively at fire scenes and emergencies.

Upon successful completion of the Recruit Program all students have met national 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.

**CALL/VOLUNTEER FIREFIGHTING TRAINING CLASS #40**

State Fire Marshal Stephen D. Coan and Mass. Firefighting Academy Director Edmund M. Walker presented certificates of completion to members of the Call/Volunteer Firefighter Training class #40 in a graduation ceremony at the at the Kuss Middle School, Fall River, MA on June 25, 2012.

**42 Graduates From 16 Fire Departments**

The 42 graduates, 40 men and two women, represent the 16 fire departments of: Acushnet, Dartmouth Dist. 1, Dartmouth Dist. 3, Dighton, Douglas, Dudley, Freetown, Halifax, Lakeville, Mattapoisett, Middleborough, Plympton, Rehoboth, Swansea, Wareham, and Westport.

The Call/Volunteer Firefighter 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. Bringing the training closer to the firefighters often means more firefighters can participate. This program was held at area fire department training facilities. Graduates have completed 320 hours of training on nights and weekends. Upon successful completion of the Call/Volunteer Firefighter Training program, these firefighters are now certified to the level of Firefighter I/II by the Massachusetts Fire Training Council.

**Today’s Firefighters Do Far More than Fight Fires**

Today’s firefighters do far more than fight fires. They are the first ones called to respond to chemical and environmental emergencies ranging from the suspected presence of carbon monoxide to a gas leak. They may be called to rescue a child who has fallen through the ice or who has locked himself in a bathroom. They rescue people from stalled elevators and those who are trapped in vehicle accidents. They test and maintain their equipment, ranging from self-contained breathing apparatus to hydrants to hoses, power tools, and apparatus.

At the Massachusetts Firefighting Academy they learn all these skills and more from certified fire instructors who are also experienced firefighters. Students learn all the basic skills they need to respond to fires and to contain and control them. They are also given training in public fire education, hazardous material incident mitigation, flammable liquids, stress management, water rescue procedures, confined space rescue techniques, and rappelling. These intensive programs for municipal firefighters involve classroom

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# TECHNICAL RESCUE UPDATE

By Mark McCabe

The Technical Rescue Training program has been busy over the past several years. Beginning in the early 1990's we have delivered, on average, 27 multi-day programs and trained 650 firefighters annually. Each year, the demand for technical rescue training has steadily increased and the feedback received from our students has caused us to make some significant changes and pursue program expansion.

We have been offering a two-day surface water rescue class that allows students to participate in open moving water, and are currently evaluating the feasibility of developing a technician level class. We have also been offering a four-day technician level trench rescue class with great success.

We have updated and added to our confined space program and expanded our rope rescue program to now offer a 4-day operational level and a 4-day technician level rope class.

In addition to providing rope, trench, confined space, water, ice, and incident command systems for structural collapse incidents classes each semester, we were awarded contracts to provide training to the counties of Barnstable, Bristol, Essex, Norfolk, and Plymouth for the start of their county-wide Technical Rescue Teams.

The training began with Essex County in the spring of 2009 with an intense schedule as each team attended both classroom and practical training in operational



Bristol County technical rescue team. Photo by Mark McCabe.

and technician rope rescue, technician confined space rescue, and technician trench rescue.

Many of these students had their skills tested very soon after training. Several county teams were activated for a variety of technical rescue incidents including the rescue of a skydiver in Dunstable in October 2010 and a suicidal person on a Lawrence bridge in June 2012. The teams were able to manage each one with great teamwork and success.

We have also been working with the Certification Office to develop certification in the disciplines of rope, confined space and trench rescue. These should be ready to roll-out soon.

If you would like to know more about the training provided or would like to discuss hosting a class in any of the disciplines we offer, please contact the Technical Rescue Program Coordinators at (978) 567-3214. ■



Foxboro Trench class. Photo by Mark McCabe.

# LOCATION OF PARK ST. FIRE IN STOUGHTON PRESENTS IRONIC TWIST

By Christine Iacobucci  
Stoughton Patch, Reprinted with Permission

May 3, 2012 - Stoughton firefighters were well-prepared for the May 1 fire at 34/36 Park St. since thousands of firefighters have actually fought a computer-based simulated fire at this exact location during training sessions at the Mass. Fire Academy.

A repairman fixing a basement furnace notices a problem and calls 911. The fire department arrives on scene within minutes and pulls up to see large amounts of smoke pouring out of the roof. The fire, which was not even visible at the time of the call, has spread from the basement to the third floor of the multi-unit home in a matter of moments.

Some Stoughton firefighters who fought this blaze, "The 34 Park Street Fire", admit to making mistakes. In fact there is one, Lt. Jay McNamara, who is actually glad he made mistakes at that fire.

That's because the fire they battled took place in a trailer and was computer simulated.

The 'sim-trailer' at the Massachusetts Firefighting Academy in Stow is, as Captain Don Jasmin calls it, "the place to make mistakes." (Jasmin is also a highly respected instructor at the Fire Academy.)

Ironically, on May 1, the training tool for more than 2,000 firefighters statewide, 34/36 Park Street, did erupt into flames, displacing 17 people, although thankfully there were no injuries or fatalities.

This time instead of a furnace problem, it was an alarm call to which the department responded.

The cause of this real life fire was electrical and it started in the ceiling between the 2nd and 3rd floors, according to the State Fire Marshal's Office.

McNamara, who was one of the first firefighters on the scene May 1, described the parallels between the two fires saying, "It went from a minimal amount of smoke visible to within 6 minutes...the spread of the fire was basically the same in both scenarios."

The fact that many firefighters already trained to fight a fire at this residential building aided their response to the real-life blaze at 34/36 Park St. on May 1.

Sometimes people question the effectiveness of computer-based trainings, but McNamara attests, "Being involved with the [Fire Officer] class and having the house in the simulation, made me more conscientious of that building and construction."

Capt., Doug Campbell explains the benefits of firefighters, like McNamara, taking the office training: "The information he conveyed to me was a direct result of him having used the simulator."

Greg Bourget, a fire investigator with the SFD (who has also trained on 34 Park Street in the simulator) spoke to the building being a "perfect example of a single family [structure] converted into a multi-family home."

"[A converted home] makes our job harder because what you think is a door isn't always" he said.

"The balloon-frame construction is typical for its time," Captain James Bertram said of the building, which dates back to the late 1800s/early 1900s.

He said the prevalence and length of the lumber at that time was such that one beam would run up an entire wall, therefore allowing the fire to do the same.

"We would have realized it [the balloon frame construction] based on the fire behavior; it just would have taken a little bit longer," McNamara said.

"We size up every situation we are involved in...the outcome would have probably been the same [but] because of the simulator it gave me an extra minute or two to be aware and convey it to my superior."

Jasmin, expressed the good fortune of the academy that the 34/36 Park St. building owner gave permission for his colleague, Bill Miller, to take pictures of the entire house for use in the simulator.

"Because we had permission from the property owners at the time to utilize it as a training tool it made the people on scene more cognizant of what was going on within the structure," Jasmin said. Stressing the

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# FLAMMABLE GAS TRAINING PROGRAM UPDATE

By Michael Gurnick, Assistant Coordinator



The Flammable Gas Training Program recently completed one of the busiest spring semesters in Mass. Firefighting Academy (MFA) history. Overall the program trained 769 people from both the fire service and private industry. While we conducted our usual programs with the Northeast Gas Association and the Propane Gas Association of New England, we also trained fire personnel from our MFA based Recruit, Call-Volunteer and Open Enrollment sessions. Additional fire service trainees participated from Boston, Worcester, Brockton and Fall River Fire Departments. Once again, fire departments made use of SAFER Grant funding to train new hires.

Two newer areas for training took us off site. One class on LNG Trucking to the Southeast Maine Environmental Response Team took place in Augusta, ME and a second on LPG Firefighting at the Lowell (MA) Fire Department. Both of these programs were created from existing curricula. Both are also the type of sessions we are more than able to provide on a 'by request' basis.

## ETHANOL FOR THE FIRST RESPONDER

A final step in moving forward into new training opportunities this semester was the development and delivery of a stand-alone grant-funded program entitled *Ethanol for the First Responder*. Ethanol is a main stay gasoline additive today and fire departments across the country must be prepared for incidents involving this product. As an 'alternative' fuel, ethanol demands very different firefighting equipment and tactics than other flammable liquids. Nearly 800 people attended this new training course and we expect future demand to be high. In fact, some 15 more sessions are planned for FY '13. This program demonstrates the need for the fire service to continue to evolve to meet the likely hazards posed by new fuel products and alternative fuels. The Flammable Gas Training Program plans to lead in this effort. Stay safe. ■

**Ethanol demands very different firefighting equipment and tactics than other flammable liquids."**

# VISION 20/20

By Capt. Rick Tustin, Winchester Fire Department

What do the years 1913, 1947, 1973, 1987, 1996 and 1998 all have in common? In each of those years, conferences were held to discuss or white papers were published outlining the fire problem in the United States and the recommended steps that should be taken to reduce the devastating affects of fire. In every year the underlying message to the fire service and its leaders was more emphasis had to be placed on prevention activities. Yet for nearly 100 years, the focus of the fire service has continued to revolve around suppression and emergency response activities.

In 2008, another group of like-minded fire prevention professionals came together in Washington, D.C. to discuss the fire problem in the United States. With funding secured by the Institution of Fire Engineers - U.S. Branch through a grant from the Department of Homeland Security (DHS) Assistance to Firefighters Fire Prevention and Safety Grant program, 150 fire and life safety professionals met to form strategies and recommendations to address the concerns identified a year earlier in a nationwide web based forum. This grassroots effort became **Vision 20/20**, and at the end of this 2008 symposium, five strategies were identified.

- **Strategy One:** An Increase Advocacy for Fire Prevention
- **Strategy Two:** Conduct a National Fire Safety Education/Social Marketing Campaign
- **Strategy Three:** Raise the Importance of Fire Prevention Within the Fire Service
- **Strategy Four:** Promote Technology to Enhance Fire and Life Safety
- **Strategy Five:** Refine and Improve the Application of Codes and Standards that Enhance Public and Firefighter Safety and Preserve Community Assets.

In the years since the 2008 symposium, this working group has made great strides in accomplishing many of the action items outlined in their 2008 report.

An online **Guide to Fire Prevention Advocacy** toolkit is now available. Marketing campaigns are being coordinated with the U.S. Fire Administration (USFA) and the Congressional Fire Services Institute (CFSI) with the theme "Fire is Everyone's Fight". Technology is being developed and evaluated to address the problem of unattended cooking fires, and the International Association of Fire Fighters (IAFF) has received grant funding from the DHS Fire Prevention and Safety grants to promote more involvement and understanding of the codes and standards development, adoption and enforcement process by the fire service with an emphasis being placed on operational personnel.

The most exciting accomplishment is the development of community risk reduction programs for the fire service. These programs bring fire prevention efforts to the company level and help to identify high-risk audiences and solutions. Based on the highly successful integrated risk management model used in the United Kingdom and Canada, select cities both large and small in the U.S. piloted community risk reduction programs through the grant. They identified high-risk neighborhoods and problems and then line personnel, in conjunction with community volunteers, visited these neighborhoods to educate and help correct potential fire and life safety problems. The initial issues identified in many of the test communities were a lack of working smoke alarms and adequate escape planning. The efforts of these test communities were to get smoke alarms into the high-risk homes and provide the occupants with educational material. The initial reports are encouraging and as a result community risk reduction reports and training materials are now available online. For these materials and other great tools please visit the Vision 20/20 website at [www.strategicfire.org](http://www.strategicfire.org). ■



State Fire Marshal Stephen D. Coan has sent recent advisories to local fire chiefs in order to spread awareness of these dangers and prevent dangerous situations from happening. These are all posted on the DFS website under *OSFM Advisories* and as part of the monthly *DFS Briefs*.

If you have any questions, please contact the Code Compliance & Enforcement Unit in the Division of Fire Safety at (978) 567-3375 or in western Massachusetts at (413) 587-3181.

August 1, 2012

**STAGE II VAPOR RECOVERY**

I am forwarding information to you regarding the Mass. Department of Environmental Protection’s (MassDEP) enforcement discretion to no longer require the installation, operation and maintenance of Stage II Vapor Recovery Systems under certain circumstances. Below is information that was mailed to facilities that have Stage II Vapor Recovery Systems. This is for information purposes only.

Effective July 9, 2012, the Department of Environmental Protection (MassDEP) will use enforcement discretion to no longer require the installation, operation, and maintenance of Stage II Vapor Recovery systems under the following conditions:

1. A new motor vehicle fuel dispensing facility dispensing gasoline for the first time.
2. An existing facility where there is excavation below a shear valve or tank pad to repair or replace a Stage II system or an underground storage tank; or
3. An existing facility where 50 percent or more of the dispensers are replaced; and the entire Stage II system is fully decommissioned in accordance with applicable guidance.

Please see <http://www.mass.gov/dep/air/community/stageii.htm> for important related information.

Here are links to the key documents that are posted on the DEP Stage II webpage.

1. Letter from Commissioner Kimmell: <http://www.mass.gov/dep/air/laws/s2ltr12.pdf>
2. Frequently Asked Questions: <http://www.mass.gov/dep/air/community/s2edfaq.htm>

3. Stage II System Decommissioning Notification Form:

<http://www.mass.gov/dep/air/approvals/stage2dn.pdf>

**Have questions or need additional information? Call the Stage II Hotline at 617-556-1035.**

August 1, 2012

**RECENT AMENDMENTS TO 527 CMR 17 FOREST PRODUCTS, AKA ‘MULCH’**

Sent to local fire officials in the August *DFS Briefs* was a set of recently filed amendments to the Fire Safety Code relating to forest products.

The main portion of the revision updates the existing regulation (527 CMR 17.00) by incorporating, in large part, the provisions of NFPA-1 Chapter 31 which deals with the outside storage of certain forest products including lumber, wood chips and related permit requirements.

One new requirement, unique to Massachusetts, is a provision, effective 9-1-12, which prohibits the new application and use of mulch within 18” of any combustible portion of a building (except for buildings containing (6) dwelling units or less).

The amendments to 527 CMR 1.00 and 10.00 are technical changes which clarify the permit requirements for lumber and mulch storage (1.04 (8)) and, in 10.03 (5)(e), directs the user to the updated s.17.00 when dealing with certain combustible materials that are considered forest products.

Please file these amendments by replacing the relevant pages in your code book.

August 1, 2012

**CORN MAZES**

The Department of Fire Services has prepared an informational document on corn mazes. Our agency receives multiple calls each year about what regulations apply to corn mazes. There are no regulations that directly apply to corn mazes; however there are broad statutes and regulations that would allow fire departments to deal with situations that could lead to fire - MGL 148 § 5 and 527 CMR 1.06. DFS has prepared a pamphlet that can help you discuss safety planning with corn maze operators. Each corn maze is unique and may meet some or all of these recommendations.

October 1, 2011

**SPECIAL AMUSEMENT BUILDINGS FOR HALLOWEEN AND OTHER SPECIAL EVENTS**

The Department of Fire Services annually reissues an advisory that was originally sent to all the fire officials and building departments in the Commonwealth. The Halloween season is a fun time of the year to be enjoyed, but as fire officials and building officials, the Halloween season generates common life safety issues, particularly where “haunted houses” and/or “fun houses” are operated and open to the public, regardless of occupant load (i.e., either ASSEMBLY USE or BUSINESS USE buildings or portions thereof). There are relevant sections of both the fire and building codes that pertain to making sure these special amusements are safe for the public. We strongly recommend that local fire and building officials work together when addressing these life safety issues.

Information from the Department of Fire Services: <http://www.mass.gov/eopss/docs/dfs/osfm/advisories/2007/091907-haunted-houses.pdf>

Information from the Department of Public Safety (Building Code): <http://www.mass.gov/eopss/agencies/dps/archived-stories/2007/special-amusement-buildings-and-the-upcoming.html>

August 15, 2012

**BUILDING CODE AND SMOKE AND CO ALARMS IN TEMPORARY SHELTERS**

Please be advised that the Board of Building Regulations and Standards has filed a regulation (780 CMR 3111), on an emergency basis (effective 6-15-12) requiring those who seek an Occupancy Certificate for a temporary Overnight Shelter to install a hard-wired smoke and/or heat detection and alarm system and a carbon monoxide detection system. According to the regulation such “hard-wired protection” shall be installed by 1-1-13. In order to reach compliance, the regulation allows a shelter to utilize “battery only” smoke and carbon monoxide detectors until 1-1-13 with the approval of the municipal building official and fire chief depending upon the location and in conformance with the Board of Fire Prevention Regulations, 527 CMR. If you have any additional questions please contact the DFS Code Compliance & Enforcement Unit at 978-567-3375. ■

**NEW EMS MEDICAL DIRECTORS HANDBOOK FROM USFA**

April 25, 2012, Emmitsburg, MD. – The Department of Homeland Security’s U.S. Fire Administration (USFA), in partnership with the DHS Office of Health Affairs (OHA), has released a handbook for **physician medical directors** of local departments and agencies who are involved in Emergency Medical Services (EMS) **response**. The *Handbook for EMS Medical Directors*

(PDF, 2.5 Mb) covers topics ranging from **occupational health and safety to liability issues**. “This handbook provides an **overview of key roles and responsibilities** to assist current and prospective medical directors in performing their important missions,” said U.S. Fire Administrator Ernest Mitchell. ■

**STOUGHTON FIRE CONTINUED FROM PAGE 19**

importance of the 34 Park Street training, Jasmin stated, “It covers hundreds of buildings in town based on the timeframe they were built.”

The actual May 1 34/36 Park Street fire demonstrated that not only does the simulator train on how to fight the fire itself, but as Jasmin says, “it lets us

know when we have to leave because if we don’t it would be more catastrophic.”

Because of the firefighters’ familiarity with the building, Jasmin said, “there was no loss of life or injuries.” ■

The U.S. Consumer Product Safety Commission (CPSC) is charged with protecting the public from unreasonable risks of injury or death associated with the use of the thousands of consumer products under the agency's jurisdiction.

To report a dangerous product or a product-related injury, go online to: SaferProducts.gov, call CPSC's Hotline at (800) 638-2772 or teletypewriter at (301) 595-7054 for the hearing and speech impaired. Consumers can obtain this news release and product safety information at [www.cpsc.gov](http://www.cpsc.gov)

**Gems Sensors Recalls Pressure Transducers Used in Fire Pump Controllers Due to Risk of Failure in a Fire**

April 24, 2012 Release #12-156

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.

**Name of Product:** Gems 3100 Pressure Detectors/ Transducers

**Units:** About 25,000

**Importer:** Gems Sensors Inc., of Plainville, Conn.

**Hazard:** The transducer can fail to accurately detect water pressure in a fire suppression sprinkler system. This could cause the sprinkler system to fail to activate and pump water to the sprinklers in the event of a fire.

**Incidents/Injuries:** None.

**Description:** The Gems 3100 Pressure Transducer is used to detect pressure in a range of applications, including the detection of water pressure as part of a fire pump controller in a fire suppression sprinkler system. The transducer has "Gems Sensors & Controls," as well as the 18-digit part number, printed on a label affixed to the center of the transducer. Part numbers beginning with "3100" are included in this recall.

**Sold by:** Gems sold the recalled 3100 Pressure Transducers directly to end-users and through distributors from January 2006 through February 2012 for about \$250.

**Manufactured in:** England

**Remedy:** Contact Gems to receive enhanced twice monthly inspection instructions and information about a free replacement transducer, when warranted. End-users who use the 3100 Pressure Transducer in other applications in which water pressure is measured should contact Gems to determine if their units are affected.

**Consumer Contact:** For additional information, call the company toll-free at (855) 877-9666, between 8 a.m. and 4:30 p.m. ET, Monday through Friday, or visit the firm's website at <http://www.gemssensors.com>

**Sears Recalls Kenmore® Dehumidifiers Due to Fire and Burn Hazards**

August 2, 2012 Release #12-240

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firms named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.

**Name of Product:** Kenmore Dehumidifiers

**Units:** About 795,000

**Retailer:** Sears, Roebuck and Co. and Kmart Corporation, of Hoffman Estates, Ill.

**Manufacturer:** LG Electronics (Tianjin) Appliance Co., Ltd., of Tianjin, China

**Hazard:** The dehumidifiers can overheat, smoke, melt and catch on fire, posing fire and burn hazards to consumers.

**Incidents/Injuries:** The firm has received 107 reports of incidents, with more than \$7 million in property damage and three reports of smoke inhalation injuries.

**Description:** This recall involves 35-, 50- and 70-pint dehumidifiers with a Kenmore logo on the front top of the unit, manufactured between 2003 and 2005. The dehumidifiers are made of white plastic and are between 21 and 24 inches tall, about 15 inches wide and about 13.5 inches in depth. They have fan and humidity controls on their top front panels and some models include remote controls. They come with front-loading water buckets. The model number can

be found on the right side of the interior of the unit once the bucket has been removed. Recalled units have the following model numbers:

35-pint (2004) - 580.54351400

50-pint (2003) - 580.53509300

70-pint (2003) - 580.53701300

70-pint (2004) - 580.54701400

70-pint (2005) - 580.54701500

**Sold Exclusively at:** Sears and Kmart stores nationwide and Sears.com and Kmart.com from 2003 to 2009 for between \$140 and \$220.

**Manufactured in:** China

**Remedy:** Consumers should immediately turn off and unplug the dehumidifiers and contact the firm to receive a Sears gift card for either \$75, \$80, \$90 or \$100, which may be used at any Sears or Kmart store or at Sears.com or Kmart.com. The gift card amount will depend on the capacity and year of the dehumidifier. In lieu of a gift card, consumers may request a check for the refund amount.

All consumers with recalled units will also receive a \$25 coupon that may be used at Sears Department Stores or Sears.com toward the purchase of a new Kenmore dehumidifier.

**Consumer Contact:** For additional information, contact the Recall Fulfillment Center toll-free at (855) 400-4641 between 8 a.m. and 7 p.m. CT Monday through Friday and between 8 a.m. and 2 p.m. CT Saturday, or visit [www.Kenmoredehumidifierrecall.com](http://www.Kenmoredehumidifierrecall.com) ■



**UL WARNS OF RELOCATABLE POWER TAP BEARING COUNTERFEIT UL MARK**

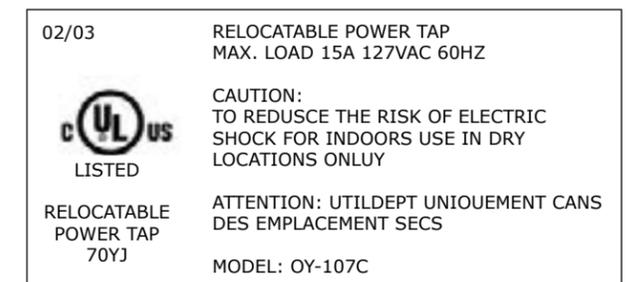
Northbrook, IL - September 14, 2011 -

UL is notifying consumers that the relocatable power tap identified below bears a counterfeit UL Mark for the United States and Canada. This relocatable power tap has not been evaluated by UL to the appropriate standard for safety for the United States or Canada, and is not authorized to bear the UL Mark. It is unknown if the relocatable power tap complies with United States or Canadian safety requirements.

**Name of Product:** Four Outlets Relocatable Power Tap, Model OY-107C; **Number of Units:** Unknown;

**Manufacturer:** Unknown; **Date of Manufacture:**

Unknown; **Identification:** On the product: The product has the following label and caution marking, which displays the UL Mark and the following information: ■



**GRADUATIONS CONTINUED FROM PAGE 17**

instruction, physical fitness training, firefighter skills training and live fire practice.

**BASIC FIREFIGHTER SKILLS**

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. ■



Recruit Class 195. Photo by Jack Gelinas



Call/Volunteer Class #40. Photo by Ken Lima