All Hands HERALD

DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS

APRIL 2011

HAZMAT

PUBLIC EDUCATION

FIRE DATA

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The *All Hands Herald* is published three times a year by the Department of Fire Services in April, August and December. 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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FROM THE FIRE MARSHAL

All Hands HERALD
DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS

This has been a tough winter. Fire departments have been challenged by serious snowstorms, narrowing streets, power outages, and collapsing roofs over this long winter. The spike in fire deaths in the early part of 2011 added to that challenge. Massachusetts experienced successive record low years of fire deaths in 2009 and 2010, making the first part of 2011 feel even worse.

DEDICATION OF NEW FACILITY

Later this spring, Governor Deval Patrick will officiate at the dedication of the new and renovated Stow facility. I look forward to the completion of this major project that provides a proper home for all divisions of the agency and a great training facility for firefighters. At the same time, acquisition and development of a Springfield training facility has not stopped. Preliminary plans have been drawn up and the project continues to move forward. DFS has also acquired a new incident support unit (ISU) and a new "rehab" unit as we grow the capability of the special operations unit. They can now triangulate the state with resources in West Springfield, Middleborough and Stow, in order to reduce response time to incidents as they are increasingly asked to do. Proper rehabilitation is important to the safety of our firefighters and allows them to rotate back into operation more quickly.

LEGISLATIVE SESSION

This upcoming legislative session has several priorities for the fire service. As part of the adoption of the Model Fire Code, a bill has been filed to establish an appeals board process. We also hope to eliminate the so-called gap in the smoke alarm laws that causes a great deal of confusion for the public.

The proposed law would require a smoke alarm inspection by the fire department on the sale and transfer of every home, not just those built prior to 1975. Such inspections are routinely required as part of purchase and sales agreements for newer homes, but not codified by law. Since all homes must be inspected as part of a sale or transfer for compliance with carbon monoxide detector regulations, this would simply codify what is happening in the real world.

A new concern is a bill (that will certainly get some traction on talk radio) that proposes to legalize class C fireworks. I would urge fire officials to reach out to lawmakers and educate them that this would be a nightmare from a public safety standpoint. The last time fireworks were legalized, there were so many fires that fire officials asked for an emergency repeal before the year was out. There is also a bill to increase the statute of limitations on the crime of arson from six to ten years. ▪

IMPROVING PUBLIC SAFETY AFTER THE STATION NIGHTCLUB

New Requirements for a Trained Crowd Manager

As a result of the devastating Station nightclub fire in Rhode Island on February 20, 2003 in which 100 people were killed and 300 others injured, the Massachusetts Legislature and the Commonwealth's Board of Fire Prevention Regulations enacted sweeping and enhanced fire safety requirements, particularly with respect to nightclubs, dance halls, discothèques, and bars.

Among the far reaching changes to the fire code that have been implemented were requirements for installation of automatic sprinklers in certain places of assembly with a capacity of 100 or more, prohibition of the use of indoor pyrotechnic displays in certain assembly use occupancies, submission of a valid certificate of inspection issued by the local inspector of buildings and signed by the fire chief for issuance and renewal of liquor licenses, and increased fines and criminal penalties for allowing certain dangerous conditions to exist in any assembly use group building.

CROWD MANAGER REQUIREMENTS

Starting June 1, 2011, every nightclub, dance hall, discothèque or bar that holds 100 or more people, or any facility with music above normal sound levels, will have to designate a crowd manager.

- Facilities must designate a crowd manager who is present in the facility during all hours that it is open to the public; The fire code changes require "the owner or operator of a nightclub, dance hall, discothèque or bar, with an occupant load of 100 persons or more" to "designate one crowd manager for every 250 occupants or portion thereof based upon the certificate of inspection issued" under the State Building Code.
- The designated crowd manager must be trained and successfully complete training every three years. This training and testing will be provided on the Internet by the State Fire Marshal at no charge. The training program is now available on-line and can be accessed twenty-four hours a day, seven days a week.
- The crowd manager must complete the *Fire and Building Safety Checklist* every day the building is open to the public. The checklist insures that the facility is safe to open to the public through a visual inspection of the property conducted each day prior to opening by the trained Crowd Manager.

Photo by: Twose

INFORMATION AND TRAINING PROGRAM AVAILABLE ON-LINE

Materials for fire departments, the public, and managers of affected venues as well as the training program itself are available on the Department of Fire Services website at www.mass.gov/dfs.

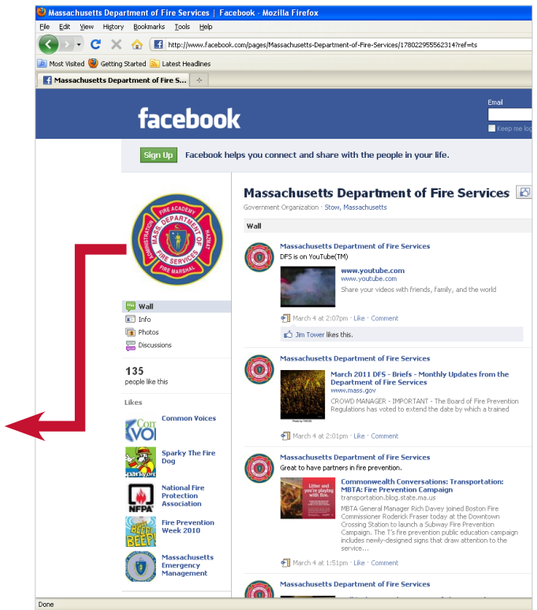
QUESTIONS

The local licensing authority has been notified of these code changes and the need to comply as part of the relicensing requirements. The fire chief in each community is also aware of the requirements and should be available as a resource to answer questions. If the fire department cannot answer a question then people can contact the Division of Fire Safety at 978-567-3375 for additional information and direction. ▪

HAVE YOU HEARD?

DFS IS ON FACEBOOK

Check out the Massachusetts Department of Fire Services' Facebook page and connect with us. You'll find updates on MFA graduations, Young Hero Awards, safety tips, links to pertinent news stories, and more. Don't forget to "like" the page, so DFS updates will show up on your News Feed. ▪



SERVICES AVAILABLE THROUGH

ON-SITE ACADEMY

Included in this year's Department of Fire Services' budget is funding to provide residential and peer support for critical incident stress management through the On-Site Academy in Gardner. Under the umbrella of DFS, the On-Site Academy will provide specialized residential care with a return to duty focus for high intensity, urgent cases where a firefighter may be at risk. The program will be funded by DFS and will include residential and out-patient trauma and addiction services.

The On-Site Academy is a non-profit residential treatment and training center for critical incident stress management, serving emergency service workers who are in distress. The On-Site Academy program is for all public safety personnel and will provide support and care to any firefighter in the Commonwealth who is temporarily overwhelmed by the stress of their job, what they have seen, and what they have been through.

In addition to providing 24-hour-a-day, 7-day-a-week services, which include crisis intervention, residential stabilization, treatment for job related critical and traumatic incidents, and addiction, DFS will coordinate with the On-Site Academy to provide education outreach to the fire chiefs and the fire service.

For help, contact: Arianna Setzco, Coordinator On-Site Academy at (978) 874-0177 or during normal business office the central office at (978) 632-3518 and the On-Call Emergency pager is (781) 553-0542.

The fire service has long recognized the value and importance of CISM in helping our firefighters stay healthy and productive in their profession. Effective preventative stress management of the first responder is important and DFS is pleased to be able to help provide this service. ▪

HAZARDOUS MATERIALS RESPONSE, RE-ENGINEERED

By David Ladd, Director, Hazardous Materials Response

For nearly two decades, the Massachusetts fire service has enjoyed the benefit of a well designed and effective hazardous materials response system. The regional basis and common capabilities of the statewide system have earned it a national reputation as among the best in the country. Clearly the foresight of the system's founders has been proven as valid.

The Massachusetts Hazmat system was in a good position to evolve at the same time as the general mission for "hazmat" did with the arrival of terrorism as a national concern and the rapid growth of technology for responding to hazardous materials incidents. For the most part, advances and modification were integrated, with relative ease, by acquiring training equipment and developing plans and procedures. These measures were carried out to assure or improve the system and the level of preparedness.

As an objective, preparedness cannot be viewed as an end point. Preparedness should be viewed as an organizational culture, where the potential risks and the system's ability to prevent or respond to them are continually anticipated and evaluated. In keeping with this philosophy, the Hazardous Materials Response Division of the Department of Fire Services continually evaluates its responses and has tabletop exercises on possible scenarios. In 1999, the division determined that hazmat teams alone could not effectively manage the potential of mass contamination and it developed plans for the statewide mass decontamination system. In collaboration with the Fire Chiefs' Association of Massachusetts, the Professional Fire Fighters of Massachusetts, the Massachusetts Department of Public Health and the Massachusetts Emergency Management Agency (MEMA), and with U.S. Department of Justice (preceding the Department of Homeland Security) funding, we developed the unprecedented capability for mass decontamination that now exists in our state.

In 2005, the Hazardous Materials Response division recognized the need for more rapid response of its detection capabilities than was then possible with the number and location of hazmat units carrying detection equipment. The more rapid detection is based upon the following early priorities in response that became elevated following the September 11, 2001 terrorist attacks.

- Need to employ protective measures for responders;
- Need to determine evacuation options;
- Need to confirm, characterize or limit the threat and its perception;
- Need to provide healthcare and various public officials with information about the presence, character and specifics of a potential release;
- Need to inform state and federal agencies so that they can increase or decrease their levels of concern and determine actions.

While all of the above elements existed prior to 9/11, the level of attention and impact from public concern were not nearly as prevalent.

From its inception, the Hazardous Materials Response Division had an objective of providing hazmat teams on scene and operational within one hour of the request. The division assessed that this objective was met if first arriving technicians were on scene within that hour, regardless if response vehicles were also on scene. In re-assessing this objective, the division changed the measurement for meeting this objective. At least one Technical Operations Modules (TOMs Units) had to be on scene, as well as personnel, in order to say the objective of the one-hour response time had been met.

In addition, a new objective was established: to have detection capability on scene in any high population density area within 30 minutes. The response capability of TOMs units was measured against this objective by simple map travel distances, with other factors considered. The following conclusions were reached:

1. The restriction of primary response (1st hazmat unit due) to team/district boundaries created an artificial impediment;
2. Reliance, in some districts, on an off-duty technician or technician from another department to "pick-up" the TOMs unit resulted in a delay and, in some instances, failure in response;
3. Movement of TOMs units alone could not result in sufficient placement to meet the objective;
4. A lack of situational awareness between the six hazmat control centers combined with perceived limitations in access to other district resources leads to delays in dispatching sufficient personnel, inability to manage multiple simultaneous incidents and the ability to cover for units that were out-of-service.

To meet the new objective, the Hazmat Response Division developed a multi-phased re-engineering plan. The hazmat re-engineering plan begins with the incorporation of on-going system improvements and carries through to the future replacement of the existing fleet of hazmat vehicles. Phase 1 of this re-engineering is now complete. The following measures were implemented to achieve the objectives of improved response and coordination:

ADDITIONAL RESPONSE UNITS

The division assessed that no combination of location changes of the existing TOMs units would achieve the desired response time without an equivalent loss in some other location. Through a cooperative agreement with the Massachusetts Regional Homeland Security Councils, four new vehicles were created and deployed.

Three Hazmat Squads were built and deployed to meet the response time requirements in areas where an extended detection response was identified (see Fig. 1). These units are medium duty, rescue style trucks and are equipped with all of the detection and analysis capabilities of a TOMs unit. These vehicles were fielded in 2008 in Danvers, Yarmouth and New Bedford.

The fourth unit is a statewide unit, based in Natick. This unit, called a Tactical Support Unit (TSU) carries specialized equipment that is not carried in all districts and serves as an additional operating base for teams at large scale incidents. The TSU is dispatched on any Tier 3 incident or upon special request of the team or department activating the team, based upon anticipated need of the specialized equipment.

The TSU carries the following special equipment:

- Two video camera systems capable of being deployed in the hot zone and transmitting images to the TOMs unit and the command post.
- A wide-area chemical and radiological detection system that is fully interoperable

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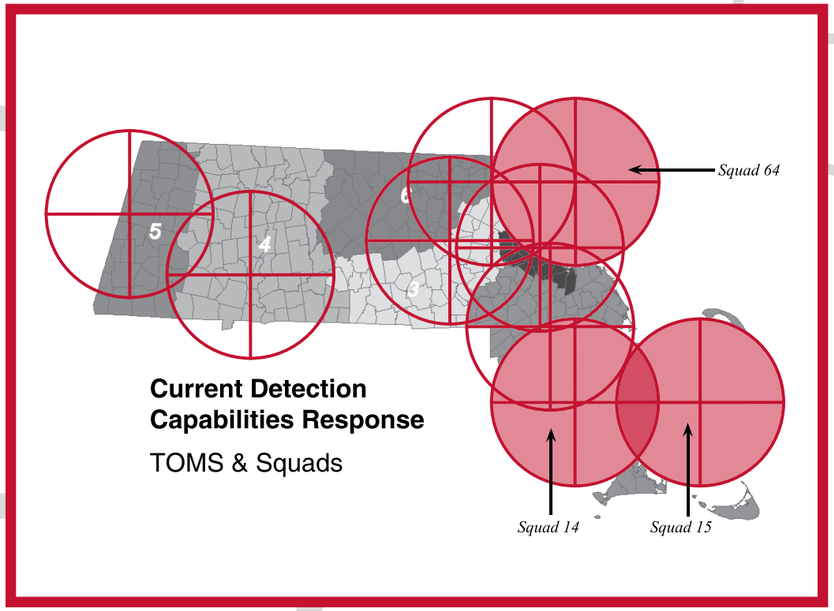

Figure 1, Current Detection Capabilities Response

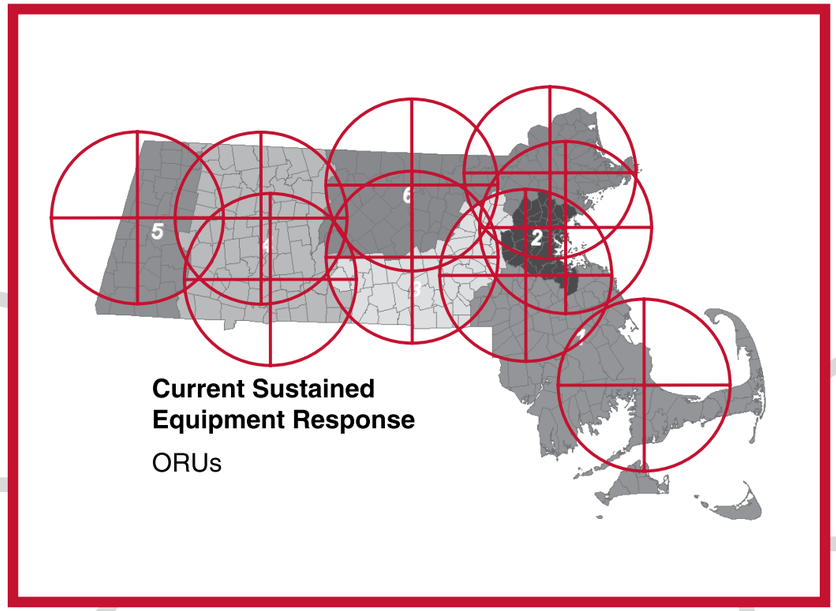

Figure 2, Current Sustained Equipment Response

HAZMAT RESPONSE CONTINUED FROM PAGE 5

with systems carried by the Mass. Department of Environmental Protection, Mass. National Guard, Civil Support/ Weapons of Mass Destruction Team, and the U.S. Environmental Protection Agency. This system allows hazmat, either singularly or in combination with these other agencies, to deploy detection over a wide area for responder and public protection. This information is reported back by radio to a common computer base and can be integrated into plume modeling for decision support and early warning.

- Ballistic protection, to allow a team of specially trained hazmat technicians to work in particular environments in close support of the bomb squad. This combined operating team is called a Joint Hazard Emergency Response Team (J-HERT).
- Proximity fire protection, used by the teams when conducting "cold-tapping" procedures on flammable liquids tankers to access and transfer product.

The second measure taken was to un-slave the hazmat units to districts and move Operational Response Units (ORUs) to achieve better coverage (see Fig. 2). Under the original system, hazmat units were assigned to a district and did not respond out of district unless covering for an out-of-service or committed vehicle, or upon a Tier 4, multi-team response. This had the effect of often not sending the closest appropriate apparatus.

To rectify this inefficiency, district lines were abandoned with respect to vehicles only and community response plans created that dispatches the closest apparatus of the correct type for the incident level. The plan also identifies an order of succession in the event that a unit is out-of-service, committed to another incident or additional units are required. Two ORUs were moved to achieve better coverage; 21 was moved from Newton to Revere and 32 was transferred from Natick in district 3 to Northampton in district 4.

The third measure was a modification to the agreements between DFS and the local fire departments that host, or house, hazmat apparatus. This modification allows DFS to reimburse local departments for delivering hazmat apparatus using on-duty firefighters instead of waiting for a hazmat technician. While the agreement does not guarantee the ability of the local department to deliver the equipment, it makes it possible, and where incorporated, reduces response time.

The final measure was the consolidation of hazmat control centers from six to two. This consolidation was coupled with the incorporation of new technology for dispatch. The consolidation resulted in an Eastern Massachusetts Hazmat Control Center, located in Holbrook and a Western Massachusetts Hazmat Control Center located in Amherst. Under the previous system, control centers had little interaction, situational awareness or ability to coordinate effective use of resources. There was also very limited redundancy in the event of technical failure or overwhelming activity levels.

The two hazmat control centers have nearly full redundancy, except some radio coverage area. A common, statewide, hazmat activation telephone number was created. Every fire department uses this phone number (877) 385-0822 to activate a hazmat response. The western counties of Hampden, Hampshire, Franklin and Berkshire select "1" when calling which directs their call to Amherst. All other counties select "2" and are directed to Holbrook. If either center fails to answer in four rings, the call automatically forwards to the other center.

Both centers have the ability to activate teams statewide and the two centers can communicate with each other by radio and telephone. The automated team activation system allows centers to cooperate on team activation and maintain situational awareness. This system allows concurrent notification to key response partners, providing a situational awareness to those organizations that may be activated or consulted during an incident.

The Hazmat Re-Engineering Plan has successfully furthered the evolution of hazmat response in Massachusetts to take full advantage of the unique statewide capabilities of the system. Over the past 20 years, Massachusetts has proven itself a leader in hazmat response and as we continue to identify opportunities for improvement, and act upon them, we will continue to better protect firefighters and the public from the risks of hazardous materials incidents. ▪

TEENS, FIRE, EDUCATION AND MEDICAL OFFICIALS CELEBRATE

BURN AWARENESS WEEK

The winners of a statewide contest for high school media students, the Y*ouTube™ Burn Awareness Video Contest*, sponsored by the state Department of Fire Services, the Mass. Association of Safety and Fire Educators (MA SAFE), and the Mass. Property Insurance Underwriting Association, were announced at a February 15, 2011 event held at Shriners Hospital for Children in Boston. National Burn Awareness Week was February 6-12, 2011.

"YouTube™ is a powerful tool for communication around the globe as we have seen in recent years, but there are many negative, false and just plain scary messages about fire and burns on the Internet," said Fire Marshal Coan. "Our goal is to allow teenagers to research the truth for themselves without being lectured by adults and without getting hurt."

(Top) Second Place Winners from Waltham High School; (Bottom) First Place Winners from Worcester's Doherty High School

WINNING VIDEOS

This is the third year of the contest and 27 teams from nine high schools in Agawam, Cheshire, Millis, Peabody, Sharon, Waltham, Westford and Worcester submitted entries. While all 27 videos were creative and interesting, the first place winning team was from Worcester's Doherty High School for their video *Dangers of Fire*; the second place winners were from Waltham High School for their video *The Babysitter*; and the third place winners were also from Worcester's Doherty High School for their video *Babysitter Fire Safety*. The Department of Fire Services posted the winning videos on its You Tube™ account at www.youtube.com/DFSOSFM .

HONORABLE MENTIONS

Teams from the South High School in Worcester and two from Sharon High School received honorable mention for their entries.

TEENS TALKING TO TEENS

"As a parent and a fire educator I have been appalled at some of the videos on YouTube™ made by teens or directed to teens. Yet as an educator I know that the best way for youth to learn about the true life consequences of the misuse of fire, is for them to research it on their own and to use their own language to effectively communicate to other teenagers," said Capt. Rick Tustin, president of MA SAFE. "Our goal was to partner with high school media teachers and use burn prevention as a vehicle to help them reach their own education goals while allowing the students to harness their creativity."

For more information about burn safety or the contest go to www.mass.gov/dfs, then click on *Fire Safety Topics*, then select *Burn Awareness* or www.burnawarenessweek.org ▪

EDUCATING THE PUBLIC ABOUT WHAT FIRE DEPARTMENTS DO:

ONE CHIEF SPEAKS UP

This article was originally published by the Belmont Citizen newspaper and is reprinted here with permission. Belmont Fire Chief David Frizzell was responding to questions that many fire chiefs face about staffing, budgeting, and how they are organized to provide the best protection to its citizens with the available resources. This is the sort of ongoing dialogue that occurs throughout the Commonwealth between fire chiefs and the people they serve. He emphasized fire prevention as a significant risk management tool and used his Mass. Fire Incident Reporting System (MFIRS) data to help educate the public about what fire departments do, how and why.

Belmont Fire Chief David Frizzell sent an e-mail earlier this week responding to online comments made by readers concerning fire department staffing.

By Anthony Schinella/belmont@cnc.com
GateHouse News Service
Posted Feb 23, 2011 @ 02:56 PM

The story, "Hit & Myths: Officials say under-staffing in the Belmont Fire Dept. restricts service," presented charts and narrative about fire staffing since the passage of Proposition 2 1/2. Many of Frizzell's comments in the e-mail address questions raised by commenters online.

We're publishing the text of the e-mail and a follow up question by the editor here:

Frizzell: Tony, I have read the comments that have been generated by your recent article, "Hit & Myths: Officials say under-staffing in the Belmont Fire Dept. restricts service". It is sad that some of your readers think it is okay to attack the Belmont Fire Department by making uninformed comments. I would love to be able to respond to the comments directly, but it is not fair to have to engage in "productive" dialogue when the commenter can remain anonymous. So I offer the following for your use to respond in a future article(s) or dialogued in your paper's comment section.

There seems to have been a fair amount of questioning of the incident "counting". You or Patrick are invited to view the incident list so you can see for yourself how an incident is counted. Each of the 3,484 calls in 2010 were individual calls placed for service. There is no double counting. There is no monkey business with the numbers. We don't count the number of pieces responding as separate incidents. Doesn't matter if one piece of apparatus responds or if 15 pieces respond it is counted as one incident. Average is 9.54 calls a day for 2010. Administrative type calls (inspections, training) are not recorded as incidents and, for the curious; food procurement is not recorded as an incident either. We are preparing our end of year report and will be able to provide you a detailed breakdown in the near future.

Response is dictated by the call received (either by phone or other means). If somebody calls up and says my lasagna is smoking, we might send one truck. If that same person calls because they see or smell smoke but don't know where it is coming from (forgot they had lasagna in the oven); a neighbor calls because they smell or see smoke (didn't know their neighbor was a bad cook); or there is a fire alarm activation (like an apartment building) we would send a full box alarm response for a house fire (two engines, one ladder, one rescue and the shift commander). It is fair to ask, "why send all the equipment?" but it is reasonable to believe that there is a fire! Once the first truck arrives on scene and evaluates what is going on, they would return or place "in service" any apparatus that is not needed on the call.

A question was raised about staffing. Currently we have authorization for 50 firefighters distributed on four shifts (two shifts of 13 and two shifts of 12). The firefighters work an average work week of 42 hours. If the department went to a 3 shift configuration this would increase the average work week to 56 hours. In a 56 hour work week configuration there would need to be 51 suppression personnel or 17 per shift. In order to make a fair analysis of which shift configuration is more cost effective you must look at the overtime implications of the Fair Labor Standards Act. There seems to be a fair amount of case law and interpretation

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CHIEF SPEAKS UP CONTINUED FROM PAGE 9

on the FLSA and firefighters. Worst case seems to be that anything over a normal 40 hour work week would be overtime. So 51 firefighters receiving 16 hours of overtime each a week (816 hours) would be expensive (in excess of $30,000 a week $1.5 million a year)! Best case seems to be about four hours per firefighter per week or about $7000 a week ($364,000 a year). The FY2011 budget has approximately $330,000 for overtime. As one can see regardless of best or worst case scenario it will cost a fair amount of money to change the work shift. I will acknowledge that if we were looking to add personnel or increase work hours to meet our staffing demand, adding hours appears less expensive, and even better including a reduction for insurance. Again the big disclaimer is these are rough numbers and need to be reviewed to get the complete picture.

As for the "incident creep" comment, there is no "creeping" in our mission. The mission has been expanded by the Board of Selectmen and by society. Prior to proposition 2-1/2 the police department handled most of the emergency medical calls as they ran the ambulance. Yes, a large portion of our calls are medical calls. The second area of "mission expansion" is hazardous condition calls: toxic chemicals, wires down, property damage. Any expansion in our services is determined by the residents when they call for service, not the fire department.

Question was raised about McLean Hospital in 2010 the fire department responded to McLean Hospital 104 times. This represents about 3% of the fire department calls.

Sixty nine calls for alarm or sprinkler activations where there was no fire (false call or alarm trouble)

- 23 Fires
- 5 Good intent calls
- 3 Medical calls
- 4 Hazard calls

As for billing, we send our false alarm calls to the town's Alarm Administrator. Depending on the circumstances the Alarm Administrator invoices for calls. Interesting point about invoicing non-taxable entities for service we provide. I will raise this issue with legal and see if it is possible. McLean, Belmont Hill School and Belmont Day School pay a connection fee to the town to have their buildings connected to the town's fire alarm system. The Alarm Administrator should be able to provide you with the amounts.

I will agree that some aspects are recorded differently today than in years past. The department switched to the National Fire Incident Reporting System (NFIRS) in the early 80's. This reporting system is currently on version 5. Each version has changed the information and classification of the data collected. We do have fewer fires today than in years past. I believe that this is due to the following reasons: mandatory smoke detectors, stronger building codes, less smoking and better fire prevention education. All of these improvements are due to better data gathering. In other parts of the country there has been significantly more new residences constructed. In Belmont we have seen very few new residences constructed. One must note that all new construction requires smoke detectors (usually hardwired, interconnected) and new electrical wiring. Many of the residences in Belmont use battery operated smoke detectors and older wiring.

The fires of today are also drastically different than they were years ago. Fires today are either caught during their incipient stage because of a smoke detector and either dealt with by the occupant or the fire department is summoned, or they are escalated to a large fire. There are many reasons for the escalation of the fire. Houses are built tighter with multi-pane windows compared to single pane in the past. This contains a fire. Older houses in Belmont often are balloon frame constructed or have void spaces that allow the fire to spread easily. Lastly, the products in our homes burn hotter. Plastics, foams and synthetics have replaced cottons, wools and wood. The newer products burn much hotter than their older counter parts.

So, although we don't have as many fires today as we did, the fires that escalate beyond their incipient stage are much hotter and more complex. I am very proud of the firefighters that work for me and the job they do. If you have any questions feel free to contact me.

Schinella: You know, I can post this online for you,

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IT'S NEVER JUST FIRESETTING

MAY 12-13, 2011 – 5TH ANNUAL NORTHEAST JUVENILE FIRESETTING CONFERENCE, IT'S NEVER JUST FIRESETTING: INTERVENTIONS FOR COMPLICATED KIDS

Pre-conference institutes on May 12, 2011 will address firesetting motivations, interviewing, and intervention planning. The May 13th conference will feature skill-building workshops on firesetting, cultural differences, autism and self-injury and keynote, Fire Marshal Jim Crawford, retired, from the Vancouver (WA) Fire Department will provide an overview on Vision 20/20 and outline the future of fire prevention and fire and life safety education efforts in the US. The conference is sponsored by the Brandon Residential Treatment Center, the MA Property Insurance Underwriting Association, the MA Association of Safety and Fire Educators, and the state Department of Fire Services. Appropriate for fire service and first responders; OEMS credits are anticipated. For registration and schedule visit: www.brandonschool.org ▪

MFA COORDINATOR SAVES A LIFE

Contributed by: David Loh, PCIII-MFA-Special Hazards Training Branch

It was no ordinary day at MFA for MFA Registrar Kate D'Amelio and Program Coordinator Joe Guarnera. Kate was getting ready for a busy day as Registrar for the Department of Fire Services Firefighting Academy boosting her energy level by taking her vitamins followed by a glass of water. Suddenly, things for Kate turned for the worst. Two vitamins lodged in her upper airway. She remained calm and focused on dislodging the obstruction. Things were getting worse and she did not want to panic.

Across the hallway, Joe Guarnera, a Revere Firefighter/EMT/HazMat Technician was preparing for an Instructor Methodology program. He heard a high-pitched sound coming from the second floor employee kitchen area. Joe's training kicked into high speed when he saw Kate in distress and turning blue. He immediately performed the Heimlich maneuver to dislodge the obstruction that was blocking Kate's airway.

With one thrust, delivered by Joe, Kate began to breath without compromise. Joe saved Kate's life.

For Joe, it was just another day in the life of a firefighter. He did what he has been trained to do for many years. For Kate, it was a significant life experience she is glad to be able to talk about. Kate has registered many firefighters and has also received training herself on the Heimlich maneuver. Kate encourages others to receive this valuable training. It is a simple procedure that works and saves many lives each year.

Great job Joe! ▪

MOVING BEYOND MOCK CRASHES

Alot of fire departments are involved in activities, usually around prom time, to help teenagers make better decisions about driving under the influence. Mock car crashes with elaborate community involvement can be extremely emotional for teenagers as well as the adults involved. They can also have the familiar feel of a drill or tabletop exercise making them particularly attractive to public safety types. Mock car crashes also involve a great deal of time and resources, so in these times with scarcity, we need to make sure they are the best bang for the buck. We need to know are they effective in changing the behavior? Are they the most effective way to change behavior?

Students Against Drunk Driving (SADD) have moved away from these types of activities as they have learned there are more effective ways to address the issue of teens driving under the influence. They focus their resources on the methods proven to be more effective over the long-term.

FEAR LEAST EFFECTIVE MOTIVATOR TO CHANGE BEHAVIOR

Prevention First, published a research paper in June 2008, *Ineffectiveness of Fear Appeals in Youth Alcohol, Alcohol Tobacco and Other Drug (ATOD) Prevention* that summarizes the latest research on the effectiveness of fear messages. The results of this study are important for fire and life safety educators as they are primarily focused on changing people's behavior. Whether it is getting people to quit smoking, test their smoke alarms, hold home fire drills, wear seat belts, use helmets, burn candles inside a circle of safety, not overload electrical outlets, stand by their pans in the kitchen, or helping teens choose not to drive under the influence, fire and life safety educators are about changing behavior.

Every fire educator knows that when teaching pre-school children to use positive messages that include something a toddler can actually do. We don't want to frighten them or saddle them with responsibility that is not rightly theirs. We know that when dealing with children who set fires that burning their fingers or showing them gory pictures or taking them to the local burn center is not appropriate. Teaching them how to make good (read healthy) choices and having trained professionals determine the cause of the fire setting behavior are the successful steps to take.

The Prevention First study says that "Tough scare tactics have been widely used… for decades, research has shown they are not effective in preventing or producing sustained reductions in ATOD [alcohol, tobacco or other drug] use among youth:

- 'Information or education programs using scare tactics are useless often because research and experience have demonstrated that they are either counterproductive or ineffective and that students learn better with a low fear appeal message and with a credible communicator.' (National Institute on Drug Abuse, 1997)"

SUBSTANCE ABUSE PROFESSIONALS HAVE MOVED BEYOND THE MOCK CAR CRASH

The report expresses a concern that while substance abuse prevention professionals "shifted their efforts to include other approaches with stronger evidence of effectiveness, it sometimes remains difficult to explain to co-workers and community partners why ….the field no longer supports fear appeals or scare tactics and discourages the use of approaches that include these tactics." The fire service might just be one of those community partners that substance abuse professionals are having trouble explaining to that mock car crashes are one of those fear appeals or scare tactics that have a low rate of success.

NEGATIVE MESSAGES LEAD TO MINIMIZING: IT WON'T HAPPEN TO ME

The research highlights that fear appeals makes people "tune-out" the message or worse, those inclined to risk–taking behavior will be encouraged to do the opposite of the message. Fear causes people to engage in minimizing behavior, to say "that won't happen to me because..." In fact, isn't that the very attitude about fire that we are constantly struggling against? People see themselves as being a likely victim of a crime but not of a fire. The data also shows that fear appeals or negative messages are unpleasant and easy to ignore.

To read the full Prevention First study, it is available online at: https://www.prevention.org/Professionals/ProfDev/documents/IneffectivenessofFearAppealsinYouthATODPrevention-FINAL.pdf

SADD'S PERSPECTIVE

The Students Against Drunk Driving website acknowledges that mock car crashes are a "staple activity of many SADD chapters but cautions that scare tactics "have been shown to have only limited impact. Think carefully about how you can make a real difference among your peers. Use this activity in conjunction with other steps that will have a lasting influence. The issues of underage drinking and impaired driving should be approached with a comprehensive education and prevention plan." They do provide information on how to run such an activity http://www.sadd.org/campaign/mockcrash.htm ▪

SPRING CLEANING

As we clear out winter, and head for summer, a new set of building codes is upon us. Effective 2/6/2011, the 8th edition of 780 CMR must be enforced for newly issued building permits involving all structures except: townhouses that are no more than three stories in height; single-family dwellings; and two-family dwellings. The 7th edition 780 CMR (Base/Commercial) has been repealed, and is no longer enforceable for new permits.

For townhouse structures not more than three stories in height, and one/two-family homes, the 8th edition of 780 CMR (Residential) became an alternative for the builder/owner as of 2/4/2011. As the Board of Building Regulations and Standards (BBRS) has done in the past, there will be a six-month window (starting 2/4/2011) where the owner/builder could choose to utilize the 7th or the 8th edition for these residential structures.

There have been a lot of rumors floating around about what the fire department's role is in reviewing building permit application submittals. According to Chapter 1 of 780 CMR, the fire department still has review/approval authority over fire protection systems as it did in the 6th and 7th editions of 780 CMR. Section 107.1.2 of the 8th edition 780 CMR (Base/Commercial) states: "Fire Department Review. For permits that include work under Chapters 4 or 9, or 34, construction documents shall be filed simultaneously with the head of the local fire department and building official for review and approval." Similar language is specified in Section R106.3.3.4 of the 8th edition 780 CMR for One- and Two-Family Dwellings.

To properly review building permit submittals, the fire prevention office will need the following documents: 2009 *International Building Code (IBC)*, 2009 *International Existing Building Code (IEBC)*, 2009 *International Residential Code (IRC)*, 2009 *International Fire Code (IFC)*, 527 CMR *Massachusetts Comprehensive Fire Safety Code*, 780 CMR (8th edition Base/Commercial) – front end amendment package, and 780 CMR (8th edition One- & Two-Family Dwellings) – front end amendment package.

See the Massachusetts Firefighting Academy course website for training opportunities in May 2011.

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 For jurisdictions North of the Mass. Pike – contact Dana Haagensen at 978-567-3376 or dana.haagensen@state.ma.us ▪

CHIEF SPEAKS UP CONTINUED FROM PAGE 10

if you like. Would you like me to do that? I have no problem and you obviously put some thought into this.

I would, however, like a section dealing with the whole "fire truck goes to Shaw's" theme that keeps coming up again and again and again ... Can we get a line about that and put it to bed already?

Frizzell: I have no problem with you posting it online, there is nothing to hide. I feel that you having correct information is important.

I am not sure what you are looking for on the Shaw's shopping trips? They are allowed to go shopping. It is a practice that was established over 20 years ago when the "Star Market" came to Town. The shopping is for meals while they are working. They do not get "break" times or "free" time where they can leave work like most places of employment. They pay for their own food (no town funds). They are in service to respond to calls while at the super market. If a member were to use their personal car to go, it would require that the truck go out of service and the truck would be unable to respond to calls.

Read more: Belmont fire chief responds to comments on staffing story - Belmont, MA - Belmont Citizen-Herald. http://www.wickedlocal.com/belmont/archive/x855579605/Belmont-Fire-chief-responds-to-comments-on-staffing-story#ixzz1FRzkdprR ▪

LAS VEGAS FIRE DEPARTMENTS USING COOLING TECHNIQUES

FOR CARDIAC ARRESTS

The Las Vegas Review-Journal reported last May, that two Las Vegas Fire Departments are starting to show results using a new technique for victims of cardiac arrest. Responders use ice packs to cool the IV fluids in order to lower a patient's body temperature to about 92 degrees F. (Refrigerators were found to drain ambulance batteries.) Preliminary data shows an increase in the cardiac arrest survival rate from 19% to 40%.

This technique is only for a subset of heart attack victims – those suffering from ventricular fibrillation and who get help quickly and have circulation restored. It is not designed to treat those who have heart attacks caused by a blockage. It seems that while CPR is critical to getting blood pumping again, the brain does not always follow immediately. The cooling helps to reduce neurological damage to the brain.

These fire departments participate in the CARES program (Cardiac Arrest Registry to Enhance Survival) a joint project of the U.S. Centers for Disease Control and Prevention and Emory University. To help EMS providers evaluate their performance, CARES provides agencies with a confidential, Web-based program to gather quickly and easily local information such as 9-1-1 response times and locations. The software creates graphs, charts, and maps for EMS providers to compare their performance with other participating communities in the United States. These reports can help guide decisions that will improve survival outcomes from cardiac arrest. ▪

MBTA: FIRE PREVENTION CAMPAIGN

The Massachusetts Bay Transportation Authority (MBTA) launched a subway fire safety campaign on February 28, 2011. The T's fire prevention public education campaign includes newly-designed signs that draw attention to the service problems and potential hazards created when trash and litter ignite on subway tracks. The subway fire prevention awareness campaign promotes the collaborative effort of state and local agencies in working together to educate customers about disposing of trash in receptacles available at all T stations. Litter can easily be ignited by a spark, resulting in a trash fire and train delays. There are approximately 10 to 15 subway fires each year that interrupt service and in some cases cause a station evacuation. ▪

MFIRS CORNER

MFIRS Coding Tips for Brush Fires

FIRE VS. WILDLAND FIRE MODULES

Even when using third party software there is the option of using the Fire Module instead of the Wildland Module. In MA, we strongly recommend using the Fire Module for these types of fires. The Wildland Module is an **optional** module that may be used for any of the following Incident Types: 140-143, 160, 170-173, 561, 631 and 632. If a software program does not allow this option, contact the vendor to remind them.

PERMIT FIRES AND UNAUTHORIZED BURNING

When responding to a permit fire that requires extinguishment, code it as an Incident Type = 631: Authorized controlled fire or 632: Prescribed fire. If the fire expands beyond the focus of the permit, then use an Incident Type = 140-143.

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

If you respond to an illegal burning use Incident Type = 561: Unauthorized burning.

MULCH FIRES

Mulch fires should be coded as Incident Type = 140: Natural vegetation fire, other & Item 1st Ignited = 72: Light vegetation (not crop) – Includes mulch, grass, leaves, needles, chaff, & compost.

Do not code any fires as Incident Type = 100: Fire, other, unless it does not fit into any of the other incident types between 111 and 173.

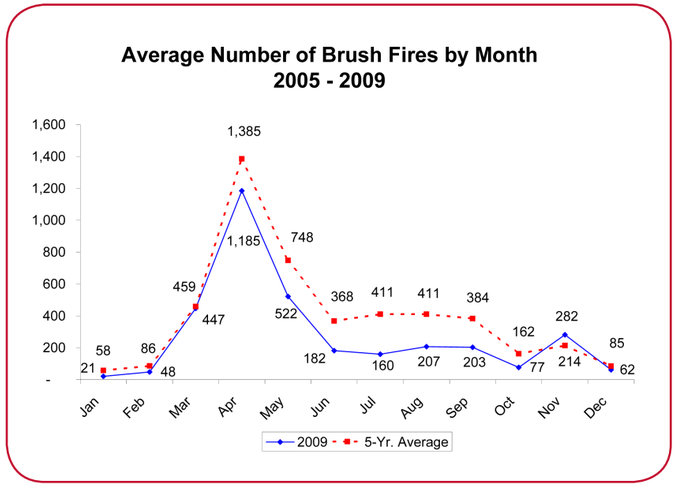
OUTSIDE RUBBISH FIRES

If you have an outside rubbish fire, it should be coded as an Incident Type = 150-155. Do not use Incident Type = 118: Confined trash or rubbish fire **in a structure**. ▪

BRUSH FIRES

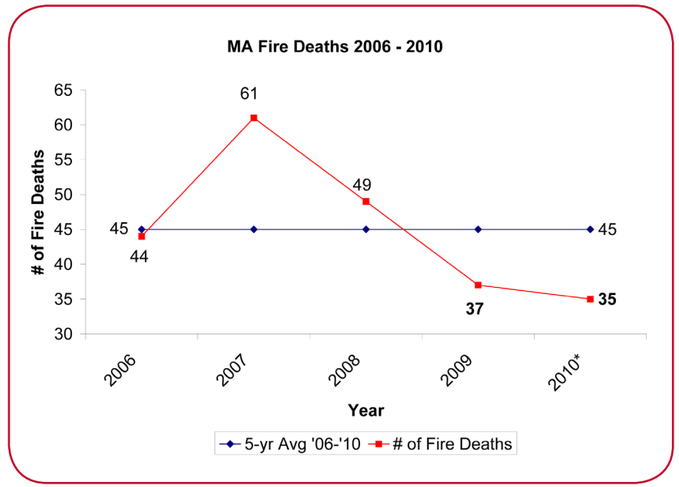
April is the Cruelest Month

Springtime means brush fires for the Massachusetts fire service. April is the peak of the Massachusetts brush fire season as illustrated in the graph. On average the Commonwealth experiences 85% more brush fires in April than it does in its next highest month, May. In 2009 however there were 127% more brush fires in April than in May. ▪



35 FIRE DEATHS IN 2010: NEW RECORD LOW

In 2010, preliminary figures show there were 35 civilian fire deaths, the lowest number of fire deaths on record since WWII. It's a 5% drop from the previous record low of 37 deaths in 2009. The main reasons for this new all time low were the drop in smoking fire deaths to nine in 2010; and a decreased number of fire deaths from heating equipment. This chart illustrates the number of fire deaths over the past five years along with the average number of fire deaths for those same fire years. 2010 was 31% lower than the five-year average. Also in 2010 there were two fire-related fire service fire deaths. ▪



2009 MFIRS ANNUAL REPORT

The *Massachusetts Fire Incident Reporting System – 2009 Annual Report* has been published and is posted on the Department of Fire Services website. This report is based upon the thousands of individual fire incident reports submitted by local fire departments throughout Massachusetts in 2009. This effort makes it possible to look at the total fire experience, to identify our fire problems, to develop strategies to address these issues and to measure their effectiveness.

In 2009, Massachusetts fire departments reported 28,595 fire incidents, a 5% decrease from 2008.

- 0 Massachusetts firefighters died while fighting a fire.
- 37 civilians died in 44 fires.
- Civilian deaths decreased by 12, or 24%, from the 49 fire deaths in 2008 - the lowest recorded number of fire deaths since World War II until 2010.
- 40% of all residential fire victims were not alerted by smoke detectors.
- Cooking caused two-thirds, or 66%, of all residential fires.
- Smoking was once again the leading cause of fire deaths, accounting for 32% of home fire deaths.
- Electrical problems were the second leading cause of fire deaths and fatal fires

We hope that fire officials and injury prevention professionals will use this report to map out and measure fire prevention strategies in the coming year. We must sustain our efforts to protect the citizens of the Commonwealth through fire prevention and public education. If you need additional copies, please go to www.mass.gov/dfs and go to *Quick Links* then *Annual Reports (MFIRS)* to download a copy in pdf format or contact Derryl Dion of the Fire Data Unit in the Division of Fire Safety at (978) 567-3382. ▪

RECRUIT CLASS 190

State Fire Marshal Stephen D. Coan and Massachusetts Firefighting Academy Director Edmund M. Walker will present certificates of completion to members of the 190th Recruit Firefighter Training Class in a graduation ceremony on Friday, March 25, 2011 at the Assabet Valley Regional Technical High School in Marlborough.

Students receive classroom training in all basic firefighter skills. They practice first under non-fire conditions and then during controlled fire conditions. To graduate, students must demonstrate proficiency in life safety, search and rescue, ladder operations, water supply, pump operation, and fire attack. Fire attack operations range from mailbox fires to multiple-floor or multiple room structural fires. Upon successful completion of the Recruit Program all students have met national standards of National Fire Protection Association 1001 and are eligible to be certified to the level of Firefighter I and II, and Hazardous Materials First Responder Operational Level by the Massachusetts Fire Training Council.

The 67 graduates, 64 men and three women, represent the 33 departments of Agawam, Amesbury, Amherst, Andover, Cambridge, Chelmsford, Duxbury, Fitchburg, Gardner, Greenfield, Hanson, Haverhill, Holden, Holyoke, Lexington,Lowell, Ludlow, Medway, Melrose, North Reading, Northampton, Randolph, Rockland, Salem, Saugus, Sturbridge, Sudbury, Wakefield, Wellesley, West Springfield, Westfield, Winthrop and Yarmouth. ▪

CALL/VOLUNTEER
FIREFIGHTER TRAINING PROGRAM

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 is held at area fire department training facilities. The intensive program includes classroom instruction, physical fitness training, firefighter skills training and live firefighting practice. Graduates have completed 180 hours of training on nights and weekends.

CLASS # 34

State Fire Marshal Stephen D. Coan presented certificates of completion to members of the Call/Volunteer Firefighter Training class #34 in a graduation ceremony at the state Department of Fire Services in Stow, MA on March 2, 2011. The 53 graduates, 46 men and seven women, represent the 29 fire departments of: Ashburnham, Ashland, Ayer, Blackstone, Boxborough, Boylston, Chatham, Grafton, Groton, Holden, Hudson, Lancaster, Lincoln, Lunenburg, Northborough, Princeton, Sherborn, Southborough, Southbridge, Spencer, Stow, Townsend, Tyngsborough, Upton, Wayland, West Boylston, Westminster, Weston, and Wrentham.

CLASS # 35

Graduation for Class #35 was held on February 15, 2011 at the Mahaiwe Performing Arts in Great Barrington, MA. The 36 graduates, 34 men and two women, represent the 13 fire departments of: Adams, Belchertown, Blandford, Cheshire, Clarksburg Vol. Fire Company, Egremont, Great Barrington, Lanesborough, Lenox, New Marlborough, Russell, Sheffield, and Williamstown.

CLASS # 33

Graduation for Class #33 took place on February 8, 2011 at Masconomet Regional High School, Boxford, MA. The 32 graduates, all men, represent the 13 fire departments of: Boxford, Byfield, Essex, Groveland, Hamilton, Lynnfield, Manchester, Merrimac, Nahant, Newbury, North Reading, Rockport, and Wenham.

For pictures of the graduating classes, check out the back cover. ▪

RECALL OF LP-GAS

This past fall, the Department of Fire Services in conjunction with the Attorney General's Office, took swift action in conducting an investigation into under-odorized LP-Gas within the Commonwealth. We transmitted all our information to the Consumer Product Safety Commission (CPSC) as it was determined to be a multi-state issue.

The State Fire Marshal was notified by the Propane Gas Association of New England (PGANE), that the CPSC intended to release public notice of a voluntary recall involving LP-Gas shipped into various states by Aux Sable Industries of Morris, Illinois. The recall was announced January 20, 2011. DFS believes this recall by CPSC is a direct result of our agency sharing information with them, after the Commonwealth's investigation. Any consumer who feels they may be affected should follow the recall information provided by CPSC.

This recall involves odorized LP-gas delivered for storage tanks or sold in portable cylinders between February 25, 2010 and September 30, 2010. However, if the storage tanks have been refilled since the time frame indicated, the additional gas is not subject to the recall. Any resident in Massachusetts whose most recent propane gas purchase or delivery was between February 25, 2010 and September 30, 2010 should immediately contact Aux Sable to arrange for a free inspection. If there is insufficient odorant, additional odorized propane or a replacement portable propane cylinder will be provided free of charge. For additional information, contact Aux Sable toll-free at (866) 473-7612 any time or visit the propane alert website at www.PropaneGasAlert.com.

If you have any further questions contact the Code Compliance and Enforcement Desk at (978) 567-3375 or in Western MA at (413) 587-3181. ▪

STATUS REPORT

Compliance & Enforcement Actions

The following report details recent compliance and enforcement actions taken by the Office of the State Fire Marshal against companies and individuals for violations of MGL c. 148 and 527 CMR. The effective date of this legal action and its details are included. While other actions may be pending, only those individuals and companies who have had administrative hearings with decisions rendered will be listed here. Should there be any questions regarding the status of any license or certificate of competency, please call the Licensing Desk at 978-567-3700.

NAME	TYPE OF LICENSE	DISPOSITION
Anderson, David V.	*Blasting Certificate of Competency*	Suspended for one year (6 months to serve); probation ends 11/3/11
Chung, Jae	*Hoodcleaning Certificate of Competency*	Suspended for three years (18 months to serve); probation ends 1/27/2014
Griffin, Joseph	*Fire Equipment Certificate of Competency*	Suspended for 90 days (30 days to serve): probation ends 5/14/2011
Pollier, Arthur J.	*Fire Equipment Certificate of Competency*	Suspended one year (60 days to serve); probation ends 1/25/2012
Suffredini, David C.	*Fireworks Certificate of Competency*	Permanent revocation.
Tecce, James E.	*Fire Equipment Certificate of Competency*	Permanent revocation; prohibited from holding any personal or business permit or license issued by DFS
Villatico, Arnold A.	*Fireworks Certificate of Competency*	Suspended; one year to serve (not renewed as of 1/24/2011)

Photo by: Lydia Bogar, DFS

The Division of Fire Safety issues licenses to people and companies engaged in fireworks, blasting, explosives, cannon and mortar firing, special effects, special hazard systems, portable fire extinguishers and commercial kitchen exhaust systems. Information on applications, exam dates, to obtain new licenses, or to renew existing licenses may be obtained by calling 978-567-3700. Examinations for licenses are held quarterly.

Filing deadlines, exam locations, dates, times, and study materials can be found online at: www.mass.gov/dfs, under "Key Resources" in the left column, click on "Licensing."

All license exams are offered at both DFS locations: State Road in Stow, MA and One Prince Street (Northampton State Hospital) in Northampton, MA.

Directions can also be found online at: www.mass.gov/dfs, under "Key Resources," click on "DFS Directions."

Applicants must be pre-registered for all license exams, no walk-ins permitted. Completed applications must be received by 5:00 p.m. on the deadline date listed below. If an application is received after the applicable deadline, the applicant will not be allowed to sit for the exam. ▪

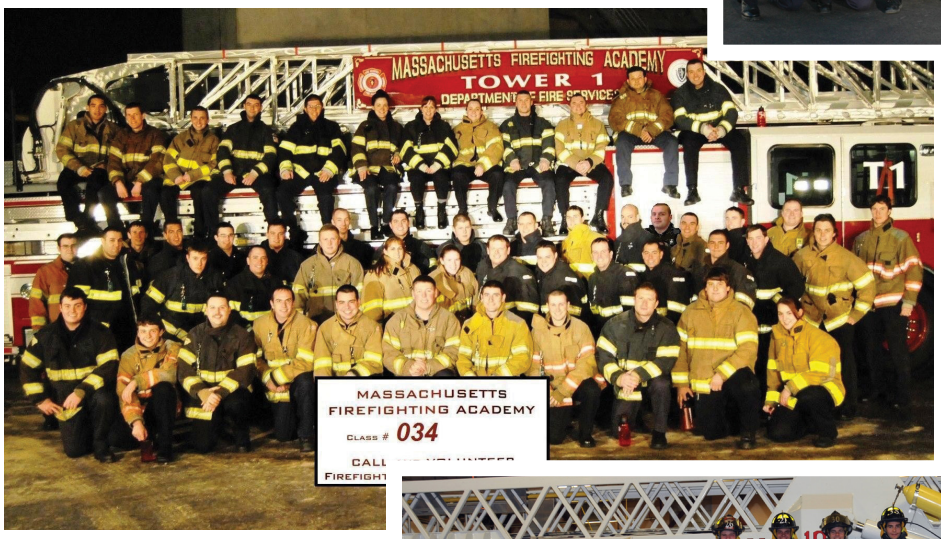
2011 EXAM SCHEDULE

EXAM	EXAM DATE	APPLICATION DEADLINE
Fire Extinguishers *Exams begin at* **10:00 am**	April 27, 2011 July 27, 2011 October 19, 2011	April 15, 2011 July 15, 2011 October 7, 2011
Cannon/Mortar Fireworks & Special Effects Blasting, Blasting R&D *Exams begin at* **10:00 am**	May 18, 2011 August 17, 2011 November 16, 2011	May 6, 2011 August 5, 2011 November 4, 2011
Commercial Hood Cleaning *Exams begin at* **2:00 pm**	Any of the above scheduled dates.	

CLASS PHOTOS

Recruit Class 190. Photo by Bruce Gauvin.

(Above) Class #33. Photo by student.



(Above) Class #34. Photo by student.

(Below) Class #35. Photo by student.