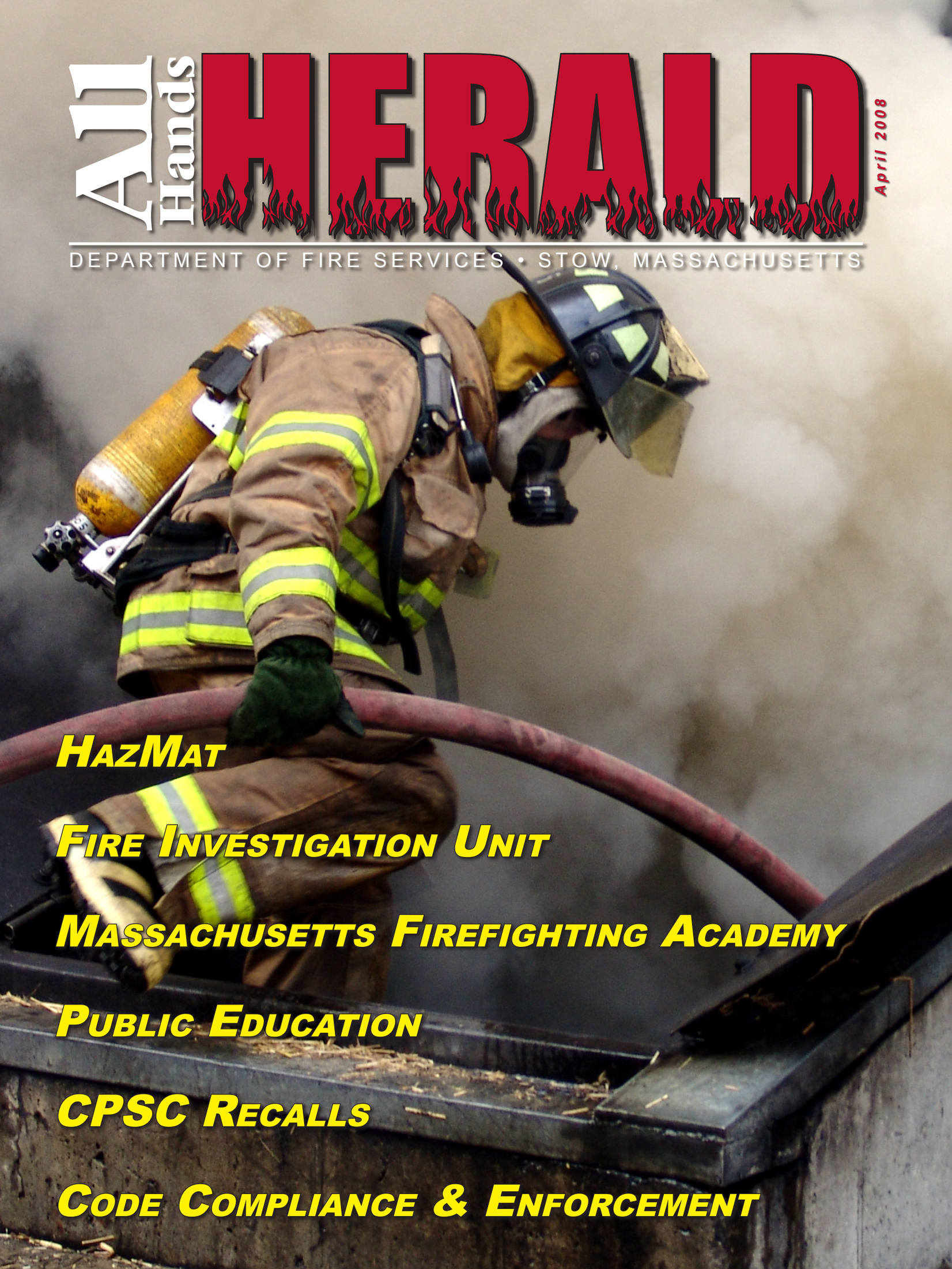
All Hands HERALD

April 2008

DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS



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About the *All Hands Herald*

The ***All Hands Herald*** is published quarterly by the Department of Fire Services in January, April, July and October. 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 Jennifer Mieth at 978-567- 3381 or Donna Nelson at 978-567-3149. Jennifer.Mieth@state.ma.us or Donna.Nelson@dfs.state.ma.us

Barry Hyvarinen is the talented contributing photographer; Judy O'Brien is the keen-eyed copy editor; and Jeff Harris is the graphic artist who pulls it all together. ◆

All Hands HERALD
DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS

From the Fire Marshal

Photo by: *Barry Hyvarinen*

The Governor's Budget, House 2, contains several items of interest to the Massachusetts fire service and we thank the Secretary of Public Safety and Security for his support of these important fire initiatives. For the first time ever, the Student Awareness of Fire Education or S.A.F.E. Program is in a governor's budget. It also includes $5 million in requested funding for the Firefighter Safety and Equipment Grants, funding for joint training for fire and building officials called for in the MA Fire Safety Act, (Chapter 304 training). It is imperative that our building and fire officials receive adequate training to properly and uniformly enforce the myriad of regulations that come under their purview. The budget request also includes funds to operate the expanded DFS Stow campus that is currently undergoing construction and renovation. In addition, the Governor's capital budget includes an item to acquire and renovate the Springfield Fire Training site into a DFS West training facility.

Fire Deaths

This has been a terrible winter for fire deaths in Massachusetts and it is made worse because it comes on the heels of three successive years of record lows for fire deaths in our state. We closed 2007 with 60 civilian fire deaths, a 36% increase. The year ended with the deadliest December in a decade (11 deaths) and followed by eight fire deaths in January 2008; the deadliest January in seven years. While we are just beginning the in-depth analysis of the 2007 fire data, our preliminary analysis of the fire deaths does not tell us anything unusual. There is a common thread of the lack of working smoke alarms in many of these fatal fires and of people who were intimately involved with the start of the fire. The causes are all the usual suspects – smoking materials, candles, cooking, electrical and heating, including a few space heater fires. Overall in 2007, we saw a larger than usual number (12) of people who died in arson fires which includes self-immolation, murder, and murder-suicide. People died in ones and twos; there was only one multiple death fire and that was a murder-suicide.

What do we take away from this? Concentrate on the basics. Continue public education on smoke alarms, escape plans, and prevention of all types of fires. We can also hope that as the new fire standard compliant cigarettes fly off the shelves, that there will be fewer fatal fires caused by cigarettes.

The U.S. Fire Administration has launched a ***Smoking & Home Fires Campaign*** (www.usfa.dhs.gov/smoking) to put an end to the number one cause of preventable home fire deaths – fires started by smoking materials. The campaign is designed to alert smokers and those who live with smokers about simple steps they can take to stop the fire before it starts in their home. It encourages smokers to "Put It Out. All the Way. Every Time."

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Construction Project Pushes Ahead at DFS

The construction project at the Department of Fire Services has been moving ahead despite the return of harsh New England weather. The excavation for the leaching field in the remote parking area, behind the burn building on the east side of DFS property, was completed by the end of November. The installation and grading of sand for the Title V septic system was completed by the end of December despite all of the snow.

Simultaneously, installation of a new storm water retention system to be located on the west side of DFS property near the new storage building, began in November and was completed in early December. In the same area, excavation of the new storage building's foundation was completed and the footings placed by mid-December. By early January, all the exterior concrete foundation walls and piers had been poured

Photo by: *DiMella Shafer Architects*

with damp proofing and insulation installed a few days later. This work was completed in time for the delivery and installation of the steel beams, starting on February 20. If all current construction and installations remain on schedule, it is projected that the new storage building will be operational by mid summer of this year.

On the east side of the DFS site, the waterline from the Sudbury Water District, which had been installed last summer from Sudbury to Stow along State Road, was continued up and over the hill past the leaching field. After this was completed, the water line installation continued towards and along the current DFS

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From the Fire Marshal

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FSC Cigarette Program

Now that fire standard compliant cigarettes are the law in MA, we need to look very carefully into those cigarette fires that do occur. I have asked the State Police commander of the Fire Investigation Unit and every fire chief to use a new cigarette fire checklist when investigating cigarette-caused fires. This data will help us determine if the standard is effective. The standard is not designed to eliminate every single cigarette caused fire, but the standard was designed against mattress ignitions.

Distressed Buildings

Recent market and economic conditions are unfortunately leading to a large number of distressed buildings – homes that are unoccupied, in foreclosure or now bank-owned, or abandoned. Fire data from past severe downturns in the housing markets indicate we have cause for concern. We currently have strong fire and building code regulations for marking vacant and abandoned buildings to protect firefighter safety. It is an added burden on municipal officials to hold building owners accountable for maintaining their buildings. I have convened a work group on distressed buildings of people from various disciplines to brainstorm if there are any additional strategies that we should be exploring.

Training on Storage of Flammables Licensing and Permitting Issues

The Department of Fire Services has completed its code compliance investigations into both the Uxbridge Bernat Mill and the CAI Inc./Arnel Co. Explosion in Danvers. As a result of these two code investigations, DFS launched a series of trainings for fire, building, city, and town officials on licensing and permitting the storage of flammable liquids and solids. The goal of the training was to improve understanding of the requirements and communications between local regulators.

Chemical Processing Safety Legislation

As of result of these investigations the Massachusetts fire service, with the support of the Executive Office of Public Safety and Security, has filed legislation on chemical processing safety. It creates a chemical user's certificate for facilities engaged in processes using highly hazardous chemicals. It allows the Board of Fire Prevention Regulations to create safety regulations and empowers the State Fire Marshal to suspend or revoke the certificate for non-compliance. It proposes that the fees from this user's certificate be used to establish the technical expertise necessary to ensure compliance with these regulations within the Department of Fire Services. This specialized staff would provide municipalities the required technical expertise to analyze and model chemical processing safety.

Sprinklers in Bars and Nightclubs

The deadline for installing sprinklers in certain bars and nightclubs was November 15, 2007. You will read elsewhere in this newsletter about our first "save" from this law. I am certain the owners of the bar were happy they installed sprinklers because despite an electrical fire when the establishment was closed, they were able to open and serve customers that same day. ◆

Construction Update

Continued from Page 1

main building parking lot. This water line will then continue along the front of the main building, parallel to State Rd., and extend to the new storage building. This water line will eventually supply all of the drinking and fire protection water to the expanded DFS facility.

As the *All Hands Herald* goes to press, DFS is in the process of moving five temporary trailers on site at the front of the DFS parking lot, facing State Road. These trailers will temporarily house classrooms, meeting space and some DFS staff members over the next couple years during construction. DFS staff now housed in Building 2, will move to the first floor classrooms and some second floor space in the main building sometime in mid- to late April. It is projected that Building 2 will be taken down by early May in order for the construction of the new administration building to begin. The new administration building is projected to be completed by mid-2009, followed by the completion of the new firehouse and "link" area. The rehabilitation of the main building will take place in 2010. The entire DFS construction project is scheduled for completion in 2010. ◆

Photo by: *DiMella Shafer Architects*

Cigarette Fire Investigation Checklist

On January 1, 2008, Fire Standard Compliant (FSC) cigarettes became the law in Massachusetts. To track compliance and to see if these new types of cigarettes are reducing the number of smoking fires and fire deaths, the State Fire Marshal is asking the heads of all local fire departments to make it department policy to determine, whenever possible, if cigarettes involved in fires were or were not fire standard compliant. The Marshal has also tasked the State Police commander of the Fire Investigation Unit attached to the Office of the State Fire Marshal to make it unit policy. This information is considered to be most probable based on the initial results of the investigation. This checklist is in addition to, and not a replacement for a fire department's mandatory reporting of fires via the Massachusetts Fire Incident Reporting System (MFIRS). It is designed to be quick, easy and painless, and not to contain redundant information already collected on the fire incident report.

The information acquired from these investigations will be entered into a database and when linked to MFIRS will become a powerful new tool in the fire prevention arsenal. The data would be available to local heads of fire departments upon request.

The completed checklist should be sent to the Fire Data & Public Education Unit at the Office of the State Fire Marshal any time there is a fire that the investigation determines was started by a cigarette. For a copy of the checklist, look on the DFS website at www.mass.gov/dfs, click on Quick Links and FSC Cigarettes or contact Derryl Dion, the Research Analyst and MFIRS Manager at (978) 567-3382 or Derryl.Dion@state.ma.us. ◆

Fire Investigation News

1st Fire Death of 2008 in Ware - Electrical

State Fire Marshal Stephen D. Coan, Ware Fire Chief Thomas Coulombe and Ware Police Chief Dennis Healey announced their joint investigation determined the cause of the January 14, 2008 fatal fire at 18A Park Street was electrical. The fire in the 5-unit apartment building took the life of a woman in her 60's who lived on the second floor. Investigators found that the fire started in the space between the first and second floors right under the second floor bedroom where the fire victim was found. The only heat source in this area was an electrical wire that had clearly failed.

State Fire Marshal Coan said, "This is the first fire death in 2008 and comes on the heels of the deadliest December in a decade."

The fire was jointly investigated by investigators from the Ware Fire Department, Ware Police Department and state police assigned to the Office of the State Fire Marshal's West Team.

The fire victim was using portable heaters, heating pads and a hot plate to heat and cook in her apartment. Investigators suspect that these appliances may have contributed to the electrical overload that led to the failure, but were unable to determine that conclusively.

Plymouth Church Arsonist Pleads Guilty

On January 4, 2008, a Plymouth man pled guilty in federal court to setting fire to the New Testament Church in Plymouth in 2005. He also pleaded guilty to a charge of using fire to damage religious property. He was sentenced to 13 years in federal prison. The fire was investigated by the members of the Plymouth Fire and Police Departments, members of the federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), and state police assigned to the Office of the State Fire Marshal's South Team. While the fire damage was minimal, the church was smashed up and soaked with gasoline. The arsonist pled guilty in October 2007 for committing a church arson as a hate crime in New York State and received a sentence of 13 years, which will be served concurrently with his federal sentence. The 21-year old man is a former student of the Word of Life Bible Institute in Chester, NY.

Lawrence Fire Investigation Leads to Incest Arrest

On Thursday, January 10, 2008 a 47-year old man pled guilty to one count of rape, five counts of indecent assault and battery, three counts of incest, assault and battery, and possession of a class D substance. He was sentenced to 25-30 years in state prison with five years of probation after the sentence is completed.

The case started as an arson investigation at 355 Park St. in the city of Lawrence on April 10, 2004. During the course of the investigation, an 18-year old woman who was a victim of the fire approached officers with allegations of rape by her father. The defendant was arrested and brought in for questioning and a full confession was obtained. The fire was jointly investigated by members of the Lawrence Fire and Police Departments and state police assigned to the Office of the State Fire Marshal's North Team.

Danvers Fatal Electrical

State Fire Marshal Stephen D. Coan and Danvers Fire Chief James Tutko announced that the most probable cause of the fatal fire on January 16, 2008 at 30 Lawrence Street, Danvers was an electrical malfunction. The fire took the life of a man and woman who were found on the second floor overcome by smoke.

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First arriving firefighters did not hear any smoke alarms sounding and the one smoke alarm found in the basement had no battery. Chief Tutko added, "The evidence suggests that there were no working smoke or carbon monoxide alarms in this home. This terrible tragedy might well have been prevented if the house was properly equipped with smoke and carbon monoxide alarms."

Fire investigators determined that the area of origin was between the basement ceiling and the floor of the first floor. The only heat source in this area was electrical wiring that showed signs of having malfunctioned.

The fire was jointly investigated by members of the Danvers Fire Department, Danvers detectives, and state police assigned to the Office of the State Fire Marshal's North Team. State police assigned to the Essex District Attorney's Office were also involved in the investigation.

Smoking Materials Cause Lawrence Fatal Fire

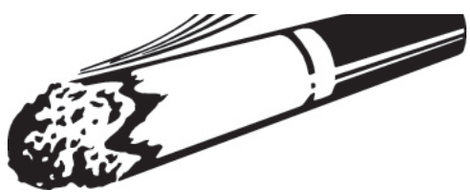
The joint investigation into the Valentine's Day 2008 fatal fire at 16-18A Royal Street has determined that the improper disposal of smoking materials was the most probable cause of the fire. The fire that took the life of a man who resided on the first floor originated in the living room at 16 Royal Street when smoking materials ignited upholstered furniture.

The fire was jointly investigated by members of the Lawrence Fire Department, the Lawrence Police Department, and state police assigned to the Office of the State Fire Marshal's North Team. The Essex District Attorney's Office also participated in the investigation.

Coan said. "Smoking has been the leading cause of fatal fires since as far back as World War II. In 2006, smoking caused 32% of residential fire deaths in Massachusetts." He added, "In January a new law took effect requiring all cigarettes sold in MA to be fire standard compliant. We do not know whether the cigarettes involved in this fire were fire standard compliant or not, but we hope as they permeate the market, the number of fire deaths from smoking will be reduced."

Newton Fatal Fire Caused by Smoking Materials

State Fire Marshal Stephen D. Coan, Newton Fire Chief Joseph E. LaCroix and Newton Police Chief John J. O'Brien announced their joint investigation into the January 25, 2008 fatal fire at 33 Ashmont Avenue have determined that the most probable cause of the fire was improper use of smoking materials. Investigators determined that the fire started inside a living room closet and believe an ember from a pipe tucked inside a jacket pocket started the fire. The fire took the life of an elderly woman who lived in the duplex and injured her adult son who lived with her. In addition, three firefighters were injured, two seriously.



The fire was jointly investigated by members of the Newton Fire Department, Newton Police Department and state police assigned to the Office of the State Fire Marshal's North Team and to the Middlesex District Attorney's Office.

Youth Charged in Swampscott High Bomb Threat

On Thursday, January 24, 2008, at 11 a.m. a North Team trooper responded to Swampscott High School for a phoned-in bomb threat. The investigation led to a sophomore who confessed and criminal summons were sought against the juvenile. This is not the first case of high school bomb threats solved by this trooper. Actual acts of school violence are so horrific that threats need to be taken very seriously. In fact, threats in and of themselves cause a great deal of harm to the school community. Since they must be taken seriously they cause great disruption to students, teachers, staff and the educational process.

Arson Ruled Out in Lawrence Conflagration

State Fire Marshal Stephen D. Coan, Lawrence Fire Chief Peter C. Takvorian, Lawrence Police Chief John J. Romero and Special Agent in Charge Glenn N. Anderson of the Bureau of Alcohol, Tobacco, Firearms and Explosives announced that their joint investigation into the January 21, 2008 conflagration has concluded.

From interviews with witnesses and first in firefighters, the investigators have determined that the fire originated in 44 Parker Street, a 3-story wood frame building that had been undergoing renovations. Without interior fire stops and with natural gas fueling the fire for an extended period of time, the fire rapidly engulfed the building. The heat and flying embers from this original fire building led to the destruction of 13 other buildings. The 7-alarm fire displaced 200 people and caused an estimated $4 million in damage.

Investigators spent several days combing through 44 Parker Street looking for any evidence the fire scene could provide, despite the fact that it was clear from early on that it would provide little assistance in determining the cause due to the extent of the destruction.

The fire was investigated by the Lawrence Fire Investigation Task Force, which has remained in effect since the early 1990s. Members of the task force include: investigators with the Lawrence Fire Department, detectives from the Lawrence Police Department, state police assigned to the Office of the State Fire Marshal's North Team, and agents from the federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The Essex District Attorney's Office also assisted and guided facets of the investigation. ◆

New Chief Fire Officer Orientation

On June 11 – 12, 2008, the Department of Fire Services will hold a *New Chief Fire Officer Orientation* at the Holiday Inn in Boxborough. This will be a departure from the previous New Fire Chief Orientation program in that it will be two days and open to all chief fire officers who serve in executive and administrative positions in their department.

The purpose of this orientation is to provide executive and administrative fire officers, who are new to their positions, with an opportunity to learn of the assistance available from a number of public and private sector agencies and entities with which they will interact. As a participant in this orientation, the chief fire officers will have the opportunity to ask questions of and receive critical contact information from a number of key organizations that serve the Massachusetts fire service. In addition, there will be experienced fire chiefs present to assist the new chief fire officers in making the most of the day while expanding their contact network. This day has been designed to provide the new chief fire officer with the most critical information sources and contacts that will result in a positive impact on the administration of their organization.

The program has been expanded to two days to allow more time for the presentation of important information and also the expansion of the cooperating agencies information fair to include vendors of fire equipment and services.

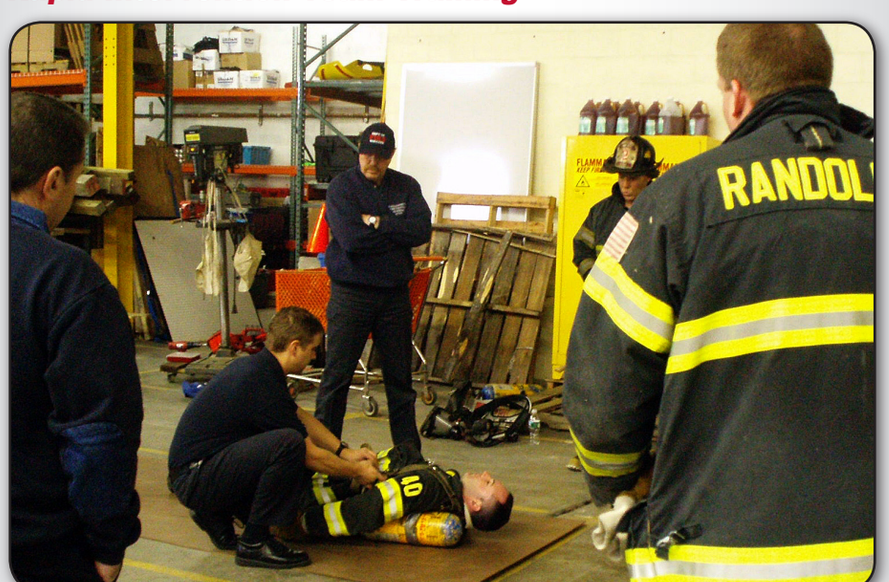
The first day will include presentations from participating agencies and a keynote speaker at lunch. Day two will begin with a presentation by David Statter from WUSA 9 Washington, DC, *How the Internet Relates to Fire and EMS* and/or *Public Image of the Fire Chief and Department*. Since 1972 Dave Statter has covered the news. A good deal of Dave's reporting has focused on how fire and emergency medical services are delivered in and around Washington D.C. and Baltimore. Along the way, Dave was also a volunteer firefighter, an emergency dispatcher and a cardiac rescue technician. He maintains a website: Statter911.com.

Day two will be dedicated to meeting one on one with the participating agencies and organizations. This will be a unique opportunity to learn first hand how these agencies and organizations can assist you in administering your fire department. The agencies and organizations that will be invited to present are:

- Commonwealth Fusion Center
- Department of Fire Services
- Department of Public Safety
- Massachusetts Emergency Management Agency
- Massachusetts National Guard
- Statewide Emergency Telecommunications Board
- Office of the Attorney General
- State Ethics Commission
- State Inspector General
- Commonwealth of Massachusetts, Human Resources Division – Civil Service
- Joint Labor Management Committee
- Department of Public Health, Office of Emergency Medical Services
- Department of Environmental Protection
- Massachusetts Correctional Industries
- Mass Highway
- University of Massachusetts Donahue Institute
- Executive Office of Administration & Finance/Operational Services Division
- FEMA Urban Search & Rescue
- United States Coast Guard
- Massachusetts Municipal Association
- Massachusetts Benchmarking, LLC
- Fire Chiefs Association of Massachusetts
- Massachusetts Corps of Fire Chaplains
- CISM Teams
- Investigation of juvenile-set fires - DFS / FIU

The registration fee is $25.00 per person and includes lunch and coffee on day 1, coffee and danish day 2. Please use a standard MFA application. ◆

Rapid Intervention Team Training



This Rapid Intervention Train-the-Trainer program being conducted in Brighton, is the first offering of the statewide rapid intervention initiative. There will be more programs to follow.

Reporting Firefighter Deaths and Injuries to MFIRS

Under M.G.L. Chapter 148 Section 2 fire departments are required to report any deaths or injuries that occur during a fire or explosion. This includes any deaths or injuries to fire personnel. Reducing fire service deaths and injuries is an important goal of the Department of Fire Services. We'd like to be able to keep an accurate count of all fire service deaths and injuries that occur in the Commonwealth. It is also our intention to use the information from these reports to design programs and educational materials aimed at preventing and decreasing the number of fire service deaths and injuries.

To help us reach this goal, the State Fire Marshal has requested that fire departments report any death, injury or illness to department personnel through the Massachusetts Fire Incident Reporting System (MFIRS).

The current version of MFIRS can support fire service deaths and injuries attached to any type of incident, not just fires and explosions. If the death, injury or illness does not take place during an incident but rather during a training evolution or just around the fire station, one should create an EMS incident (*Incident Type* = 311 – Medical Assist, if a department does not run its own ambulance; or *Incident Type* = 321 – EMS call, if a department does run its own ambulance) and attach a Fire Service Casualty Module to it. Even exposure to toxic substances or harmful physical agents through any route of entry into the body, regardless of the presence of clinical signs or symptoms, should be reported. There is also no time limit to update a fatality from a previously documented injury or illness.

The U.S. Department of Justice's definition of a line of duty death (or injury) is any death, illness or injury that occurs to a member of a fire department in a city, town or district that is 'on-duty' or duty-related. 'On-duty' or duty-related means that the death, injury or illness occurred en route to, at, or coming from an incident; during a work shift; during a training evolution; and heading to the station or scene of an incident after being appropriately 'toned out' or called to a genuine incident by the appropriate authority (for call or volunteer fire service personnel).

Also, the federal Hometown Heroes Act establishes a statutory presumption that the public safety officers who die from a heart attack or stroke following non-routine stressful or strenuous physical public safety activity or training, died in the line of duty. If a department member dies from a heart attack or stroke associated with a particular call within 24 hours of that call or the end of his or her shift, a Fire Service Casualty Module can be completed and attached to that particular incident.

For questions about reporting these casualties, please contact Derryl Dion, the Research Analyst and MFIRS Manager at (978) 567-3382 or Derryl.Dion@state.ma.us. ◆

Fireground Rehabilitation Guidelines

Cold Weather

Incidents Lasting 30-60 Minutes

- Fluid replacement with water at cool to room temperature (56- 72 Deg. F)
- Have water available for air bottle changes- 8 oz. bottle change.

Incidents Lasting > 60 Minutes

- Have water available for air bottle changes- 8 oz. bottle change.

For companies arriving at rehab, provide the following:

- Fluid replacement with water and sports drink 50/50 mixture at cool to room temperature. If using powdered drink mix - double the water amount directed.
- Warm, **decaffeinated** fluids that are easily digested such as soup or broth.
- Easily digested foods such as plain sandwiches, stew, fruits, snack bars, plain pizza.
- Do not include fried foods or high fat foods (i.e. donuts, pastries, burgers).
- Do not provide carbonated or caffeinated drink options.
- Fluids should be consumed at a rate of 7-10 oz. for every 20 min. of firefighting activity.

Rehab Site Guidelines

- Rehab area should be warm.
- Encourage firefighters to remove wet clothing and replace with dry clothing as possible.

Notes

- Caffeine ingestion causes dehydration, increases heart rate and blood pressure and may cause irregular heart rate.
- Including sodium in rehydration fluids helps prevent hyponatremia from excessive perspiration and repletion with water only.
- Cool to room temperature fluids are more readily absorbed by the body and are easier to consume when working.
- Concentrated drinks and foods high in fat are not easily digested. They can result in nausea and further dehydration as they pull from the body's fluid stores to process. ◆

SOURCE: MASS. FIREFIGHTING ACADEMY

Core Body Temperature and Hydration Study

In December 2007, the Orange County (CA) Fire Authority issued the final report of its study *Safety and Performance Implications on Hydration, Core Body Temperature and Post-Incident Rehabilitation*. The purpose of the study was to examine heat strain and cardiovascular stress. Heart disease has long been documented as the leading killer of firefighters. These results point to several steps that can be taken to reduce that toll.

One of the most startling results was that most - 90%- of the firefighters were already dehydrated before starting the firefighting simulation. Another important finding was that cold wet towels proved to be the most effective and practical cooling measure during recovery, but that KoreKooler Rehab Chairs were nearly as effective as wet towels. These chairs have plastic bags on the arms and allow the occupant's forearms to be submerged in or surrounded by ice and cold water.

Other key findings were...

The average maximum heart rate during the drills was 180 beats per minute. The highest heart rate was 214 beats per minute.

Forty-four percent of participants reached a core body temperature of 102.1° or higher with the highest temperature registering at 106°.

Even after several minutes of rest and recovery, core body temperature continued to rise. Most participants' core body temperature peaked approximately five minutes after they commenced physical activity.

On average, tympanic (i.e., measured in the ear) temperature readings were 2.4° lower than core body temperature readings, as recorded by the core temperature pill.

Study participants ingested a core temperature capsule to monitor core body temperature during the exercise, wore wristband heart monitors, and also provided urine samples to determine hydration levels. Then the 126 volunteers engaged in a structural fire suppression simulation.

The average weight loss during the drill was over three pounds of body weight and the highest weight loss was eight pounds.

One of the recommendations of the study is that firefighters be educated about the importance of hydration for their personal long-term health

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Heat Stress Index

TEMPERATURE °F	RELATIVE HUMIDITY 10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	115	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
82	77	79	80	81	84	86	89	91	95
80	75	77	78	79	81	83	85	86	89
78	72	75	77	78	79	80	81	83	85
76	70	72	75	76	77	77	77	78	79
74	68	70	73	74	75	75	75	76	77

Note: Add 10ºF when protective clothing is worn and add 10ºF when in direct sunlight.

HUMITURE ºF	DANGER CATEGORY	INJURY THREAT
Below 60º	None	Little or no danger under normal circumstances.
80º - 90º	Caution	Fatigue possible if exposure is prolonged and there is physical activity.
90º - 105º	Extreme Caution	Heat cramps and heat exhaustion possible if exposure is prolonged and there is physical activity.
105º - 130º	Danger	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity.
Above 130º	Extreme Danger	Heat stroke IMMINENT!

FPAM 22nd Annual Training Seminar and Senior Fire Officer Forum Speaker Wayne Powell

The Fire Prevention Association of Massachusetts (FPAM) will hold it's 22nd annual training seminar April 29-May 1, 2008 at the Sheraton Milford Hotel, 11 Beaver St., Milford, MA 01757. The Department of Fire Services' will present Wayne Powell, Fire and Life Safety Specialist with Marriott Corporation International as part of its continuing Senior Fire Officer Forum series. For more information go to the FPAM website at http://www.firepreventionofma.org/id12.html. For more information on the DFS 2007-08 Senior Fire Officer Forum series, go to www.mass.gov/dfs. ◆

Core Body Temp.

Continued From Page 7

WIND SPEED (MPH)	TEMPERATURE ºF												
	45	40	35	30	25	20	15	10	5	0	-5	-10	-15
5	43	37	32	27	22	16	11	6	0	-5	-10	-15	-21
10	34	28	22	16	10	3	-3	-9	-15	-22	-27	-34	-40
15	29	23	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51
20	26	19	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60
25	23	16	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66
30	21	13	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71
35	20	12	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-75
40	19	11	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76
45	18	10	2	-6	-14	-22	-30	-38	-46	-54	-62	-70	-78
	A						B						C

WIND CHILL TEMPERATURE ºF		DANGER
A	Above 25ºF	Little danger for properly clothed person
B	25ºF / 75ºF	Increasing Danger, flesh may freeze
C	Below 75ºF	Great danger, flesh may freeze in 30 seconds

and for managing the bodily stress of firefighting activities. Firefighters should engage in health and wellness programs since regular exercise and good nutrition help to maintain good cardiovascular health. Rehabilitation programs should adopt the key findings of this study in their protocols.

David Houghton, Department of Fire Services' Special Operations Director, said "The Massachusetts protocols in place for our Incident Rehab Units include using cool but not ice water and when we use sports drinks, we use it at half strength because shocking the system with too many electrolytes when it is already depleted can be dangerous. " Cool but not cold water allows the system to drink more water, thus hydrating more efficiently and effectively.

You can read the full report on line at: http://www.ocfa.org/_uploads/pdf/hydrationstudy.pdf ◆

2007 Life Safety Achievement Award

Each year the Residential Fire Safety Institute (RFSI) requests the assistance of the State Fire Marshals to help make departments in their states aware of the Life Safety Achievement Award recognizing fire departments having zero structural fire deaths in their community for a specific calendar year.

To apply for the 2007 Life Safety Achievement Award, the chief of the fire department must submit an application form, which DFS sent to each fire chief. Further information and applications can also be downloaded from the RFSI website (www.firesafehome.org). The application must be signed by the fire chief and a description must be included showing that the fire department conducts some type of fire prevention and/or public education each year.

If you have any questions about the award or eligibility requirements, you can contact the RFSI director, Roy Marshall at rfsirlm@myfmtc.com or the program manager Dana Jarvis Bies at 712-829-2734. ◆

Campus Fire Safety Right-to-Know Act of 2007

By Ed Comeau, Campus
ecomeau@campus-firewatch.com
www.campus-firewatch.com

Legislation was reintroduced on the seventh anniversary of the tragic fire at Seton Hall University that killed three freshmen and in the wake of the Jan. 17, 2007 fire that killed three students and two siblings in Huntington, West Virginia.

The Campus Fire Safety Right-to-Know Act of 2007, reintroduced on January 19, 2007 in Congress, calls upon colleges and universities to report information on the level of fire safety on their campuses to the U.S. Department of Education and to the public. This legislation passed the U.S. House of Representatives in 2006.

Since January 2000, there have been 99 campus-related fire deaths across the country, with almost 90 percent of them occurring in off-campus and Greek housing.

"Just within the past week, tragedy has struck at Marshall University where three students and two siblings were killed in an off-campus fire," said Ed Comeau, publisher of Campus Firewatch. "Schools have an incredibly valuable opportunity to educate students about how they can protect themselves by selecting fire-safe housing and practicing fire safety every day. This legislation will help parents identify schools that put a strong emphasis on fire safety so that no parent has to receive a call telling them their child will never be coming home again. I commend Congress for their leadership in helping combat this problem."

The Campus Fire Safety Right-to-Know Act of 2007 is being introduced in the House by Representatives Bill Pascrell (D-NJ) and Joe Wilson (R-SC) and it will be introduced in the Senate on Monday by Senator Frank Lautenberg (D-NJ). Fourteen major fire safety organiza-

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USFA & NFPA Release Report on Mitigation of the Rural Fire Problem

EMMITSBURG, MD – The United States Fire Administration (USFA) announced on February 6, 2008 the release of a comprehensive report from a joint project with the National Fire Protection Association (NFPA) to examine what can be done to reduce the high death rate from fire in rural America. This report, *Mitigation of the Rural Fire Problem – Strategies Based on Original Research and Adaptation of Existing Best Practices*, provides implementation strategies for the reduction of rural fires. The report targets the fundamental differences in the nature of the rural fire problem compared to the U.S. fire problem as a whole.

"As communities with fewer than 2,500 residents have a per capita fire death rate almost twice the national rate, this is an important life safety effort," said Gregory B. Cade, U.S. Fire Administrator. "USFA has a long commitment to reducing fire deaths in this country through effective mitigation and preparedness."

The project reached out to leaders of organizations serving rural communities to learn what works in implementing programs in those communities. Also, national and local fire service organizations were consulted to learn more about their program successes and challenges in the reduction of fires, deaths, and injuries in rural communities.

In addition to fire protection and suppression, human issues such as public fire safety education and technical factors, including fire and smoke detection, codes, consumer product safety, and residential fire sprinklers, are discussed in the report.

"NFPA was pleased to partner with USFA on this innovative project that has identified ways to reduce fire deaths in rural America," said James Shannon, NFPA president. "This initiative supports NFPA's efforts in saving lives, protecting property, and reducing risks associated with fire."

Whether it is the separation of communities from one another or the separation of residents from one another, the report finds separation to be the defining characteristic of rural America. Ultimately, separation makes it more costly to conduct business in rural communities – impacting the economy – and residents are more likely to be on the lower end of the economic scale. The communications challenges some businesses face due to separation, like print media for example, may impact the quality and ease of communication within and to a rural community. This is an example of something that may limit the distribution of safety information.

Poverty was found to be the most significant factor driving the higher fire risk in rural America. Less income means potentially fewer resources. While rural populations have a greater need for fire safety, they have a reduced ability to fill that need without outside help. They would benefit from safer products – which can sometimes mean newer products – as well as devices designed to provide safety like smoke alarms.

This report also includes Train-the-Trainer presentations for the rural fire service and community leaders on administering successful outreach programs and a separate presentation for citizens highlighting key fire safety and preparedness messages. ◆

Arson Awareness Week

May 4-10, 2008

Arson Awareness Week is May 4-10, 2008. The theme will be toy & novelty lighters. The materials will be available on the www.usfa.dhs.gov web site in late March. ◆

Personnel Changes

Retirements

The Hazardous Materials Emergency Response Division bid farewell to its Deputy Director and one time Acting Director Steve Clendenin in December. Steve has taken a position with Battelle Corporation, where he will be conducting Emergency Preparedness planning for U.S. Navy facilities in Italy, Spain and Iceland. Steve and his wife will be moving to Naples, Italy.

Steve is a former captain with the Framingham Fire Department and an original member of the District 3 Hazardous Materials Response Team. He assumed the position of Acting Director from 1997 through 1999 and continued on as Deputy Director until last December. During his tenure with HazMat, Steve was a leader and an innovator, forging many progressive methods and procedures. In addition to his service to DFS, Steve served as the Chair of the Detection and Decontamination Sub-Committee of the U.S. Interagency Board for Equipment Standardization and Interoperability and Chair of the Weapons of Mass Destruction Working Group for Federal Emergency Management Agency Urban Search and Rescue Teams. Good luck Steve, and thank you for your dedicated service!

In addition, John Burke who served as our Director of Operations for the past two years, also retired. John previously served as the fire chief in Sherborn and Lincoln and assistant fire chief in Framingham.

New CIO

In early March, Brian Clendenin, (Steve's brother) joined us as our new Chief Information Officer managing the Information Technology Unit at the Department of Fire Services. Brian has over 20 years experience as an IT manager and comes to us most recently from the Suffolk District Attorney's Office.

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Hazardous Materials Division Training with Command Simulator

Hazardous Materials district teams conducted two one-day training programs on December 19 and 20, 2007 at the Springfield Fire Training Center using the state Department of Fire Services Command Simulator trailer.

Thirty-two members of the Hazardous Materials Response District 4 and District 5 teams participated in training on the CAMEO (Computer-Aided Management of Emergency Operations) suite of computer programs that are available from the National Oceanographic and Atmospheric Administration (NOAA) Office of Response and Restoration. John Dearborn, District 4 team Training Coordinator moderated the training.

CAMEO was developed jointly by NOAA and the Environmental Protection Agency (EPA). CAMEO is a set of software modules designed to assist first responders and emergency planners in:

- Accessing chemical property and response information,
- Modeling the impact of potential chemical releases,
- Displaying plume dispersal images on a map, and
- Managing planning data.

All of the CAMEO modules work interactively to display critical information in an easy-to-understand manner. During a response to a chemical release, CAMEO can help decision makers quickly get the information they need for a safe, effective response.

According to the NOAA web site, CAMEO was used extensively by emergency response agencies during Hurricane Katrina and Hurricane Rita.

The hazardous materials technicians utilized the 18 computer stations in the Command Simulator trailer to run the CAMEO software to formulate a response to each of the ten exercise scenarios that were presented during the day-long training. The scenarios were based on facilities and chemicals present within the hazardous materials district response area.

John Dearborn said, "The Command Simulator trailer was a effective tool to use to conduct the training. Feedback from the participants was very positive. The training was beneficial to the team members as it gave them an opportunity to work the scenarios as a group. It also proved to be a very efficient method to teach computer-based technology." ◆

National Response Framework Released

WASHINGTON – On January 22, 2008, the Department of Homeland Security (DHS) released the National Response Framework (NRF), successor to the National Response Plan. The NRF, which focuses on response and short-term recovery, articulates the doctrine, principles and architecture by which our nation prepares for and responds to all-hazard disasters across all levels of government and all sectors of communities. The NRF is responsive to repeated federal, state, local and private sector requests for a streamlined document that is less bureaucratic and more user-friendly. The NRF also focuses on preparedness and encourages a higher level of readiness across all jurisdictions.

The NRF is being released following an extensive process of outreach and coordination between DHS and key stakeholders representing federal, tribal, state and local governments, non-governmental agencies and associations, and the private sector. The latest public comment period for the base document of the NRF closed on Oct. 22, 2007 and the comment period for the support annexes closed on Nov.10, 2007. The final documents reflect the nearly 5,700 comments received from participants of the process.

"The National Response Framework is an essential tool for emergency managers at all levels," said Homeland Security Secretary Michael Chertoff. "It helps define the roles, responsibilities, and relationships critical to effective emergency planning, preparedness and response to any emergency or disaster. Today's release reflects the culmination of many months of hard work and collaboration within the nation's emergency management community."

The NRF is intended for senior elected and appointed leaders, such as federal department and agency heads, state governors, mayors, tribal leaders, city managers and

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FY '08 Student Awareness of Fire Education (S.A.F.E.) Grants

Applications for the FY 2008 Student Awareness of Fire Education Grant were sent to every fire department this January and the deadline was Friday, February 22.

Any city or town whose fire department or fire district had a S.A.F.E. Program Grant in any of the Fiscal Years 2000-2007 and is committed to working with school systems, public health and other community agencies to develop a well conceived and coordinated fire safety education program was eligible to apply for the Program Grant. Fire departments/districts that are not eligible for a Program Grant could apply for a Planning Grant. The scope of services that accompanied the contract allows communities 12 months to spend the funds.

FY 2007 Year-End Reports will be required in June 2008, but can be completed sooner if the funds are spent and programs completed. The forms and other information about the S.A.F.E. Program are available online at www.mass.gov/dfs. Click on Fire Prevention, Public Education and S.A.F.E. Program.

S.A.F.E was included in the Administration's FY '09 Budget as well. ◆

NE Juvenile Firesetting Conference:

Pathways to Collaboration and Intervention- May 9, 2008

On May 9, 2008, Brandon Residential Treatment Center, the Department of Fire Services, the Mass. Association of Fire and Safety Educators (MA SAFE) and the Mass. Property Insurance Underwriting Association will be sponsoring a day long conference at the Beechwood Hotel, Worcester, MA for educators, social service, mental health providers, and members of the fire service and juvenile justice communities that interact with juvenile firesetters. For more information or to register online go to www.Brandonschool.org. ◆

I Might Look Like a Monster

And other little things you should avoid saying or doing while teaching kids about fire safety

By Jesse Dobiecki,
Fire Education Specialist

Reprinted from the VT Office of the State Fire Marshal Newsletter

The fire safety messages we teach to school age children have not changed all that much. But the more thoughtful we are about our approach, the more likely that the right message will be retained, which of course increases your student's ability to stay safe.

A few slight adjustments in some of the language that we typically use to teach fire safety could help to increase the understanding of children as well as their comfort level. It's not that the words that we have been using are "wrong"; it's just that there are some words that are "better", more suited to our purpose.

Some experience during last summers trailer work [editors note: she means fire safety house in MA-speak] hammered this point home. On many occasions, fire safety educators would ask their students: "What do you do if there's a fire in your house?" It was astonishing how many young children responded, "Stop, Drop and Roll" in unison.

This was not necessarily because we, as fire safety educators, failed to deliver the proper home safety message; it may very well be that the mistake was in the language chosen to deliver the Stop, Drop and Roll message.

What is typically taught to children is: when your clothes catch on fire, you stop, drop and roll (and cover your face) to put it out.

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I Might Look Like A Monster…

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The problem lies in the connection between what kids are told to expect, and what they are to do. The problem lies in the phrase "clothes catch on fire". Consider the phrase **"catch on fire**"- to a child, using the word "catch" in this manner can be confusing. Young children, who may not understand the basics of fire behavior, key in to the words **"fire"** and **"stop, drop and roll"** and learn to associate them, but they don't fully understand the lesson.

ster" and reacting to it, which will affect that child's understanding of the lesson and, if his reaction is attention-getting enough, may distract the rest of the group as well. There are scary words that are essential parts of the lesson, like "fire". Monster does not have to be one. You do not want the two words "firefighter" and "monster" associated with one another. And, also, nothing makes you feel older than having a child ask you, "Who is Darth Vader?"

"A small change in language when it comes to comfort level…"

When administering this lesson, fire safety educators who use the phrase ***fire gets on you*** rather that ***catch on fire*** find that children more easily understand the message. Children can identify with things getting on them, and they know how to get things off of themselves. Dirt, Kool-aid, cooties. These are things that **"get on"** kids, and kids understand that they have the power to get things off of them. This slight change in phrase will aid their understanding of the concept.

There are few experiences that are as disheartening to a fire safety educator than to return to a group of children they taught a safety concept to only to find that it has been "lost in translation." To avoid this, here are some other examples of slight word changes that can increase a fire safety students' understanding.

Replace "I might look like a monster." with "I might look funny and sound strange."

When donning SCBA, instead of saying "I might look and sound like a monster, Darth Vader, etc", **tell children "I might look funny and sound strange**." Tell kids exactly what they can expect, trying to keep the message as streamlined as possible. What you want to avoid is the timid youngster in the back of the room keying in to the phrase "mon-

Replace "mom and dad" with "adults you live with." A small change in language when it comes to comfort level – avoid using the phrases "parents" or "mom and dad", instead saying "adult you live with." Many school age children do not live with their parents, but all live with an adult. Changing this little phrase may mean saving embarrassment for a child, or may make the lesson make more sense to a child. And saying "adult you live with" comes out a lot less awkward than "parent/guardian."

Replace "house" with "place you live" The thinking here is very similar to the change in "mom and dad". Not every child lives in a traditional "house", and even the word "home" can be triggering – some children live in foster homes, state programs, with grandparents, etc., and may think of their "home" or their "house" as an altogether different location than the one they sleep in at night. This change does not have to be made across the board, as the phrase "place you live" can be awkward, but peppering your lesson with it can be helpful.

And, finally:

"Don't Play With Matches (or Lighters)" has been a popular and effective lesson for many years. One should keep in mind the audience,

however – there is a significant proportion of the population of students you will teach that need a different lesson on the same theme. What young children eight and under, need to learn is, "Don't touch lighters or matches." That simple change, when teaching young children, is very important, as many times a child's experience with lighters and matches is finding them on the ground. They need to know to get an adult, and not even pick the object up, as simply touching some of these devices can be dangerous.

All of these changes are minor, but hopefully they can help to make your fire safety education lessons as effective as possible. ◆

Teaching Electrical Safety

Teaching children the importance of electrical safety is an aspect of many fire safety programs. The National Fire Protection Association's *Risk Watch* program is aimed at teaching children injury prevention safety lessons. The *Risk Watch* website, www.riskwatch.org, has electrical safety lesson plans designed specifically for children in preschool through 8th grade. Each lesson plan can be easily downloaded via PDF file and includes all the necessary supporting materials for educators. To access these lessons for your fire safety program go to www.riskwatch.org and click on "teacher tools." ◆

USFA Launches Smoking Fire Safety Campaign

WASHINGTON, D.C. – In early January, 2008, the U.S. Fire Administration (USFA) announced a Smoking & Home Fires Campaign to put an end to the number one cause of preventable home fire deaths – fires started by smoking materials. The campaign is designed to alert smokers and those who live with smokers about simple steps they can take to stop the fire before it starts in their home. The USFA, which is a division of the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA), is encouraging smokers to "Put It Out. All the Way. Every Time."

"Most smoking-related home fires happen on beds, furniture, or in trash when smokers do not put cigarettes all the way out, toss hot ashes in the trash or fall asleep while smoking," said U.S. Fire Administrator Greg Cade. "What's important to remember is that smoking home fires can easily be prevented. It just takes a few seconds to light up – and a few seconds to make sure that cigarette is really out."

Chief Cade pointed out that nationally, 23% (46 million) of adults are smokers, and in some states that percentage is as high as 28.7%.

Every year, about 1,000 people are killed in smoking-related home fires. According to the USFA, one-in-four people killed in home fires is not the smoker whose cigarette caused the fire. In fact, 34% were children of the smokers and 25% were neighbors or friends of the smokers. Too often, the victim is the firefighter trying to save them. On January 12, 1992, a seven-year-old Maryland boy died as a result of a fire caused by smoking-related materials, as well as Kenny Hedrick, a volunteer firefighter, who was trapped and died in the basement of that home. Kenny's mother Cathy Hedrick, Director of Survivor Programs for the National Fallen Firefighters Foundation said, "The cause of this tragic fire that took the lives of two innocent victims was a smoldering cigarette in the family room."

To demonstrate how quickly a smoldering cigarette can turn into a raging fire, Chief Cade showed a video demonstration at the campaign launch in Washington D.C. The video can be seen at www.usfa.dhs.gov/smoking.

The Smoking & Home Fires Campaign warns about the dangers of careless smoking and urges smokers to do it outside if they need to smoke. Inside the home, people should use big ashtrays with a stable base and really put the cigarette out, don't just tap it into the ashtray. People should especially make sure their cigarette is fully out if they are drowsy due to medicine or alcohol.

The campaign materials include a CD toolkit with English and Spanish posters, brochures, fact sheets, public service announcements, PowerPoint presentations, an engaging video of a smoking-home fire demonstration, and more. The materials are available online and can be ordered by visiting www.usfa.dhs.gov/smoking. Fire departments and community organizations are encouraged to use these free materials.

A video PSA for the web is also available. ◆

New England Fire/Rescue/ EMS

June 22-24, 2007

The New England Association of Fire Chiefs Conference will be held at the Eastern States Exposition Fairgrounds ("The Big E") in West Springfield. For more information check their website at www.newenglandfirechiefs.org/. ◆

DFS Webpage New Quick Links

The Department of Fire Services webpage, www.mass.gov/dfs, has undergone many changes since it transitioned to the statewide, portalized look that all state agencies use for a uniform look. In an effort to make it easier for our users to find what they are looking for, we have created a new Quick Links on the main page. These are not links to other people's webpages, but it is more an index to where to find things at our website. If you have any suggestions for additional quick links, please let us know. ◆

Smoke Alarms for High Risk Groups

The Fire Protection Research Foundation recently completed a study on the effectiveness of smoke alarms for people who are deaf or hard of hearing and other high-risk groups. The study focused on the effectiveness of alternative alarms, including those that utilize methods other than sound to alert people who are hearing impaired. Common alternative alarms use strobe lights and bed or pillow shakers as well as sound alarms that use different sound frequencies than typical smoke alarms.

The findings of the study revealed the least effective alarms for people who are hard of hearing were strobe lights. Only 27% of the study's population was woken up by strobe lights alone. Bed and pillow shakers yielded better results. When shakers were tested, operating at the off-the-shelf T-3 pulse, 80-83% of the study participants awoke. However, participants that were 60 years of age or older were less likely to awaken to the bed shaker.

The most effective alarm for people who are hearing impaired in this study was the loud low frequency sound alarm. In the testing conditions, the 520 Hz square wave T-3 sound awoke 92% percent of all participants when working at or below 75 dBA for 30 seconds. The alarm woke up 100% of participants at 95 dBA. The typical smoke alarm operates at 3100 Hz pure tone T-3 sound at 75 dBA (high pitch sound), and in this study, only awoke 53% of the participants.

Alcohol Impaired

The Fire Protection Research Foundation also tested the effectiveness of smoke alarms on the alcohol impaired. The current high pitched sound smoke alarms were not effective in waking the participants, with only 61% awakening, as opposed to the 400 Hz and 520 Hz square wave T-3 sounds alarms operating at 75 dBA that woke up 93-100% of the participants. Strobe lights and bed/pillow shakers were not as effective in waking up this population. Strobe lights woke 24% of the participants and shakers only awoke 58-64% of the group.

The Fire Protection Research Foundation plans to carry on its investigation into the frequency of alarms as well as looking into combining several types of signals at once to increase smoke alarm effectiveness.

The report can be found online at the NFPA website at http://www.nfpa.org/categoryList.asp?categoryID=260&URL=Research%20&%20Reports/Fire%20Protection%20Research%20Foundation/Reports. ◆

MFA Instructors Making a Difference in Iraq

Two Massachusetts Firefighting Academy instructors in the U.S. Air Force Reserve have taken their teaching skills back on the road to Iraq at the Sather Air Force Base, located in the Victory Base Compound. Air Force Master Sergeant Jason Messenger, a Westover firefighter from North Brookfield and Air Force Tech. Sergeant Paul Jacques, an Attleboro firefighter, have been stationed together at Sather Air Force Base in Baghdad since January 2008. M. Sgt. Messenger is based out of Westover and Tech. Sgt. Jacques is based out of Otis. This is the second deployment for both firefighters, who are assigned to the 447th Expeditionary Civil Engineering & Medical Squadrons. They expect to remain in Iraq until at least July 2008.

Air Force Master Sergeant Jason Messenger (left), a Westover firefighter from North Brookfield and Air Force Tech. Sergeant Paul Jacques (right), an Attleboro firefighter, stand next to a rack of fire fighting buckets with fellow Iraqi Air Force firefighters.

Master Sgt. Messenger is the shift leader for the night shift at the hospital/clinic located at Baghdad International Airport at Sather Air Force Base. According to M. Sgt. Messenger, about 150 to 200 people per week are seen at the hospital, mostly routine sick calls but there still are some trauma calls. Recently, a badly burned little girl came through the base's hospital before being sent to Children's Hospital in Boston for treatment.

Tech. Sgt. Jacques is a training officer, assisting in the training of Iraqi firefighters. The 447th Expeditionary Civil Engineer Squadron's fire department started training local Iraqi firefighters about three years ago. The Air Force firefighters work with about 130 firefighters from New Al Muthanna Air Base and the Baghdad International Airport three times a week. The training includes classroom lectures and live-fire exercises. ◆

Training on License & Permits for Storing Flammable Liquids and Solids

The Department of Fire Services and the Department of Public Safety recently offered a number of training sessions covering permitting and licensing of flammable/combustible liquids, discussion on building evaluation reports and the review of several code compliance reports.

These training sessions were geared to fire officials, building officials, town/city clerks and licensing granting authorities within communities. We asked that fire departments share this information with other officials in the community and try to attend together.

The goal of the training was to conduct an overview of the fire incidents, the cause and origin reports and the Code Compliance and Enforcement reports on the Danvers explosion and the Bernat Mill Fire in the Town of Uxbridge. The training further focused on the license and permit requirements under the state laws, the issuance of the original land license, the amendment process, the revocation process and building evaluation

If you have any questions or concerns please contact the Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA 413-587-3181. ◆

Commercial Cooking Operations

Two Boston firefighters lost their lives in August 2007 while battling a restaurant fire. Here are some sections of the State Fire Code dealing with commercial cooking operations DFS would like to highlight.

In 2006, the Board of Fire Prevention Regulations adopted an entirely new regulation (527 CMR) (11) Commercial Cooking Operations. The Board incorporated by reference the 2004 edition of NFPA 96 "Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations". This standard provides for the minimum fire safety requirements for the design, installation, operation, and maintenance of all commercial cooking operations. Chapter 11 of this standard contains specific requirements for equipment use and maintenance of equipment.

527 CMR 23.07(6) requires fire suppression system companies finding a suppression system in non-compliance with the manufacturers specification or listing to notify the head of the fire department, and the Marshal in writing within 48 hours. ◆

CPSC Takes Major Step Toward Reducing Upholstered Furniture Fires

February 1, 2008 • WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission (CPSC) voted unanimously (2-0) to issue a Notice of Proposed Rulemaking (NPR) on a new mandatory standard to address residential upholstered furniture fires.

The goal of the proposed standard is to prevent ignition or slow the spread and intensity of upholstered furniture fires. These fires cost the U.S. about $1.6 billion each year. CPSC staff estimates the proposed standard, once fully effective, would prevent an estimated 100 deaths and 130 injuries every year.

"Fires involving upholstered furniture

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USFA Coffee Break

Training on Nonmetallic Waste Containers No. 2008-8 February 19, 2008

Polyethylene rollout waste containers often are provided by trash haulers as a service to commercial building tenants. Intended primarily for outdoor use, these containers may find their way into the structures' interior. Almost all of these inexpensive polyethylene containers have excellent weather-resistance and durability for exterior storage, but represent a huge fuel load when moved indoors.

An individual polyethylene container has a latent heat potential of about 20,020 Btu/pound (4.6 MJ/kilogram). A typical 50-gallon (0.189 m^3) rollout waste container weighs 10 to 13 pounds (4.5 to 5.9 kg). In that weight range, the container alone adds from 200,200 to 260,260 Btu (211 MJ to 275 MJ) to a room.

According to the article, "Good Fuel Source" from The Council for Solid Waste Solutions, an average pound of municipal solid waste has a latent heat potential of 4,500 Btu/lb (4.6 MJ/kg). At an average 5 pounds (2.2 kg) of dry weight per gallon (m^3), these trash receptacles can hold up to 250 pounds (113 kg) of waste, thus adding another 1,125,000 Btu (1187 MJ).

The model fire codes require that trash containers exceeding 40 gallons (0.151 m^3) to be of noncombustible or approved combustible materials. In one code, wastebaskets of any size are regulated in jails and prisons. The concern is that these plastic containers create an extremely high fuel load and, under fire conditions, could overtax sprinkler systems.

Plastic or other nonmetallic contain-

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Special Effects in School Productions

The Department of Fire Services has been made aware that some schools are using special effects as part of school theatre productions. We suggest that you meet with your public and private school officials to review the state laws 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.

After the West Warwick, RI fire, Chapter 304 of the Acts of 2004 created an enhanced criminal penalty now in effect as M.G.L. 148 Section 34A, prohibiting the use of pyrotechnics without a properly issued permit. This statute, in part states: that any owner, occupant, lessee or other person having control or supervision of any assembly use building, and who causes or permits a dangerous condition to exist on the premise at anytime shall be punished by a fine of not more than $5,000 or by imprisonment in the house of correction for not more than 2-1/2 years or both. Specifically, item 4 of the statute states: *"The use of any firework or pyrotechnic devices, as defined by the Board of Fire Prevention Regulations without a properly issued permit."*

Due to 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 effects in their productions must be conducted by properly licensed and permitted individuals. A few years ago, a child was injured by special effects being used in a school play. School officials should closely review the plans for each production, and notify the fire department to determine permitting requirements, regardless of quantity of materials involved. ◆

Abandoned or Dangerous Building Regulations 780 CMR and 527 CMR

There has been a recent increase in abandoned building fires across the Commonwealth; and with the rise in foreclosures, this trend is likely to continue. Therefore, I would like to remind you of the regulations governing abandoned buildings found at 780 CMR 121.2 and 121.3 and 527 CMR 10.13 which establishes the uniform standards for the marking of dangerous buildings required under 780 CMR 121.8.

For the purposes of the regulation, abandoned buildings are those determined by the Building Inspector pursuant to Chapter 143 § 6 to be deserted with no intention of being re-occupied and are open to the weather.

BOARD UP PROVISIONS:

780 CMR 121.2 Inspection: The building official immediately upon

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CPSC Takes Major Step…

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are a leading cause of fire-related deaths in U.S. homes," said CPSC Acting Chairman Nancy Nord. "Stopping a furniture fire in its tracks or slowing its spread would buy consumers precious time to get out of their homes."

Under the proposal, manufacturers could meet the performance standard by using smolder-resistant cover fabrics or interior fire resistant barriers to protect the furniture's internal filling material, which is the primary fuel in an upholstered furniture fire.

The CPSC's objective is to reduce the fire risk in upholstered furniture without requiring the use of fire retardant chemicals. Manufacturers will not be required to use chemicals to meet the proposed standard. In its environmental assessment, CPSC staff projects most manufacturers and importers would likely choose options that do not involve fire- retardants in fabrics or filling materials.

"CPSC is now on track to develop a mandatory safety rule that will save lives and protect consumers," added Acting Chairman Nord.

An NPR is the second step in the agency's three step rulemaking process. ◆

USFA Coffee Break

Continued From Page 15

ers must be tested to ASTM E 1354 or NFPA 271, *Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter,* which requires a limited heat release rate of 0.0264 Btu/ft$_2$/sec (300 W/m$_2$), and be labeled indicating their compliance.

Waste containers are a serious concern and often are overlooked. Pay special attention where smoking is allowed, hot work performed, or where there are multiple containers and no sprinkler system.

For additional information, refer to *International Fire Code*, Chapter 3, or NFPA 1, *Uniform Fire Code*, Chapter 9. ◆

First Bar Saved By New Sprinkler Law

Massachusetts recently reached a major milestone in fire safety. In response to the 2003 Station Nightclub fire, MA passed comprehensive fire safety legislation that we call the MA Fire Safety Act. One of its many provisions was requiring certain bars and nightclubs to install fire sprinklers within three years. The deadline for installation was Nov 15 2007. Bellingham Fire Chief Richard Ranieri has alerted the Department of Fire Services about what we consider to be the first "save" from this law.

On the day after Christmas, December 26, 2007, the Bellingham Fire Department received a central station alarm from the Patriot's Bar and Grille. They found a moderate smoke condition on arrival. Investigation revealed that a single sprinkler head activation had suppressed a kitchen fire. It appears that there was an electrical fire, which burned through the wall in the kitchen and the drop fire ignited several bags and boxes on the floor. One head activated and controlled the fire limiting what could have been a major loss. The bar was not open for business at the time of the fire and no staff were on the premises either. Chief Ranieri said, "While it did not save any lives, I believe the bar owner would not have been able to open for business the same day of an unwitnessed fire without sprinklers." The establishment reopened after cleaning up that afternoon.

Chief Ranieri said, "I guess it is just another case in point where sprinkler systems if properly designed, installed and maintained do work. Although the intent of the sprinkler law was for life safety protection of the occupants, in this case it saved the business from a major loss since the owner reportedly does not have contents insurance." The Patriot's Bar and Grille completed installation of the sprinkler system on November 15, 2007, just in time to meet the deadline. ◆

Recent Changes to the Fire Code

There are two recent changes to the fire prevention regulations.

MicroBlaster

The first is a modification to 527 CMR 13.00, which expanded the definition of "Charge Activated Hydraulic Device" to include a new device, the "Micro Blaster", which uses gas as a means to break rock. The new definition reads a "Charged Hydraulic Device" which now includes devices that use both hydraulic or gas as the explosive charge to promote the breaking of rock. This regulation was filed on an emergency basis and was effective as of 10-10-07.

No Phony Smoke Alarms

The second regulation, filed on an emergency basis, effective 11-6-07, prohibits the use of fire protection devices, used for life safety or fire protection that are in fact neither designed nor capable of performing such life safety or fire protection function. Fire officials are concerned about the expanded use of such items, which are often actually hidden cameras. Such devices also give a false sense of fire safety security to members of the general public. ◆

National Response Framework Released

Continued From Page 10

the private sector. Simultaneously, it informs emergency management practitioners by explaining the operating structures and tools routinely used by first responders and emergency managers at all levels of government.

The NRF is designed to:

- be scalable, flexible and adaptable;
- always be in effect; and
- articulate clear roles and responsibilities among local, state and federal officials.

In addition to releasing the NRF base document, the Emergency Support Function Annexes and Support Annexes will be released and posted at the NRF Resource Center (www.fema.gov/nrf), an online repository of the entire component parts of the NRF. The annexes are a total of 23 individual documents designed to provide concept of operations, procedures and structures for achieving response directives for all partners in fulfilling their roles under the NRF.

Upon finalization and publication of the NRF base document and the annexes, a large focus will be to initiate an intensive nationwide training and exercise program to embed the NRF into the nation's preparedness and response cycle. Implementation of the NRF training and exercise strategy will include awareness training, position-specific training, exercises (tabletop and functional), and sustainment training.

To make the NRF a living system that can be revised and updated in a more nimble, transparent fashion, the NRF Resource Center was developed. The Resource Center will allow for ongoing revisions as necessary to reflect real-world events and lessons learned.

The NRF and the annexes will go into effect 60 days after publication in the Federal Register. ◆

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being informed by report or otherwise that a *building* or other *structure* or anything attached thereto or connected therewith is dangerous to life or limb or that any *building* in that city or town is unused, uninhabited or abandoned, and **open to the weather**, shall inspect the same; and he shall forthwith in writing notify the owner to remove it or make it safe if it appears to him to be dangerous, or to make it secure if it is unused, uninhabited or abandoned and open to the weather. If it appears that such *building* or *structure* would be especially unsafe in case of fire, it shall be deemed dangerous within the meaning hereof, and the building official may affix in a conspicuous place upon its exterior walls a notice of its dangerous condition, which shall not be removed or defaced without authority from him.

121.7 Standards for making buildings safe or secure: Any owner of a building who has been notified that said building shall be made safe or secure under 780 CMR 121.2, shall:

- Remove all materials determined by the head of the fire department or building official to be dangerous in case of fire.
- Secure all floors accessible from grade utilizing one of the following methods so long as such method is approved by the head of the fire department and building official in writing:
  Secure all window and door openings in accordance with the U.S. Fire Administration, National Arson Prevention Initiative Board Up Procedures, continuously until such time as the building is reoccupied; or
- Provide 24 hour watchman services, continuously until such time as the building is reoccupied; or
- Provide a monitored intruder alarm system at the perimeter of all floors accessible from grade, continuously until such time as the building is reoccupied.
- Said owner, as the case may be, shall notify the building official that the approved method chosen to secure the building has been incorporated. Said owner shall allow the building official to enter the building for an inspection to ascertain that the building is secured and made safe. Said owner shall allow the head of the fire department to enter the building. The building official shall be supplied with records of maintenance and operation if the provisions of 780 CMR 121.7.2.b or c. are used.
- Maintain any existing fire alarms or sprinkler systems unless written permission is obtained from the head of the fire department in accordance with M.G.L. c. 148, § 27A to shut off or disconnect said alarms or systems.
- Maintain utilities unless written permission is obtained from the building official to disconnect said utilities. Permission to disconnect utilities shall not be granted if it will result in inadequate heat to prevent freezing of an automatic sprinkler system or inadequate utilities to maintain any other protection systems.
- The requirements of 780 CMR 121.7.1. through 4. do not prevent a building official from ordering or taking expeditious, temporary security measures in emergency situations pending the completion of the requirements of 780 CMR 121.7.1. through 4.
- For the purposes of 780 CMR 121.7.5, an "emergency situation" shall be defined as: an unexpected incident, which by its very nature may present a threat to public safety personnel who may be required to affect a rescue effort or conduct fire extinguishment operations.

Upon refusal or neglect of said owner to comply with such notice, any building official acting under the authority of 780 CMR 121.3 or 121.5, shall cause to be secured all window and door openings accessible from grade in accordance with the U.S. Fire Administration, National Arson Prevention Initiative Board-up Procedures or other equivalent procedure approved by the head of the fire department, continuously until such time as the building is reoccupied.

Any building that has been made to conform to the provisions of 780 CMR 121.7 during vacancy may be reoccupied under its last permitted use and occupancy classification, provided that any systems which were disconnected or shut down during the period of vacancy are restored to fully functional condition and subject to 780 CMR 111.2 and M.G.L. c. 40A. The local building official shall be notified in writing prior to re-occupancy. If said building is changed in use or occupancy or otherwise renovated or altered it shall be subject to the applicable provisions of 780 CMR 34.

121.8 Marking or identifying certain buildings that are especially unsafe in the case of fire. Any building official who determines that a building is especially unsafe in case of fire under 780 CMR 121.2, shall notify the head of the fire department about the existence of said building. The building official, in cooperation with the head of the fire department, shall cause said building to be marked in accordance with the marking requirements established by the Board of Fire Prevention Regulations in 527 CMR 10.00.

MARKING PROVISION:

10.13: Emergency Planning and Preparedness
(7) Marking or identifying certain buildings that are especially unsafe in the case of fire

(a) Any building determined to be especially unsafe in case of fire, under the provisions of 780 CMR 121.2 shall be identified and marked by the building official, with the cooperation of the head of the fire department, to indicate the degree of hazard.

(b) In marking such buildings, the following symbols shall be used:

This symbol shall mean that interior hazard exists to such a degree that interior operations shall be conducted with extreme caution.

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Securing & Marking Abandoned Buildings

Continued From Page 18

☒ This symbol shall mean that severe structural deficiencies or severe interior deficiencies exist to such a degree that operations shall be from the outside except for when a life hazard exists.

(c) Markings shall be applied on the front of the building at or above the second floor level, where practical, between openings such that they are visible from the street. Markings may be applied to the sides or the rear of a building if the head of the fire department deems such placement necessary. Markings shall also be applied in a conspicuous place near every entrance and on penthouses. Markings shall not be applied over doors, windows, or other openings where they may be obscured by smoke or fire.

(d) Markings shall be a minimum of 24 inches by 24 inches. Markings shall either be on a placard with a reflective background or painted with a reflective paint of contrasting color directly on the surface of the building. Stripes and borders outside of the marking shall be a minimum of two inches wide.

(e) All markings shall bear a date as to when applied or the date of the most recent inspection.

(f) Prior to receiving a mark, all buildings shall be inspected thoroughly by the head of the fire department.

I would also like to remind you of the duty under M.G.L. c. 143 s. 6 that the owner, lessee, or mortgagee in possession of such building or structure shall furnish a floor plan to both the chiefs of the fire and police departments of the city or town where the building is located.

Further assistance is always available through the Office of the State Fire Marshal. Please contact the Code Compliance and Enforcement Unit at (978) 567-3375 or in Western Mass. (413) 587-3181. ◆

Would you want to be walking on the floor above this?

Campus Fire Safety

Continued from Page 8

tions co-signed a letter that was sent to every member of Congress asking for their support (a copy of the letter and the legislation is available at www.campus-firewatch.com).

"The Campus Fire Safety Right-to-Know Act is a common-sense measure that I am proud to reintroduce," said Representative Pascrell. "The House recognized the critical importance of campus fire safety by passing this bill last year, and I will fight for the same results in the new session of Congress. Far too many students are being killed in fires at our nation's colleges and universities. When selecting a school, students and parents must also consider the school's track record when it comes to fire safety. The Campus Fire Safety Right-to-Know Act will provide them with the vital information they need to make an informed decision."

"There's safety in information. Parents and students need to know that a campus is doing all it can to keep students safe," Senator Frank R. Lautenberg said. "We've got to do all we can to prevent a tragedy like the Seton Hall fire from occurring in the future."

Campus Firewatch is a monthly, electronic newsletter focusing on the complex issues and a leader in campus fire safety. More information, including an updated Campus Fire Safety Information Sheet and Firelog Compilation can be found at www.campus-firewatch.com. ◆

340 Fires in Vacant Buildings in 2006

According to the Massachusetts Fire Incident Reporting System (MFIRS), in 2006, 340 building fires occurred in buildings that were vacant, under construction or demolition. These 340 fires caused three civilian injuries, 50 firefighter injuries and an estimated $14.6 million in damages. The average dollar loss per vacant building fire was $42,932. ◆

Plans Review Desk

Professional Services During Construction

Professional oversight, which is paid for by or through the private developer, is required throughout the design and construction process by Massachusetts' regulations. Put the system to work for the fire prevention office and save time.

For most buildings, Section 116 and Section 903 of the Massachusetts State Building Code (780 CMR) require that a design professional prepare/review all fire protection system construction documents, be on site of the construction to ensure systems are installed properly, and certify that the final installation meets approved plans and applicable standards. These services are referred to commonly as "Construction Control Services." Construction review should not be void of fire department input. However, the construction review process, from planning to final acceptance, will be more manageable if the fire department and the building official enforce simple steps of the "Construction Control" process.

The first important step in professional oversight is obtaining a written declaration from the individual that will be providing the professional oversight. The individual responsible for oversight is typically established in a preliminary Construction Control Services affidavit and/or in the Fire Protection Systems Narrative Report required in 780 CMR:903.1.1(1)(a). You need to be sure to read the document submitted and that the declaration states that the responsible individual will be performing all required services. This verification is mentioned because templates are in circulation whereby the responsible individual only takes responsibility for the design phase, and not the construction phase or final sign off. Furthermore, you need to be sure that an individual, and not a company, is taking responsibility. All architect and professional engineer registrations, and all fire alarm and fire sprinkler contractor licenses, are tied to an individual. Insist that the individual be established before permits are issued to avoid situations where the professionals involved in submittals do not realize you are expecting them to perform all services. It is also advisable to get contact information for the design professional, as the templates do not generally include this information and it can be difficult to track down a professional if all you have is their name and license/registration number.

The middle of the professional oversight process has two important issues – verifying that the responsible professional has prepared/reviewed any project submittals, and verifying that the responsible professional has been on-site to review the construction of the system. In many cases, installing contractors have retained professionals to review the contractor's plans for compliance with installation standards when the contractor's professional is not the same individual as the responsible professional as established above. Although the contractor's professional may ensure that the plans meet applicable standards, the contractor's professional may not be aware of issues specific to the project. Insist that the evidence of the responsible professional's review is on the submitted plans and original (wet seal/stamp, signed and dated). As for on-site review, it can be helpful to require that the responsible professional participate in any walk-through the fire department is involved with. Similarly, the fire department can ask for progress reports that would indicate on-site reviews have been taking place.

The final concerns of the professional oversight process are addressed in Section 903.4 of 780 CMR. The responsible professional must submit certification that the installation is compliant to the fire department prior to asking the fire department to witness final acceptance testing. If the process outlined in 780 CMR:903.4 is followed, the likelihood is significantly reduced that the fire department will stand around while the contractor fixes "bugs" during the final acceptance test. Also, 780 CMR:903.4 allows the transfer of up to 100 percent of the fire department's witnessed testing to be performed by a design professional if the fire department and building official both approve.

How to contact an OSFM Fire Protection Engineer: if your jurisdiction contains, or is South of, the Mass Pike - contact Jake Nunnemacher at 978-567-3377 or jacob.nunnemacher@dfs.state.ma.us. For jurisdictions North of the Mass Pike - contact Dana Haagensen at 978-567-3376 or dana.haagensen@dfs.state.ma.us. ◆

Personnel Changes

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DCAM

James T. DiRico is our new Director of Capital Asset and Management. Mr. DiRico, is a highly experienced candidate with over 27 years in facilities operations and management. He comes to us most recently from Hewlett-Packard.

Code Compliance

Ed Destefano has joined the Office of the State Fire Marshal as our newest full-time Code Compliance Officer. When his training period is complete, Ed will be covering the southeastern part of the state. Before coming to DFS, Ed worked for the Department of Defense for 30 years as a civilian firefighter. When he retired he was the fire prevention captain.

In addition two part-time compliance officers have joined the Underground Storage Tank (UST) Program – former Norwell Fire Chief Paul Rosebach and Nashua (NH) Fire Lt. John Araujo. ◆

MFIRS Corner

MFIRS Coding Tips

Springtime Means Brush Fires

Wildland Fires

Please remember that even if your department is using third party software, it must offer the option of using the Fire Module instead of the Wildland Module. 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 the software program does not allow this option, please contact the vendor and remind them. If you have any problems, have them contact Derryl Dion.

In MA we strongly recommend that you use the Fire Module for these types of fires.

Permit Fires and Unauthorized Burning

If you respond to a permit fire that you have to extinguish, code 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.
- For illegal burning, use *Incident Type* = 561: Unauthorized burning.

This graph clearly shows that springtime means brush fires for the Massachusetts fire service. April is the peak of the Massachusetts brush fire season. The Commonwealth experiences 43% more brush fires in April than it does in its next highest month, May.

Mulch Fires

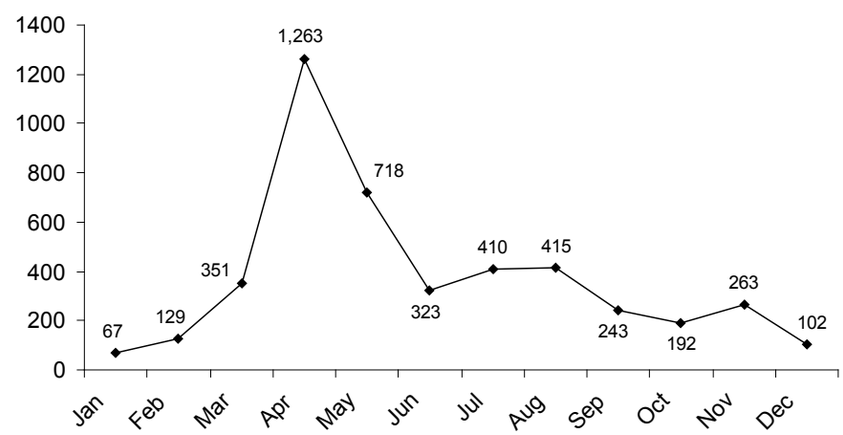
Mulch fires should be coded as *Incident Type* = 140: Natural vegetation fire, other.

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

Outside Rubbish Fires

Outside rubbish fires should be coded as an *Incident Type* = 150-155. Do not use *Incident Type* = 118: Confined trash or rubbish fire **inside of a structure**.

Average Number of Brush Fires by Month
2001 - 2006



Tracking Distressed Buildings

Building Status - Vacant vs. Non-Vacant

There seems to be some confusion as to what the *Building Status* field and its codes represent. The field defines the operational status of the building involved in the fire. Two of the codes for this field are: *Vacant & Secured* and *Vacant & Unsecured*. A vacant building is one that is not occupied at any time, not just at the time of the fire. It is usually an abandoned building or a building that does not have any occupants or businesses residing in it.

It does not include buildings such as storage units, and motor vehicle garages, or businesses after business hours with no one there. The code *In Normal Use* should be used for these scenarios. The code *Idle not Routinely Used* should be used for seasonal properties and those that are used on a 'somewhat' regular basis (e.g. snack stands or ticket booths at playgrounds or athletic fields) when they are not occupied and operating.

Distressed Buildings

In the Arson Module under *Other Investigative Information Codes*, you have the ability to track multiple factors related to distressed buildings such as code violations, structure for sale, structure vacant, financial problem, criminal/civil actions pending.

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New' MFIRS System Changes as of January 1, 2008

There are some changes in the system, many of which may cause 'Critical' errors that are coming with the latest release of MFIRS v5 on January 1, 2008. Any 'Critical' error in an incident will not allow that incident to be saved in the state database and has to be corrected and the entire incident resubmitted. We were instrumental in getting some of these changes made, so if you have any suggestions please be sure to pass them along. These changes were made at the national level to NFIRS by the USFA and all vendors have been made aware of them. If you have not received a recent update to your MFIRS software, please speak to your software vendor.

The changes that will affect MFIRS users are:

1. *Incident Type* (Basic Module) 100 – Fire, other, will require a Fire Module. A 'Critical' error will result if a Fire Module is not present.

2. A new *Actions Taken* (Basic Module) code 87 – **Investigate fire out on arrival** has been added. It should be used for incidents where the fire department responds but the fire has already been extinguished.

3. A 'Critical' error will be generated for any age that is negative.

4. A new *Type of Material First Ignited* (Fire Module) code has been added = 28 – Ethanol.

5. Removed *Cause of Ignition* code (Fire Module) 0 – Other. A 'Critical' error will result if 0 is used.

6. If *Incident Type* (Basic Module) = 112 – Fire in a structure other than a building, the *Structure Type* (Structure Fire Module) cannot be 1 – Enclosed building, or 2 – Fixed portable or mobile structure. A 'Critical' error will result if either of these codes is used.

7. If *Property Use* (Basic Module) = 464 – Barracks, dormitory, then the *Mixed Use Property* (Basic Module) field is required to be completed. A 'Critical' error will result this condition is not met.

8. A new *Factors Contributing to Release* (HazMat Module) code has been added = 49 – **Criminal Activity**.

9. The description for *Building Status* (Structure Fire Module) code = 2 – from Occupied & operating has been changed to **In Normal Use** – includes properties that are closed or unoccupied for a short period of time, such as a business closed for the weekend or a house with no one at home.

10. A new *Equipment Involved in Ignition* (Fire Module) code has been added = 877 – **Novelty lighter.**

11. If *Arrival Time* (Basic Module) is greater than 20 minutes than the *Alarm Time* (Basic Module) than a 'Warning' error will be generated.

Training

If a department needs more training on MFIRS v5 and can guarantee 15 students, please contact us to set up an MFIRS v5 class. It is a 4-hour MFA class and comes with 4 OEMS credits. Enrollment must be open to other departments.

Fatal or Large Loss Fires

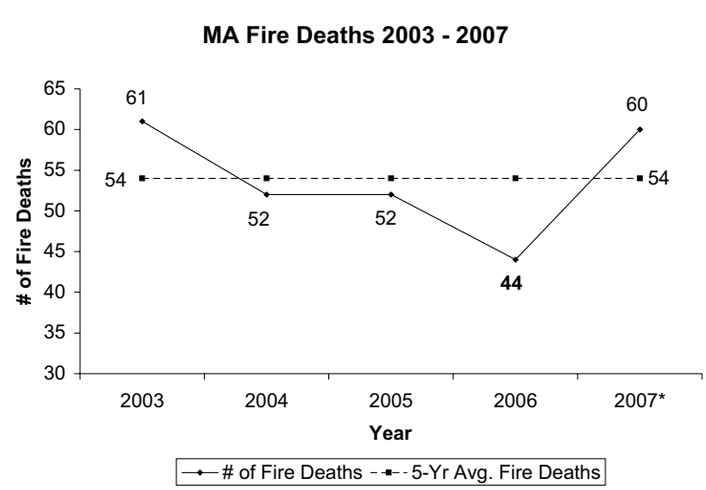
For fires or explosions with a **fatality** or that incur a **large loss (>$1,000,000)**, please forward a paper copy of the MFIRS report with a completed Remarks section to Derryl Dion within 2 business days. This most likely will be a preliminary report and you can file the complete report at a later date unless otherwise noted. Every effort should be taken to make sure that these reports are as complete as they can be given all of the information available at the end of your investigation. If one of the state troopers from OSFM's Fire Investigation Unit (FIU) was involved with the investigation, please contact them periodically to see what they are reporting as their conclusions in their report. FIU reports are separate from the MFIRS reports, and using the "team concept" of fire investigation, both reports should reflect the same conclusions.

Electronic Reporting

The email address to send your electronic MFIRS reports to is: MFIRS.Report@state.ma.us. One or two days after your first submission via email, please call Derryl Dion at (978) 567-3382 to confirm its receipt. If you are reporting electronically you should be sending us your reports on a monthly basis during the first two weeks of the following month. Your submission file should be an attached file to the email, not a part of the email's text and you should have your department's name and the date range of your submission in the subject line.

Assistance

Please contact Derryl Dion, Research Analyst at (978) 567-3382 or Derryl.Dion@state.ma.us with any questions regarding MFIRS or to conduct fire data or histories research. ◆



2007 MFIRS Year End & Quality Control Reports

The Fire Data Unit is planning on closing the 2007 MFIRS reporting cycle by April 30 2008. To accomplish this we need your help in performing quality control on your reports as soon as possible. During March 2008, we sent out 2007 MFIRS Year End and Quality Control Reports to each fire department that submitted 2007 data. Please check our reports with your in-house statistics and notify us of any changes as soon as possible. If you have not submitted any or all of your 2007 incidents, please do so as soon as possible. If your fire department did not have any reportable fires, the fire chief should sign and date the Certificate of No Reportable Fires that was sent in February.

The statistical feedback reports include:

2007 Incident Submission by Month, and

2007 Fires & Arson Fires by Incident Type.

The quality control reports include:

- *2007 Incidents Returned to Department Corrected Forms Not Received by DFS,*
- *2007 Incidents Missing the Arson/Juvenile Firesetters Module.*
- *2007 Error Validation Report,*
- *2007 Fires Under Investigation,*
- *2007 Structure Fires With Incorrect or No Property Use,*
- *Electrical Fires with No Equipment Involved,*
- *2007 Civilian Fire Casualty Modules with Missing Data for Any Fields,*
- *2007 Fire Service Casualty Modules with Missing Data for Any Fields.*
- *2007 Response Time Report.* ◆

CPSC

The following are excerpts from press releases issued by the U.S. Consumer Products Safety Commission (CPSC) regarding products recalled for fire or burn hazards. Consumers should immediately stop using any of these products and contact the U.S. Consumer Products Safety Commission or the manufacturer for instructions on how to proceed. The web address is: www.cpsc.gov

AIR COMPRESSORS

08-181 ..... 1/31/08

Campbell Hausfeld & Husky Air Compressors

Campbell Hausfeld

Protective covers on the compressor's motor are not made from proper flame retardant material & can ignite.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08181.html

AIR CONDITIONERS/HEAT PUMPS

08-530 ..... 12/20/07

Remington and McQuay "ComfortPac" Air Conditioners and Heat Pumps

McQuay International

Wires in the heater element can overheat and spark, posing a smoke and fire hazard to consumers.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08530.html

BOOSTER CABLES

08-134 ..... 12/13/07

Valucraft Booster Cables

Autozone Parts Inc.

The booster cable clamps were assembled incorrectly resulting in reverse polarity, posing a shock or explosion hazard.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08134.html

CANDLES

08-167 ..... 1/17/08

Jar Candles

The Wick & Petal Co.

The candles can burn with a high flame.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08167.html

08-168 ..... 1/17/08

Round & Egg-Shaped Decorative Candles

Pottery Barn

The candle's exterior coating can ignite.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08168.html

08-170 ..... 1/22/08

Nordstrom "At Home" Taper & Votive Candles

Nordstrom Inc.

The candle's exterior coating can ignite.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08170.html

08-191 ..... 2/12/08

"Embers" Tea Light Candles

Christmas Tree Shops

The clear plastic shell can melt or ignite.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08191.html

CIRCUIT BREAKERS

08-151 ..... 12/27/07

Counterfeit Circuit Breakers labeled as "Square D" North American Breaker Co. Inc.

The circuit breakers labeled "Square D" have been determined to be counterfeit & can fail to trip when they are overloaded.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08151.html

COFFEE MUGS

08-123 ..... 12/6/07

Starbucks Fusion Coffee Mugs

Starbucks Coffee Co.

Continued from Page 23

The plastic handle can detach from the body of the mug when filled with hot liquids.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08123.html

EXHAUST FANS

08-161 ..... *1/10/08*

Whole-house Exhaust Fan Electric Motors

A.O. Smith Electrical Products Co.

The fan's electric motor can be miswired and overheat.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08161.html

GLUE GUNS

08-175 ..... *1/29/08*

Crafters Square Hot Melt Mini Glue Guns

Dollar Tree Stores Inc.

The guns can short circuit, causing them to smoke & catch fire.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08175.html

HAIRSTYLING IRONS

08-124 .....*12/11/07*

WEE CHI Ceramic Hairstyling Irons

Farouk Systems Inc.

The "on/off" switch was installed incorrectly. When the iron is plugged in & switch is in the "off" position, the iron remains "on".

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08124.html

HEAT RECOVERY VENTILATORS

08-136 ..... *12/13/07*

Heat Recovery Ventilators

Venmar Ventilation Inc.

The thermal protector in these units can fail.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08136.html

HEATERS

08-115..... *12/6/07*

Oscillating Ceramic Heaters

Collins International Co.

The heaters can overheat, smoke or ignite.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08115.html

LAMPS

08-159 ..... *1/10/05*

Portfolio Incandescent Torchiere Lamps

L G Sourcing, Inc.

A short circuit can occur in the lamp's wiring.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08159.html

MICROWAVE OVEN

08-110..... *12/5/07*

Built-in Combination Wall & Microwave Ovens

GE Consumer & Industrial

The door switch in the microwave oven can overheat & ignite plastic components in the control area.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08110.html

OUTDOOR VACUUMS

08-129 ..... *12/12/07*

Billy Goat MultiVac Outdoor Vacuums

Billy Goat Industries Inc.

The vacuum's fuel tank could crack & leak fuel. If gasoline is leaking from the fuel tank is ignited, a fire or explosion can occur.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08129.html

PRESSURE COOKERS

08-147 ..... *12/21/07*

Pressure Cookers

TTK Prestige Ltd.

If the pressure cookers are not closed properly, the lid can separate & allow hot contents to spill out.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08147.html

REMOTE-CONTROLLED HELICOPTERS

08-190 ..... *2/12/08*

Remote-Controlled Helicopter Toys

Soft Air USA Inc.

The rechargeable battery contained inside the helicopter can catch fire during charging, igniting the helicopter & nearby combustible materials.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08190.html

TIMERS

08-157 ..... *1/9/08*

Intermatic DT27 Digital Self-Adjusting Timers

Ewig Industries Macao Commercial Offshore Ltd.

The timers could have been wired incorrectly.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08157.html

TOASTER

08-111 ..... *12/5/07*

Black & Decker Infrawave Toasters

Black & Decker

An electrical component in the toaster can overheat & ignite the circuit board.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08111.html

WARMER DISHES

08-145 ..... *12/21/07*

Covered Warmer Dishes with Rack

Lenox Group Inc.

Flames from the tea candle can extend up the sides of the dish. In addition, a label on the bottom of the dish causes excessive smoke when exposed to the flame.

http://www.cpsc.gov/cpscpub/prerel/prhtml08/08145.html ◆

Licensing Exams

Licenses

The Office of the State Fire Marshal issues licenses to people and companies engaged in fireworks, blasting, explosives, cannon and mortar firing, special effects, special hazard systems and portable fire extinguishers. 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 and times can be found online at: http://www.mass.gov/dfs/osfm/license_exams.htm.

All licensing exams will be given at the Department of Fire Services, Stow campus, and at the western Massachusetts office of the Department of Fire Services, One Prince Street, Northampton. All exams begin at 9 a.m. in the dates scheduled ◆

2008 Exam Schedule

Examination	Deadline Date	Examination Date
Blasting, Blasting R&D, Cannon/Mortar, Fireworks, Special Effects	May 2, 2008	May 14, 2008
Fire Extinguishers	April 18, 2008	April 30, 2008

Status Report of Compliance and Enforcement Actions

The following is a status report of recent compliance and enforcement actions taken by the Office of the State Fire Marshal against individuals or companies for violations of MGL Chap. 148 and 527 CMR. The status of the action is provided and notation is made regarding the effective date of the action. While other actions may be pending, only those individuals or companies who have had administrative hearings with decisions rendered will be documented in this space.

Should there be any question regarding the status of any license or certificate, please call the Office of the State Fire Marshal at any time for verification. The Licensing Desk can be reached at (978) 567-3700. ◆

Compliance and Enforcement Actions by the Department of Fire Services

Name	Action Taken	Terms	Ends
Blasting Certificate of Competency			
Brian D. Keefe Jr	1-year suspension	12/4/2007 - 11/19/2008 6 months to serve	5/19/2008
Fire Equipment Certificate of Competency			
James Tecce	Permanent Revocation	Prohibited from ever again holding a business reg. of any kind from DFS	
David M. O'Neill	5-year suspension	1 yr. to serve, retest, 4 yrs. probation	5/23/2008 5/12/2012
Fire Equipment Certificate of Registration			
Intra-City Supply Co.	5-year suspension	1 yr. to serve, 4 yrs. probation	5/23/2008 5/12/2012
Cannon Certificate of Competency			
Keith Downer	90-day suspension	Suspension effective 1/10/2008 and continues 90 days from license surrender	

Graduations

Recruit Class #179

The graduation ceremony for members of the Massachusetts Firefighting Academy's sixty day Recruit Firefighting Program Recruit Class # 179 took place on March 28, 2008 at Assabet Valley Regional High School, Marlboro, MA. This rigorous professional training provides our newest firefighters with the basic skills to perform their jobs effectively and safely. The Massachusetts Firefighting Academy, a division of the Department of Fire Services, offers this program, tuition-free. The 70 graduates, two women and 68 men, represent the 34 departments of: Agawam, Arlington, Auburn, Beverly, Bourne, Charlton, Cohasset, Devens, Easthampton, Easton, Everett, Foxborough, Framingham, Gloucester, Hudson, Lowell, Marshfield, Medford, Melrose, North Andover, Northampton, Norwell, Peabody, Plainville, Plymouth, Somerville, Ware, Wellesley, West Barnstable, West Springfield, Wilmington, Winchester, Woburn, and Yarmouth. ◆

Photo by: *Bruce Gauvin* — *Recruit Class #179*

Call/Volunteer Firefighter Training Program

Class #20

Massachusetts Firefighting Academy Director Edmund M. Walker presented certificates of completion to members of the Call/Volunteer Firefighter Training class #20 in a graduation ceremony at the Chocksett Middle School in Sterling, MA on Feb. 7, 2008.

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. The Fire Chiefs' Association of Massachusetts persuaded the Legislature to financially support this innovative delivery of off-site training.

The twenty-six graduates, twenty-four men and two women, represent the thirteen fire departments of: Ashburnham, Ayer, Bolton, Holden, Hubbardston, Lancaster, Lunenburg, Princeton, Rutland, Shirley, West Boylston, Westminster, and Winchendon. ◆

Photo by: *Class student* — *Class #20*

Photo by: *Class student* — *Class #21*

Class #21

State Fire Marshal Stephen D. Coan presented certificates of completion to members of the Call/Volunteer Firefighter Training class #21 in a graduation ceremony at the Pentucket Regional High School in West Newbury, MA on Feb. 21, 2008.

The forty-two graduates, thirty-six men and six women, represent the thirteen fire departments of: Boxford, Georgetown, Groveland, Hamilton, Ipswich, Merrimac, Middleton, Newbury, Rockport, Rowley, Salisbury, Wenham, and West Newbury. ◆