



# HOT TOPICS



Volume 11, Issue 4

City of Delray Beach Fire-Rescue Department

October 2011

## Fire Safety Month in Full Swing

We are in the middle of Fire Safety Month has just begun and are expecting to have continued success with getting the message of Fire Safety out to the kids this year. As of now we have already done presentations to the students of Village Academy, Pine Grove, Trinity Lutheran Pre-K/Elementary School, Seacrest Christian School and SD Spady. Presentations have been done in assemblies, classrooms and as station tours. The Fire Safety Bureau would like to extend a sincere thanks to all personnel who have been involved in these presentations and helped to make them a great success. All the kids have had a great time getting to meet a firefighter, tour a fire truck/engine and having a chance to "man the nozzle".

### Upcoming presentations are:

- October 17<sup>th</sup> at Delray Beach Head Start
- October 18<sup>th</sup> at Gulfstream Academy
- October 19<sup>th</sup> at Oxford Pre School
- October 20<sup>th</sup> at Banyan Creek

Once again thanks to all who have helped to make the Fire Safety Month a great success!!!



### Mission Statement

The Delray Beach Fire-Rescue Department is resolved to provide the highest quality of emergency services to residents and visitors of our community; effectively mitigating all types of incidents threatening life or property; educating the public in specific aspects of health and safety to assure a superior quality of life.

Lt. Beardsley with his wife Danielle



### *Congratulations*

**Lt. Ed Beardsley** and **Lt. Curtis Jepsen** successfully completed the Chicago Marathon yesterday as representatives of an IAFF team. **Lt. Jepsen** ran the course in 4 hours and 53 minutes, while **Lt. Beardsley** finished in 5 hours and 17 minutes. There were over 45,000 runners from all 50 states and over 100 countries. Please join me in congratulating them on this incredible accomplishment!!

The team ran on behalf of the IAFF burn foundation and raised an impressive amount of money. The team was comprised of 25 firefighters from around the country.

Lt. Jepsen with his wife Mandy



### Vision Statement

"Our vision is to provide Fire-Rescue, Emergency Medical and Special Operations Services at the highest level of excellence, professionalism, and commitment to the community. Proud of our past and embracing our future, the members of Delray Beach Fire-Rescue will work as an effective and integrated team, dedicated to continuous improvement and maintaining a positive environment. The Department will be a model to others and the pride of the community".

## Chicago Marathon



The Chicago Marathon started in 1977 with more than 4,000 runners and get this: had a \$5 registration fee. That's hard to believe when you compare that price to today's fee of \$145 for U.S. residents and \$170 for those living elsewhere. Since its humble beginnings, the Marathon is a tradition, with residents lining the 26.2-mile course cheering on runners. The course goes through some of Chicago's most popular neighborhoods, including Lincoln Park, Little Italy, and more.



*"Preparing for the worst.....Delivering the best"*



## Update

**Assistant Fire-Rescue Chief Danielle Connor, EFO, RN**

We have just made employment offers to six new Firefighter/Paramedics who will begin orientation on November 7, 2011. Orientation is scheduled to last 4-6 weeks and these folks should join their new shifts somewhere around or after Christmas. We are working on getting brief biographical sketches together on each of them. Please take the time to make these new employees feel welcome.

My tenure as your Acting Fire-Rescue Chief is coming to a close and it's hard to believe it's been over a year already. My sincere appreciation to every single member of this department for your patience as I "learned on the job."

The opportunity to act in this capacity has been an honor and I am thankful for your trust. Chief James is expected to be back full time at the beginning of December, and I will transition back to my Assistant Chief position. In the past year, we have had a number of personnel "step-up" literally and figuratively to assist the organization. We have had Battalion and Division Chiefs serve as Acting Assistant Chief....a Lieutenant serve as an Acting Division Chief.....and a Paramedic serve as a Training Lieutenant. Thank you to each of these officers for helping me help you.



# Delray Beach Fire Station Open House Health and Wellness Event

December 3, 2011

10a-1p

Highland Beach Station #6



*Congratulations to Sarah  
& Richard Murphy on  
the birth of their son  
Killian Michael Murphy  
Born 10/17/11 at 8:32am  
9lbs 8oz 22.5 inches long*





Florida ranks third of 50 states in the number of domestically focused counterterrorism and homeland security organizations, and third overall in organizations established or newly involved in counterterrorism since 9/11. In dollar amount, the state ranked fifth in fiscal 2009 in federal homeland security spending and fourth in domestic preparedness and antiterrorism programs. Measured per capita, the state ranked 34th in overall federal government expenditures. Full article @ <http://projects.washingtonpost.com/top-secret-america/states/florida/>

## Operations Division

Assistant Chief Russell Accardi

Many personnel in the operations division have been busy attending several special operations courses to obtain specialty certifications. The number of divers across the shifts will be enhanced with seven who completed the Public Safety Diver Course and ten who obtained their Dive Rescue 1 certification. The recent efforts of the department to provide these training opportunities will allow us to maintain our response capability and fill vacant positions on the team. These new members will become the future of the team and help ensure we have experienced team members through attrition. Congratulations to our newly certified divers on this achievement.

Other members of our Haz Mat Team have recently attended specialized training courses such as the Terrorist Bombing course in New Mexico. Many of these courses are funded through state grants from DHS and others from the Urban Area Security Initiative (UASI) grant funding. The UASI funding is another funding source that our department has benefited from by being a Regional Domestic Security Task Force (RDSTF) Haz Mat/WMD Statewide Response Team.

The department has been working with the Florida Department of Transportation (FDOT) to ensure we have the access holes placed in the new sound barrier wall under construction from the L-32 Canal on the Boca line north to south of Linton Blvd.

We are ensuring the same signage we developed for the existing sound walls used to assist us in locating the hydrants closest to the access holes, are also installed along the new stretch of walls.

Once again, we will be participating in the countywide high-rise fire training in the former West Palm Beach City Hall building. The training will continue in early November and we will be sending personnel who did not get to participate in the first sessions. One area that was identified as needing additional practice in the previous training is the need to drill on the deployment of our high-rise hose-packs in stairwells. We will be drilling on the deployment of our high rise kits using the parking garages so we can charge our hose-lines.

In the last several Hot Topics issues I have highlighted some NIOSH Fire Fighter Fatality Investigation reports. This month I am using the National Fire Fighter Near-Miss Reporting System to again point out the dangers of working on our roadways and highways. This article describes a close call that could have easily been another fire fighter fatality. More information is available about this and many other calls that fire fighters have provided to help educate other members of the fire service at [www.firefighternearmiss.com](http://www.firefighternearmiss.com)

*Continues on page 4.*



## National Fire Fighter Near-Miss Reporting System

Report Number: 05-0000493

Report Date: 08/29/2005

### Event Description

Our Unit arrived on scene at approximately 7am the day of the incident. There were two vehicles involved in what appeared initially to be property damage only. There was one police car On Scene blocking off the far left lane, and an Engine Crew as well blocking off the middle lane. Car/Traffic was squeezing past the incident to the right of the two vehicles. Upon exiting of the Unit, I was briefed by the engine crew of the situation: "Two cars - the rear car hit the van in front. The people in front are not complaining of any pain. The person in the rear car is out of control and we are assisting her now". The car in the rear, which hit the car in front, had both front air bags deployed - the patient in the driver seat was extremely anxious - she was crying and screaming, and out of control. She would not answer any questions, and the engine crew assisting the patient was unable to ascertain whether she was having any pain. I was the Charge EMT on Scene, so I moved up to the next vehicle in front to check on the status of any other patients. I was told, initially that the persons in the van were not complaining of any pain - just as I was about to check on them, the Officer on the Engine said to me "Go check on the front vehicle - they're all NOW complaining of Neck and Back Pain - How many Patients can you take?" I said I would look and get back to him. When I approached the vehicle on the right hand side - the side where traffic was squeezing past, I entered the van from the rear passengers side - I ascertained that there were now four more patients - we needed more man power and additional units - as I stepped forward to the patient in the front seat, my foot was run over by a passing vehicle. I stepped away from the van and walked towards the Unit - my foot started to hurt immediately - I told my driver, and very soon after I was unable to walk on the foot. I became one of the patients! Four more units were dispatched!

### Lesson Learned

The moment it was established that there were additional patients in the other vehicle, the final remaining lane should have been shut down. This was a command decision - which the engine crew should have made. There was no way we could extricate multiple patients with cars squeezing past. Before I stepped into harm's way, the lanes should have all been closed, not after, like it was when I was run over. There was plenty of equipment to make it happen, now two police cruisers and one engine. I also believe that I could have been more aware of my surroundings. Even though I was aware that we were on a main road, I was not paying attention at 7am to the surroundings as much as I could have. I had the general assumption that the scene was safe, I was wrong, it won't happen again. I also believe communication could have been better between me, the Charge EMT and the Engine Officer. It could have prevented my injury all together.



On Sunday, November 6 at 2 a.m.,  
Daylight Saving Time ends in  
the United States.  
Setting our clock back one hour and  
thus returning to Standard Time.

### *Joseph Falcone, Acting Training Dive Chief*

I would first like to congratulate Lt. Curtis Jepsen and Lt. Ed Beardsley for completing the Chicago Marathon on October 9th. They successfully competed as representatives of an IAFF team. Lt. Jepsen ran the course in 4 hours and 53 minutes, while Lt. Beardsley finished in 5 hours and 17 minutes. There were over 45,000 runners from all 50 states and over 100 countries. Please join me in congratulating them on this incredible accomplishment!! The team ran on behalf of the IAFF burn foundation and raised an impressive amount of money. The team was comprised of 25 firefighters from around the country.

As fall/winter approaches and cooler temperatures are present, we are going to continue with the tradition of bringing back the firefighting modules we have done in previous years, plan on that training beginning in November/December. We also have a recruit academy beginning in November with six firefighters being brought on-board, the academy will run until mid-December. Plans are also in the works for another Hi-Rise evolution in West Palm Beach in November to further train on the County Wide SOG. Meetings have begun in the County to discuss/implement a RIT policy for fire departments to have as a guide when developing their own policies. I have attached an article that I found in Fire Engineering that talks about MAY DAY and emergency procedures to follow and is an interesting read. The main point to keep in mind is that this does not only happen in large metropolitan areas. One can argue the fact that we do not get many fires and our chances of having something go wrong is slim, but that is the farthest from the truth. Emergencies can happen in the smallest of buildings to the smallest department and we should be trained on how to handle a personal emergency or a situation with someone in our crew.

### **YOU MUST CALL MAYDAY FOR RIT TO WORK: WILL YOU?**

BY DR. BURTON A. CLARK, EFO; RAUL A. ANGULO; and STEVEN AUCH

You have probably participated in some type of rapid intervention team (RIT) or "Saving Our Own" training, and your SOPs may have some directions on a Mayday. The odds are, however, that you have not been given specific rules on when to call a Mayday. You are taught to be the rescuer, not the victim, and your Recognition-Primed Decision-Making process (defined below) may interfere with your calling a Mayday when you should.

What does this mean for firefighters? First, it means that we've put the cart before the horse. It doesn't matter how well trained or well equipped your RIT is. Unless the incident is witnessed, RIT teams won't be activated unless you or your partner calls a Mayday. The training emphasis has been on saving our own, not on our own calling for help. We would hate to speculate, but firefighters might have survived had they recognized early enough that they needed help or that something was out of the norm and they had called a Mayday. Deputy Assistant Chief Curt Varone, of Providence, Rhode Island, has verified our thoughts by identifying 11 structure fires between 1978 and 2002 in which failing to call or delaying a call of a Mayday contributed to 24 line-of-duty deaths (LODDs).<sup>1</sup> Firefighters do not like to admit that they might need to be rescued. The delay in calling a Mayday may be caused by many factors, but three need to be addressed immediately: (1) the stigma associated with admitting to yourself and letting others know you need help, (2) not having been given clear rules for calling a Mayday, and (3) the manner in which the fire service makes decisions.

Last year, the Seattle (WA) Fire Department had three near-miss incidents involving firefighters in interior firefighting operations. Each of these incidents easily could have led to LODDs, had help taken a few more seconds to arrive. The particulars of these incidents were detailed in "Train in 'the Rule of Air Management' " (Fire Engineering, April 2003). All three firefighters—a captain, a lieutenant, and a firefighter—are seasoned veterans and well-respected members of the department.

There were some disturbing similarities in the three incidents:

- None of the firefighters in distress called for a Mayday.
- None of their partners called for a Mayday.
- No one activated the emergency button on the radio.
- No one activated his PASS device.
- None of the partners activated a PASS device.
- Each firefighter became separated from his partner.
- Each firefighter ran out of air.
- Each firefighter suffered debilitating effects of carbon monoxide.

*Article continues on pages 6 through 9*

When interviewed, one firefighter said, "I knew I was in trouble. I thought about using the radio, but I thought, 'I found my way in; I can find my way out.' "

Peer pressure and the "stigma" surrounding the idea that help is needed played a part in each incident. These firefighters realized that events were not unfolding correctly. They were all trying to find their way out of the building, but they couldn't. They all ran out of air. They all tried alternative filter-breathing techniques. But in the end, exposure to carbon monoxide impaired their judgment and motor skills.

## **ESTABLISH MAYDAY DECISION-MAKING PARAMETERS**

To ensure that firefighters will call for help as soon as they recognize that they may be in trouble, fire departments need to develop clear Mayday decision-making parameters (rules that specify when a Mayday must be called) and institute Mayday training programs firefighters must take and continue to pass throughout their fire service experience. The parameters/recommendations are based on logic similar to that used to establish training programs that teach military fighter pilots when they should eject from their planes in an emergency.<sup>2</sup>

Fighter pilots are given clear, specific ejection parameters (rules governing when to eject), and they are trained and retrained on making the ejection decision and drilled on actually pulling the ejection cord several times a year. The comparison of firefighters' calling a Mayday to pilots' ejecting from their planes makes good sense, according to Kelly M. Woods, a former Navy fighter pilot who had to eject over North Vietnam when his jet plane was shot out from under him. After military service, he became a career firefighter. He and his partner were advancing a line down a basement stairway when the stairway collapsed, pinning him under the stairs. His partner called a Mayday. Today, Woods is an instructor with the West Virginia State Fire Academy.

It may seem strange that we have to create rules to tell firefighters to call a Mayday. But, remember that we teach firefighters to be aggressive and expect them to act aggressively.

Former Chief Alan Brunacini of the Phoenix (AZ) Fire Department noted at the 2002 Maryland Fire Chiefs Conference: "The hardest thing to do is to put a firefighter in reverse." Think of how we train firefighters. Do they ever fail to put out the fires in rookie school, or do they ever have to make the decision to retreat? Are firefighters ever put into training or drill situations in which they have to make the decision to call a Mayday for themselves? If the answer to these questions is no, how can we expect our firefighters to make these decisions under real-world life and death conditions?

## **THE DECISION-MAKING METHOD**

The manner in which we make decisions may be part of the problem also. Klein Associates researchers analyzed how U.S. Army battlefield commanders make decisions. We are using the military-fire service comparison because firefighters, like the military, must make decisions "while confronting time pressure, [under] changing conditions, [for] high stakes, and [with] unclear immediate goals and incomplete information."<sup>3</sup>

The Klein study describes the cognitive process used to make decisions on the fireground, referred to as "Recognition-Primed Decision-Making (RPD)." As an example, officers arriving on the scene look at the picture (visual cues: fire, smoke, construction, time of day, occupancy, and so on) in front of them and then compare that picture with the pictures in their memory bank. When a match is found, they choose what worked at a similar situation in the past and use that experience to drive their strategy and tactics for the present situation.

This is a very rapid decision-making process. The first option chosen and followed is also most likely the only option considered. RPD is effective most of the time but not all of the time. Kline states: "Unfortunately, the first option may not be the best decision." (3, 43) This memory bank of pictures and actions we have to choose from has been developed over years of experience and training. It has been referred to as a "photographic slide tray." Using this analogy, we might say that "we may be missing some slides." RPD isn't limited to command-level officers; we all use it.<sup>4</sup>

## RPD AND MAYDAY

What does RPD have to do with Mayday? Remember that all three Seattle firefighters, two officers and one firefighter, were experienced. They had gotten themselves out of tight spots before; all said they had experienced running out of air and using the filter breathing method (disconnecting the low-pressure hose from the regulator and putting the end in the turnout coat to breathe) to get out at previous fires. None had ever had a Mayday called for them. They were using RPD to respond to the situation at hand, but it did not work this time. It is safe to assume that the Mayday-calling slide was not in their RPD slide tray.

Do you train firefighters in the simple act of using the radio to practice calling a Mayday? If not, maybe you should. For example, at a working fire, an officer fell through the floor into the basement. His radio transmission was, "14's in the basement."<sup>5</sup> He never called a Mayday. Other factors also contributed to this LODD. We do not know if he had the Mayday-calling slide in his RPD slide tray.

Our firefighters may not be prepared to call a Mayday for themselves. Following is a summary of research conducted for previous articles. The tests covered making decisions pertaining to calling a Mayday.

- The New Iberia (LA) Fire Department conducted a drill to determine if the firefighters would call a Mayday for themselves. An open space 60- 2 100-foot building was used; 400 feet of hose was stretched through the building, and 18 teams of two members and one team of three members were sent in one team at a time. They were told to follow the hose and assist another team at the end of the hoseline. The conditions were immediately dangerous to life and death (IDLH), cold smoke, and zero visibility (masks were blacked out). Their SCBAs had only 800 psi in them (only three firefighters noted the low air). Thirty-nine members participated—17 captains, 14 drivers, and eight firefighters. All personnel had a portable radio assigned to them on the apparatus; only 18 of the 39 firefighters took their radio in with them. The situation made it impossible to fulfill the assignment of joining the other team at the end of the hose. Training Officer Martin Delaune reported the following:

- Four kept going until their air was depleted.
- After the low-air alarm activated, 22 kept going forward for four minutes.
- After the low-air alarm activated, eight kept going forward for three minutes.
- Two discussed the situation for 2.5 minutes before beginning the retreat after alarm activation.
- Three began the retreat when the low-air alarm activated.
- Three activated their PASS alarm.
- Two radioed a Mayday.
- None survived. They all ran out of air before they got out.<sup>6</sup>

- The Fort Worth (TX) Fire Department tested about 500 firefighters (four companies at a time) in a RIT/ Mayday drill. A large open-floor plan building was used. A charged 145-foot 13/4-inch attack line went from the entrance door into the building. One loop had been placed in the line. The conditions were IDLH and zero visibility (masks blacked out). The line ended at a doorway that led into a suite of three offices. A manikin was placed in one of the rooms. The teams were told to rescue the downed firefighter near the nozzle.

About one quarter (about 130) of the firefighters were unsuccessful in exiting the building before they ran out of air. Most did not call a Mayday; all were declared nonsurvivors. The few that called a Mayday for themselves made the call outside the window of survivability.

- The Indianapolis (IN) Fire Department used a 2 1/2-story wood-frame residence charged with live smoke for departmentwide RIT training. Four-member RIT teams were activated to locate a trapped firefighter who had declared a Mayday.

Department Training Chief Doug Abernathy estimates there were 15 to 20 failures of the low-air warning system on the SCBAs worn by the rescuers. Many of the failures resulted in out-of-air situations. Other firefighters became separated from their partners. None of the rescuers called a Mayday for themselves. "We found that we have a long way to go with our RIT and Mayday training," Abernathy reported.

**Washington Township, a department adjacent to Indianapolis, recently tested 120 firefighters in a Mayday situation. Using a large, recently abandoned restaurant and blacked-out facepieces on the SCBAs, the firefighters were taken in one at a time. All, with the low-air warning already sounding, were told that they were members of the attack crew. It was further explained that they had become separated from the others. Individually, the firefighters were spun around, to disorient them, and positioned five feet from the charged handline. Training Officer Dale Strain explained that he hoped the firefighters would then declare a Mayday over the radio and activate the alarm on their PASS device. Strain reports that all but a few did one or both procedures; he attributed this success to the Mayday training the firefighters had recently received.**

### MAYDAY RULES

Firefighters start developing their RPD slide tray in rookie school. Hesitation, retreat, and call for help are not learned. With this in mind, how do we learn when to call a Mayday? Throughout your career you will most likely never need to call a Mayday. We cannot rely on experience to teach us this competency—the first time may be the last time. If there is a very important skill that you very rarely need to use and you have to do it right the first time, you must drill, drill, drill—drill your entire career. Jetfighter pilots review ejection doctrine before each takeoff, and they drill on it every two months.

We developed nine "Mayday Decision Parameters" to guide firefighters in deciding when to call a Mayday in a single-family dwelling fire.<sup>7</sup> Individuals and small groups brainstormed to identify the specific parameters. The parameters were then submitted to sample populations of firefighters (339), to determine if they agreed or disagreed that they must call a Mayday under those conditions. These parameters are not conclusive and have not been field-tested. The nine conditions receiving the highest number of "agreements" among those surveyed that these conditions warrant calling a Mayday are presented to foster further discussion and study.

The parameters are as follows: (1) if you become tangled, pinned, or stuck and the low-air alarm activates; (2) if you fall through the roof; (3) if you become tangled, pinned, or stuck and do not extricate yourself in 60 seconds; (4) if you are caught in a flashover; (5) if you fall through the floor; (6) if there is zero visibility and no contact with the hose or lifeline and you do not know in which direction the exit is; (7) if your primary exit is blocked by fire or collapse and you are not at the secondary exit in 30 seconds; (8) if your low-air alarm is activated and you are not at an exit door or window in 30 seconds; and (9) if you cannot find the exit door or window in 60 seconds.

It would seem that firefighters intuitively would call a Mayday if they fell through the floor. However, when we asked 339 firefighters from many different fire departments if they would call a Mayday if they fell through the floor at a single-family dwelling fire under IDLH conditions, only 88 percent said they would. What are the other 12 percent going to do? Whatever it is, it is not the correct first decision. Ninety-eight percent said they would call a Mayday if they were tangled, pinned, or stuck and their low-air alarm activated. That still leaves 2 percent who would not call a Mayday.

The Mayday condition with the lowest "yes" response was "Cannot find exit (door or window) in 60 seconds." Fifty-eight percent said they would call a Mayday; 42 percent said they would not. Remember, this fire example was in a single-family dwelling—front door, back door, and window in most rooms. We did not choose this dwelling or the exit Mayday condition by accident. When you review the National Institute of Occupational Safety and Health firefighter fatality reports for one- and two-family dwellings, the firefighter victims were very close to a window or exit door but still failed to get out in time. One minute (60 seconds) can be an eternity. Managing air and time in IDLH conditions are critical factors in Mayday decision making.

## RECOMMENDATIONS

We encourage you to be creative and to address these issues by yourself, with your crew, with your department, and with your trainees and to implement training programs that incorporate these conditions and procedures for overcoming them.

**Practice calling a Mayday over the radio. Blindfold the firefighters. Have them wear gloves; hand them the radio; and see if they can turn it on, get the correct channel, push the emergency identifier button, push the talk button, and verbally call a Mayday. Have someone on another portable radio serve as communications and receive the information: Who is calling? What is the problem? Where do you think you are?**

**Repeat the same drill in full turnout gear with SCBA in use. Put some mattresses on top of the firefighters. See if they can get the radio out of their pocket.**

**As the company officer, tell your crew when you expect them to call Mayday for themselves. Give specific examples. Tell them when you will call a Mayday for them, giving specific examples such as under IDLH conditions or "if your leg falls through the floor and I cannot pull you out on the first try, I will call a Mayday" or "if the ceiling falls on us and we get tangled in wire, we will call a Mayday and then start cutting our way out."**

**At the training academy, every time you have live-fire training, place crew members in a situation in which they must make the Mayday decision for themselves. The instructor can drop a cargo net over a member or block the exit. Build a prop that drops the firefighter through a trap door into a ball pit. This will also create a drill in two in/two out and RIT. It will also desensitize the others on the operational team to the Mayday call so they continue fighting the fire instead of abandoning their assignment to go to the aid of the downed firefighter.**

**If we want RIT and Saving Our Own to work, we need to put the Mayday calling slide into every firefighter's RPD slide tray. Then, we need to drill on it often. Because RPD "... is predicated on people choosing a course of action based on pattern matching, a comparison of the current problem to similar problems encountered before." (4,74) We cannot rely on fireground experience to teach us when to call a Mayday; therefore, we must simulate this lifesaving skill often.**

**A sobering thought related to the issue of RIT and Mayday comes from Battalion Chief Kenny Freeman of the Fort Worth (TX) Fire Department: "Personally, perhaps the most important issue brought to light through the RIT training involves the realization that my expectations and assumptions concerning the deployment of a RIT team were both inaccurate and unrealistic. While my previous as-sumptions were totally born out of a commonly held perspective, they would have been nonetheless ineffective and possibly tragic in the final analysis."<sup>8</sup>**

**Rapid intervention teams and Saving Our Own training are wonderful firefighter survival tools. But, like all safety equipment or SOPs, the most important component is the firefighters themselves. Just as you have to put on your seatbelt to have it protect you in an accident, you have to call a Mayday for the RIT to come to get you out. Will you?**



## Life Safety: Fire Sprinkler Performance Categories

*Victor B. Williams, Division Chief - Fire Marshal*

The world's first recognizable sprinkler system was installed in the Theatre Royal, Drury Lane in the United Kingdom in 1812 by its architect. Sprinklers have been in use in the United States since 1874, and were used in factory applications where fires at the turn of the century were often catastrophic in terms of both human and property losses. In the US, sprinklers are today required in all new high rise and underground buildings generally 75 feet (23 m) above or below fire department access, where the ability of firefighters to provide adequate hose streams to fires is limited.

Many people as well as many fire service professionals today don't realize that, until recently, automatic fire sprinkler systems were not intended to suppress a fire when actuated. In its original intent for life safety, sprinklers were designed to detect, confine, and then report a fire outbreak to the local fire department while holding the fire in check until the fire suppression forces arrived to complete the extinguishment with hoselines.

Today, with increases in fire load and fire hazard classification, automatic sprinklers come in two performance categories, control mode and suppression mode.


### **Control Mode:**

*Control mode* sprinklers are intended to control the heat release rate of the fire to prevent building structure collapse, and pre-wet the surrounding combustibles to prevent fire spread. Control mode sprinklers also prevent fire spread by cooling hot gases and vapors at the ceiling. The fire is not extinguished until the burning combustibles are exhausted or manual extinguishment is effected by firefighters.

### **Suppression Mode:**

*Suppression mode* sprinklers (formerly known as *Early Suppression Fast Response* (ESFR) sprinklers) are intended to result in a severe sudden reduction of the heat release rate of the fire, followed quickly by complete extinguishment, prior to manual intervention. Suppression mode sprinklers knock down a fire fast by using an aggressive large drop spray and a flame penetrating central core of water.

It is incumbent upon the fire engineering professional and sprinkler designer to work in concert with the building owner, and the Authority Having Jurisdiction to decide what performance objectives are needed, determine the protection requirement, thereby ensuring the fire and life safety of residents, employees, and visitors on a specific project.



*Whoever is careless with the truth in small matters  
cannot be trusted with important matters.*

*Albert Einstein*

**From the Support Services Staff**  
*Cecelia Shade, Administrative Officer*

*It doesn't matter if you believe in yourself, until you truly believe in others...Micah Lancaster*

**BUDGET!**

Whew! We made it through another fiscal year. There were many challenges to overcome. However, administratively as a team we worked together and made it through. I am so appreciative for our staff and the dedication that each individual gives towards our success. Thank you all for your contributions.

As we begin a new budget year, please make every effort to be financially responsible with the City's finances. Overall, I believe we had a great year and accomplished many projects. As we communicate our needs, the goal is to work towards living within the guidelines established by the department for accomplishing our goals. Please see Mrs. Shade to discuss any concerns. We look forward to a great year.

**EMS BILLING UPDATE!**

Many, many thanks to Desiree, Marla and Shakeema for their dedicated efforts to the daily billing processes which allows us to bill and receive payments on transports in a timely manner. Our training this summer with Mrs. Tuomala surely helped us to identify areas of concern, to correct our daily work processes and to obtain the revenue needed to be successful billers. We've been hard at work for the past eight months and have exceeded our expectations in a short period of time.

A BIG thank you to our field crew for assisting on the front end with obtaining patient information necessary to bill claims correctly, and also to management for the support and encouragement needed to continue to thrive in this area. We are expecting "greater" things moving forward.

On another note, EMS Billing Specialist Shakeema Gaskin is preparing to attend the ABC3 EMS Billing conference in Hershey, PA this month. Once she has completed the course, she will be a Certified Ambulance Coder (CAC). We wish her luck and safe travels. Enjoy!

**REORGANIZATION!**

The administrative staff was recently reorganized to better serve individual Chiefs and the department as a whole. Although we are short a staff member, due to budgetary implications. We recognized the need to not hire and save a position in this trying economy. The reorganization is as follows:

Admin. Assistant Tilghman reports to Chief Crelin, Acting Asst. Chief of Administration  
 Admin. Assistant Black reports to Chief Accardi, Asst. Chief Operations/Battalion Chiefs  
 Admin. Assistant Nastasi reports to Chief Williams, Div. Chief-Fire Marshal  
 Admin. Assistant Marsh, and Executive Assistant Kazakevicius report to Cecelia Shade, Admin. Officer  
 EMS Billing Specialist Paul and Gaskin report to Exec. Assistant Kazakevicius.

For any questions or concerns regarding the administrative staff please see their respective supervisors. As always, we are here to assist with whatever you need.

**FAMILY NEWS!**

Support a safety patrol! Cecelia Shade's daughter, Tyra and Shakeema Gaskin's son, Charles are safety patrols at Poinciana Elementary School in Boynton Beach. We would love for you to come out and support their Annual Pancake Breakfast & Craft Fair being held on Saturday, October 29<sup>th</sup> at the school from 8a-12p. It is a great event with lots of goodies, silent auction, performances, and pre-holiday items to buy. Please plan to attend. You will be glad you did.

Also, Cecelia Shade's daughter, Taylor, a senior at Boynton Beach Community High School is being recruited for college basketball. She has been offered a full scholarship and has narrowed her choices down to Mercer University (Macon, GA), Long Island University (Brooklyn, NY), and Florida International University (Miami, FL). Stay tuned to see what she decides.

In the meantime, we invite you to come out and support the BBCHS Lady Tigers at their first home game on Thursday, November 17<sup>th</sup> @ 7:30p.

## PATIENT TREATMENT OUT-COME DATA

*Steve Anderson, EMT-P Division Chief Emergency Medical Services*

Emergency Medical Services (EMS) has a vital role in the rapid transport and survival of stroke patients. Improved coordination between hospitals and EMS is a cornerstone to determining whether a patient should be transported to a Primary Stroke Center or Comprehensive Stroke Center. One element to assist you with this decision in a well-integrated system would be effective patient out-come data between EMS and the stroke center.

For many years, sufficient data to define EMS at either the local, state, or national level didn't exist. The absence of this data made it difficult even to describe EMS as a profession. Today, in a coordinated effort with the three area hospitals, the EMS Division is actively tracking outcome data for every Stroke and Cardiac Alert patient. The cooperation received so far has been widely accepted by all three area transport destinations. During the next year you will see training opportunities available to personnel so they can attend weekly stroke rounds and interventional outcome meetings. The benefit is firsthand experience of the other elements that come into play after delivering your patient to the ER.

Another important component to a successful outcome for our patients is how we report our patient treatment information to the state. Emergency Medical Services Tracking and Reporting System (EMSTARS), is Florida's online pre-hospital information source. This allows us to provide incident level patient care reporting to the Florida Bureau of EMS and the National EMS Information System (NEMSIS) databases. In return, we are able to receive patient outcome data which can assist us with the best patient transport destination for various types of medical emergencies. What can you do to assist in this reporting process? When validating your Electronic Patient Care Report please do not disregard the NEMSIS validating error box. When you receive this error, you'll find the error box provides a Data Element Number. Use this number to reference the Florida EMS Data Dictionary to correct your error. If you have any questions about the process, please contact the EMS Division.

### September Out-Come Data

Hospital	Run Number	Onset of symptoms	911 called	Pt contact	Arrival ER	CT Ordered	CT Read	Door to CT Read	911 to ER
BMH	11-08811	17:21	17:51	18:00	18:32	18:37	18:52	20 min	39 min
BMH	11-08226	12:10	12:36	12:43	13:09	13:20	13:29	20 min	33 min
DMC	11-08544	08:45	09:10	09:18	09:33	09:45	10:03	30 min	23 min
DMC	11-08702	13:55	13:56	14:04	14:16	14:28	14:38	22 min	20 min
DMC	11-08781	20:55	20:55	21:03	21:17	21:22	21:28	11 min	22 min

Door to CT Read-Hospital Influence

911 to ER –EMS influence



## Special Operations News

*Mark Siciliano, Lieutenant-Special Operations Coordinator*

In August, seven of our personnel completed the Public Safety Diver Course at Coral Springs Fire Academy. This course is similar to an open water dive certification class but geared more toward public safety personnel. Those who completed are: Ryan Walker, Lindsey Bell, Kevin Mead, John Woertz, Greg TabEEK, James Bast and Jerry Spivey. Congratulations to all of you for your achievement.

In October, ten of our personnel completed the Dive Rescue 1 Course at Coral Springs Fire Academy. This course moves from recreational diving and into public safety diving. Some of the advanced skills they learned were: scene management, black water diving, diving in full face masks, search patterns, underwater communication systems and victim retrieval. Those who completed are: Ryan Walker, Kevin Mead, John Woertz, Greg TabEEK, James Bast, Jerry Spivey, James Jacobs, Tyler Adams, Matt Mejeur and Matt Mahoney. Congratulations and we look forward to seeing you on the dive team soon.

The International Public Safety Diver Conference was hosted at the Bahia Mar in Ft. Lauderdale in September the conference had various speakers and classes on many important subjects related to public safety diving. Some of the topics were: Public Safety Diver Awareness, understanding the stages and causes of stress in public safety diving.

This class offered an underwater stress inoculation course. This course put the diver in situations that would induce a higher level of stress while trying to manage situations underwater. Medical Guideline for Public Safety Diving which explained the importance of annual physical evaluations for divers and new studies to improve them. Legal Considerations for Public Safety Diving which outlined many of the legal aspects we can encounter when performing public safety diving. There were also many vendors with new product and pool sessions to evaluate them. The conference was attended by Mike Wise, Sean Gibson, Dave Wyatt and Mark Siciliano.

In September, Curtis Jepsen, Greg TabEEK, John Woertz and David Wyatt attended the Incident Response to Terrorist Bombings at New Mexico Tech in New Mexico. This 4 day course is sponsored by the Department of Homeland Security and focuses on recognition of potential bomb making components and expectations of bombing incidents. This information can prove to be valuable to hazardous materials technicians when dealing with suspicious incidents involving chemicals that may seem ordinary on their own but when combined can have a devastating outcome. Thanks to those who took the time away from their families to attend this and bring this important training back to us.





# October

## *Birthdays*

2nd  
*Steven Press*

3rd  
*Matthew Mahoney*

5th  
*John Connolly*

11th  
*Christopher Hutchinson*

13th  
*Andrew Zimmer*

18th  
*Michael Camera*  
*Joseph Falcone*

21st  
*Christopher Reynolds*

22nd  
*Hal Knabb*

24th  
*David Marchsteiner*

30th  
*Mark Locigno*



## *Anniversary*

23rd  
*Tony Ojea*  
22 years

1st  
*Robert Creasman*  
21 years

22nd  
*Travis Franco*  
*Dennis Simpson*  
*Matthew Mahoney*  
5 years

