

A First-Class HazMat Team in Our Own Backyard

From 1979 to 2001, the Houston Fire Department Hazardous Materials (HazMat) Team was the only dedicated hazardous materials response team in our area. Although world-renowned and still considered one of the best, the events of September 11, 2001 and the Anthrax attacks that followed created a need to evaluate the overall HazMat response capabilities of Harris County. Based on the reality that Harris County is the petrochemical capitol of the world and has such close ties with our national infrastructure, a decision was made to create additional resources.

In the spring of 2002, the Harris County Hazardous Materials Response Team (HC HMRT) was created by the Harris County Commissioners Court. By that summer, the initial team of two HazMat technicians and two response trucks (3/4 ton pickup trucks) was born, with a mission to respond as quickly as possible to hazardous materials situations and offer technical assistance to fire department Incident Commanders. Five years later, the HC HMRT has grown by leaps and bounds and is the second busiest and one of the best trained teams in our 13-county region. They operate as a FEMA, Type 1 HazMat Team - which includes a custom-built HazMat Response truck (called HM1). The truck carries a full complement of HazMat response equipment, is staffed with four HazMat Technicians per shift (for three shifts), and is led by a HazMat Captain.

In situations where your fire department utilizes the services of the HC HMRT, you may be wondering how it all plays out. **Bob Royall**, Chief of Emergency Ser-



vices for the Harris County Fire Marshal's Office and responsible for the day-to-day operations and management of the Emergency Response Division, was kind enough to sit down with us and fill us in.

Q *Chief Royall...when an event occurs, the HC HMRT works together with other emergency services teams like the Ponderosa VFD. How do you make this partnership as seamless as possible?*

A First, let me say that in past situations involving the coordination of PVFD and HC HMRT, the integration has been just that... seamless, and has really created a level of comfort and trust for all those involved. When the HC HMRT first responds to assist local fire departments, we report to the Incident Commander and receive their assignment.

The Team then works within that established organization to accomplish the task assigned - all the while, closely coordinating with all fire service units on the scene. In most cases, the local fire department will be asked to assist by providing Decontamination, Medical Surveillance, or Rapid Intervention support for Technicians entering the "Hot Zone". Any formal HazMat operation requires a great deal of close coordination between all response

assets on the scene.

Q *How important is training to the success of the team in real-life situations? What goes into preparing a team member (hours, specific knowledge, testing, etc.)?*

A Technical training is critically important in this highly specialized and dangerous field. Our HazMat Technicians start with 120 hours of initial training and then continue their education through formalized training courses such as WMD Live Agent Training, Advanced Radiation Training, Emergency Response to Terrorist Bombings, Chlorine Emergency Response, Railcar Emergency Response, Environmental Crimes Training, Oil Spill Response, HazMat Chemistry, Sampling and Evidence Preservation, the National Incident Management System (NIMS), and many others. Additionally, Harris County HazMat Technicians receive scheduled quarterly refresher training classes throughout the year.

In addition to participating in our own training programs, the Harris County HazMat also provides both Awareness and Operations Level HazMat Training for area Fire Departments. At the current pace, HC HazMat expects to complete the following number of training programs by the end of February 2008:

| | |
|-------------------------|----|
| NIMS/ICS Training | 24 |
| FD HazMat Classes | 68 |
| Public Education / CERT | 18 |
| Drills & Exercises | 25 |

Q *What situations call for the Hazardous Materials Response Team versus the standard fire department response?*

A Based on their level of HazMat Training, a fire department can
Continued next page

respond to and take certain actions at a hazardous material emergency. Those departments who are trained to the Awareness Level are limited in their scope while a department trained and equipped to the Operations Level will have additional capabilities. The following levels of training have been identified according to NFPA 472, Standard for Competence of Responders to Hazardous Materials/ Weapons of Mass Destruction Incidents; 2008 Edition.

Awareness Level Personnel.

(29 CFR 1910.120: First Responder at the Awareness Level) Personnel who, in the course of their normal duties, could encounter an emergency involving hazardous materials/weapons of mass destruction (WMD) and who are expected to recognize the presence of the hazardous materials/weapons of mass destruction (WMD), protect themselves, call for trained personnel, and secure the scene.

Operations Level Responders.

Persons who respond to hazardous materials/WMD incidents for the purpose of implementing or supporting actions to protect nearby persons, the environment, or property from the effects of the release. (29 CFR 1910.120)

Hazardous Materials Technician.

Person who responds to hazardous materials/weapons of mass destruction (WMD) incidents using a risk-based response process by which they analyze a problem involving hazardous materials/weapons of mass destruction (WMD), select applicable decontamination procedures, and control a release using specialized protective clothing and control equipment.

The difference between an Operations Level trained person (most fire departments) and a HazMat Technician (a HazMat Team) is the level of activities that can be performed. Typically Operations Level activities are limited to "defensive" actions only. Those may include product (spill) control such as diking, damming or diverting, extinguishment, vapor suppression, decontamination, etc. A HazMat Technician on the other hand may use specialized equipment and chemical protective clothing to take "offensive" actions against the material in order to stop or control the release.

Q How has the Hazardous Materials Response Team's role changed over the years? Where do you see it heading in the future? What will change / stay the same and how will technological advances affect the structure / responses today or in the future?

A Harris County HazMat was started in the summer of 2002 with two HazMat Technicians and two response trucks (3/4 ton pickup trucks). Those first two guys had minimal equipment and capabilities. As stated in the newsletter, their mission was to respond as quickly as possible and offer technical assistance to the Incident Commander.

Now, five years later we have certainly come a long, long way. Today, we operate a FEMA, Type I HazMat Team which includes a custom-built HazMat Response truck called HM-1. It carries a full compliment of HazMat response equipment and is staffed with a four HazMat Technicians. Our staffing is divided into three shifts and each shift has four members assigned and is lead by a HazMat Captain.

In early 2008, HM-2 (a FEMA, Type I Foam Tender) will be added to the fleet. This new high-flow foam resource will be available to assist our local Fire Departments when they need fire fighting foam or specialized HazMat assistance during large flammable liquid incidents. As far as emerging technologies go, the sky is the limit. Stand-off air monitoring instruments and robotics seem to be coming to the front. Acquiring such devices will allow us to conduct a more thorough reconnaissance within dangerous atmospheres that prohibit human entry. As more military technologies are declassified, we may see the emergence of monitoring platforms such as unmanned aerial surveillance. The future certainly looks interesting.

Q As a retired veteran of the Houston Fire Department, how do you feel your years of service have prepared you for your current position? What aspect of the job could no amount of experience have prepared you for?

A As a retired Officer with the Houston Fire Department, I look back with deep admiration to those veteran fire Officers with whom I served. Each commander challenged me in a different way. From my very first Captain, a former Marine DI who was tough as nails, to the numerous District Chiefs, Deputy Chiefs, Assistant Chiefs, and nine Fire Chiefs, each taught me valuable lessons in leadership, humility, compassion, teamwork, and that ever always present "attention to duty". Some of those empowered us to make decisions and encouraged us to grow, others managed us, and some provided the strictest of direction. I would like to believe that each

management style and leadership journey contributed to what I am today with my own personnel management and leadership personality.

When it comes to being a HazMat Officer, success in the operational end of the business is heavily dependent upon your experience as a seasoned and tested HazMat responder. On the management end of the business, it's a different story. Strategic planning, fiscal management, human resources, asset management, grant administration, statistical analysis, emerging technologies, all-hazards disaster response, and the ever-changing Homeland Security mission add another delta to the mix. No amount of street experience can prepare you to deal with such a wide range of responsibilities. To be effective, one must strike a delicate balance, understand the importance of each responsibility, and have a good understanding of where you want your organization to go.

Q *In your time as Chief of this team, what are you most proud of? What has been the biggest challenge?*

A I am most proud of our Team members. It seems like the more I challenge them, the better they become. Our more experienced Technicians have stepped up to the plate by mentoring our younger folks and showing them the ropes. This has strengthened our Team and helps develop character. It's an honor for me to be part of something so special.

As for my biggest challenge, I guess I have two.

1. Getting our staffing where it



needs to be. While we have made great strides by adding a third shift and obtaining part-time positions to maintain minimum staffing, we still need to add eight additional personnel to achieve a true 24/day on-duty coverage.

2. Getting HC HMRT onto the current modified 24 hour shift schedule. Prior to moving to this new shift, the HazMat Team worked a series of 12-hour shifts and 16-hour shifts that were extremely difficult to manage. In 2006, our after-hour responses shot up by 108%, causing us to look for ways to provide more hours/day of on-duty coverage. After many challenges and eleven months of hard work, we found a viable solution in July of this year.

Harris County HazMat is housed at the Harris County Fire & Sheriffs Training Academy located at 2318 Atascocita Rd. in Humble. The Team is comprised of

twelve full-time HazMat Technicians and twelve part time Techs.

These highly trained and skilled professionals hold numerous certifications through the Texas Commission on Fire Protection and State Firemen & Fire Marshals Association. In July of 2007, Harris County HazMat instituted a modified 24 hour shift schedule in order to maintain around the clock staffing to meet the needs of the emergency services agencies in Harris County.

As new HazMat trends evolve and demands for our service increase additional adjustments will be made in the coming years to meet those demands.

We appreciate the service and expertise of these brave men and women, and we thank Chief Royall for his time!