

Special Operations Command

Many significant enhancements have been made to all three components--Haz-Mat Operations, Marine Operations and Rescue Operations--of the Special Operations Command (SOC) since 9/11. These new initiatives and enhancements, plus new equipment and technologies, improve FDNY's ability to respond not only to a terrorist attack, but to the everyday technical rescue, haz-mat and marine incidents. The following summarizes some of the major changes to SOC since 2002.

Haz-Mat Operations

- A 24/7, on-duty Haz-Mat Battalion Chief has been added to respond to haz-mat-related fires and emergencies. Once on-scene, the Haz-Mat Battalion Chief staffs the Incident Command System (ICS) position of Haz-Mat Branch Director and functions as a subject matter expert to the Incident Commander (IC).
- Haz-Mat Technician Units have been increased from eight to 12. In August 2004, Engines 44, 165 and 274 were placed in service as Haz-Mat Tech Engines and in April 2005, Engine 250 was added as a fourth Haz-Mat Tech Engine. All members of these companies receive 120 hours of intense training, bringing each member to the Haz-Mat Technician II level. These units were provided with a Haz-Mat Tender to respond with specialized haz-mat equipment. They are a key component in Haz-Mat's *Tiered Response* plan.
- The FDNY's Hazardous Materials *Tiered Response* consists of utilizing units that have been provided mission-specific training and equipment to operate at a level of offensive response for toxic industrial chemicals, as well as weapons of mass destruction (WMD) events where CBRN materials have been released, endangering life, property or the environment. These units will operate under the direction of the IC directly or as part of a Hazardous Materials Branch in an ICS structure. The goal of the Haz-Mat *Tiered Response* plan is to better provide for the health and safety of civilians and responders by providing the IC higher-level trained and equipped responders in a more rapid on-scene

time frame.

- All SOC personnel now are required to attend a wide variety of WMD scenario-based training programs funded and delivered by the National Domestic Preparedness Consortium of the Department of Homeland Security at various locations throughout the country.
- Twenty-five SOC Support Ladder Companies have been trained and equipped with mission-specific capabilities in haz-mat and technical rescue operations.
- Twenty-five Technical Decon Engines have been trained and are capable of conducting tactical decon operations in all levels of Chemical Protective Clothing (CPC).
- Twenty-two additional Chemical Protective Clothing Ladder Companies have been trained and equipped to provide victim rescue in contaminated areas. There were only seven CPC companies



photo by Stephen "Butch" Moran

The *Bravest* is a high-performance, 65-foot fireboat. It features 50-mph, triple 1000-hp jets and pumps 6000 gpm.



photo by John Seley

Engine 44 (above) is one of FDNY's 12 Tech Engines (Hazardous Materials Technician Engine Company). Some of the members display an assortment of metering and pumping equipment for use at a haz-mat incident.

in service prior to 9/11.

- All SOC and non-SOC units assigned haz-mat-specific tasks are required to participate in annual competency assessment refresher training delivered by the Haz-Mat Training School at Randall's Island.
- The EMS HazTac Battalion has expanded from 10 units pre-9/11 to 35 units staffed by both EMTs and Paramedics trained to the Haz-Mat Technician level for medical response. EMS HazTac personnel are trained to operate in all levels of Chemical Protective Clothing, performing responder and civilian triage and treatment in both the *Hot* and *Warm* zones of contaminated patients.

Marine Operations

- The entire fleet of fireboats has been replaced since 9/11, giving the FDNY a greater number of boats to monitor New York City's 600 miles of shoreline. New boats include two 140-foot, state-of-the-art fireboats (*Three Forty Three* and *Fire Fighter II*), a 65-foot, jet-powered, fast response boat (*Bravest*), 10 33-foot, fast response fireboats and three 31-foot medical response boats.
- A new 65-foot, jet-powered fireboat currently is being built by Metalcraft Inc. This new boat will replace the fireboat *Kevin C. Kane* as the back-up boat to the *Bravest*. The *Kane* was destroyed during Hurricane Sandy.
- Marine facilities have been upgraded, including two new firehouses (Marine 1 and Marine 9), rebuilding of pier facilities at Brooklyn Navy Yard (Marine 6) and construction of a shipboard simulator at the Fire Academy on Randall's Island. A planned maintenance building at the Brooklyn Navy Yard is expected to be completed within the next year.
- Enhanced training for Marine Operations personnel, including upgrading of Pilot licensing to 500-ton; licensing of all Marine personnel, including Officers and Firefighters; swiftwater, haz-mat and shipboard firefighting training for more than 3000 FDNY personnel from SOC units and selected engines, ladders, Battalions and Divisions.
- FDNY established a Marine Operations *Tiered Response*, a system that enables the Department to rapidly deploy the appropriately scaled mix of specialty units in a manner that is responsive to an incident's escalation or recession, while also maintaining adequate capabilities to manage additional incidents and coverage across the entire Harbor. *Tiered Response* adds needed flexibility to FDNY's response.
- Marine Operations has forged some valuable partnerships with



The Hytrans pumps serve as an alternate water supply source when hydrants are unavailable or malfunctioning.



One of three new, post-9/11 (July 2005) collapse rescue vehicles that are assigned to Collapse Rescues 1, 2 and 4. Collapse Rescue 5 operates a similar, but older apparatus. Each borough now has its own collapse apparatus, which allows the Department to create five Rescue Task Forces consisting of a rescue company, a collapse rescue apparatus, a squad company with haz-mat tender, a SOC Support Ladder and a Rescue Paramedic unit.

photo by Battalion Chief John A. Calderone, Battalion 22

outside agencies, including the U.S. Coast Guard, U.S. Secret Service and the Area Maritime Security Committee, which has improved FDNY's ability to respond to events in the Harbor and interact with our Port Partners in a more efficient manner.

Rescue Operations

- A SOC Task Force with capabilities similar to the current NY Task Force 1 USAR team was established. The Team consists of 80 members from SOC units and a cache of equipment, allowing the Team to respond to any large-scale technical rescue, haz-mat, flood or terrorist incident within the City or outside the City for mutual-aid responses. Activation of the SOC Task Force allows a dedicated team to respond and operate at major incidents with the required equipment, thereby not overwhelming the on-duty SOC units and leaving them available for responses throughout the City.
- A SOC Rebreather Unit was established in 2005, which carries and maintains Draeger extended-duration breathing apparatus. These Draeger rebreathers provide up to four hours of on-air time to members, allowing extended operations when required in under-river rail tubes, tunnels and other locations that would require more than the 45 minutes provided by the current Scott SCBAs. More than 900 members have been trained in their use.
- In 2005, a Rescue Paramedic program was established that trains medical personnel to integrate with SOC units and provide advanced medical services in confined spaces, trenches and other challenging environments. Currently, there are 11 Rescue Medic Units.
- Rescue Operations acquired three high-volume Hytrans pumps for use as a water supply source in areas where water may not be available due to out-of-service hydrant systems or other problems. These pumps are capable of providing 3000 gpm for firefighting by pumping water from nearby rivers, lakes or any other water sources. They also may be used for de-watering operations; they were used extensively for this purpose during Hurricane Sandy.
- SOC has acquired two motorized rail carts and numerous manual hand carts for use during transit incidents. These rail carts provide transportation for both members and equipment in under-river rail tubes, tunnels or other transit locations.

Much in the Fire Department has changed since 2002. The Special Operations Command epitomizes much of the evolution that has taken place within the FDNY, making us stronger, smarter and better prepared to face any emergency.

