

## WNYF



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### on the web

This quarter's feature article is by Battalion Chief Gerald A. Tracy and focuses on a Firefighter Mentorship Program.

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# FDNY Training for Marine Fires and Emergencies

by Battalion Chief Donald F. Hayde and Captain Lou Guzzo

arine fires and emergencies--although infrequent--have been some of the most challenging, spectacular, resource-intensive and devastating incidents encountered in the history of the FDNY. Notably, the *General Slocum*, *Normandie*, *USS Constellation*, *Sea Witch* and *Esso Brussels* are ship fires that have taxed the resources of the Department over the years and resulted in significant loss of life.

Recently, the FDNY responded to the B-125 barge explosion at Port Mobil and the Staten Island Ferry accident. The potential for significant loss of life is heightened by terrorist attacks on maritime targets. Needless to say, an incident resulting from terrorist activity or an unfortunate mishap in New York Harbor could be catastrophic.

New York Harbor, the nation's third largest port, has more than 7000 ship transits per year (not including extensive ferry service), more than 560 miles of waterways and handles almost \$70 billion of cargo each year. The Harbor is visited by a variety of ships, including cruise liners, LPG carriers, tankers, container ships, car carriers, fuel barges, dinner boats and ferries. Major marine disasters within New York Harbor have proved to be extremely dangerous and necessitate a heightened sense of awareness and training on the part of FDNY.

Firefighting in the marine environment involves many different and complex issues that the land-based Firefighter may not have encountered previously. Some of these differences include the use of various kinds of fixed fire-suppression systems; complex and confusing deck/super-structure configurations; limited access and ventilation; and hazardous materials and cargoes. All of these factors combine to present a virtual "floating fire building" that may prove to be an unstable platform. These factors and

many others make the marine firefighting environment one of the most challenging and, possibly, one of the least understood fire problems for land-based Firefighters.

Realizing the unique problems posed by marine firefighting, FDNY started the search for supplemental training to better prepare members to operate in the marine environment. It was recognized early in the search that contrary to the myth that marine fires are handled exclusively by fireboats, land-based Firefighters are the first line of defense in response to major marine incidents.

Several training organizations--including the U.S. Merchant Marine Academy and SUNY Maritime College--were approached and evaluated. Tri-State Maritime Safety Association (TMSA)--a non-profit firefighting and training group--was selected. TMSA has a strong and unique background in this area because their instructors have experienced numerous shipboard fires.

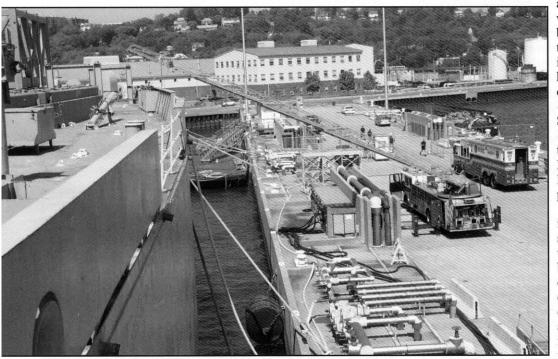
Unlike most that provide this training, TMSA offers instruction from the perspective of a shore-side firefighter. TMSA's lead instructors, Al Huelsenbeck, a 29-year veteran and Battalion Chief of the Wilmington, Delaware, Fire Department, and Doug Dillon, a retired U.S. Coast Guard (USCG) officer who was Chief of Planning of Marine Safety Office/Group in the Port of Philadelphia, have been trailblazers, committed to bringing their background and expertise to all firefighters who respond to vessel fires.

Through their "Train-the-Trainer" program, TMSA has trained a number of FDNY Firefighters to be instructors. The training covered topics such as ship construction, arrangement and systems; ship fire-detection and -suppression systems; maritime environment; ship types; vessel plans, drawings and documents; and Incident Command and strategy and tactics.

Additionally, the course addressed communication systems

and legal aspects of the maritime world, as well as other pertinent shipboard firefighting techniques. After touring a number of different vessels in the Port of New York, an extensive hands-on firefighting drill was conducted aboard the fast sealift ship, USNS Denebola, based at Homeport, Staten Island. One has to see the USNS Denebola to fully appreciate the challenge it presents to Firefighters. The Denebola is 950 feet long, draws 35 feet and has a displacement of more than 55,000 tons.

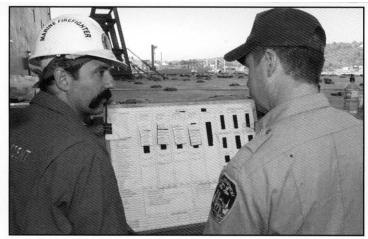
The drill--conducted by Tri-State instructors--consisted of a "darkened" space using ROSCO smoke to reduce visibility to zero. The Firefighters being trained as trainers stretched charged hand-lines into the smokedarkened, cavernous, seven-story engine room through various catwalks and ladderwells. All those who participated developed a profound respect for the challenges they would face in an actual shipboard fire. They were



Training evolutions took place on the 950-foot-long Denebola. FDNY members developed an appreciation for the hazards encountered with shipboard fires.

all photos by the FDNY Photo Unit

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FDNY members received extensive hands-on training and participated in classroom study. These FDNY members—or "trainers"—will employ their new-found knowledge and skills this fall to train additional FDNY members to deal with marine fires and emergencies.

able to transfer classroom knowledge into action at the drill staged on the *Denebola* and fully appreciate the hazards and difficulties encountered when dealing with fires aboard vessels.

The prospective FDNY instructors then enhanced their training program by participating in an intensive, week-long Shipboard Firefighting Symposium in Hampton Roads, Virginia. At this symposium, various lectures were presented by experts in the field. The week-long program also included tours of various vessels in the Port of Norfolk, as well as live fire training in the U.S. Navy Fire Trainer. The USCG delivered a hands-on incident command scenario where participants worked in all areas of the Incident Command System (ICS).

This classroom study culminated in a waterborne firefighting scenario in the James River aboard an anchored cargo ship that was part of the mothballed merchant marine fleet. This was a complex exercise in which all logistical problems associated with this kind of fire were encountered, including transporting 14 companies with all their equipment to the middle of the James River. Returning from the training program in Virginia, this knowledge was reinforced with additional training of FDNY Companies.

It is anticipated that this new training initiative will exceed proposed NFPA standards and provide members with much-needed information that will prepare them to deal with this unique and dangerous environment. Initial training will involve the Marine Division, as well as Companies that respond to waterfront locations and all Special Operations units. The two-day course will be divided equally between the classroom and hands-on operations aboard a vessel.

The first segment will consist of an extensive PowerPoint presentation, providing a general overview of shipboard firefighting, its hazards, vessel construction and layout and hazardous



Many hose lengths are required when dealing with a shipboard fire.

cargo considerations. The second segment will allow members to approach the situation with a level of realism aboard an actual vessel involving various internal, simulated fire conditions.

The intent of this training is to pass on to members and units in the field the multiple and various challenges that exist in the marine environment. In light of today's post-September 11 climate, potential terrorist targets and the means to deliver such acts can take many forms, one of which is obviously a vessel transiting the waterways of New York City. This training will better equip FDNY members to handle marine fires and emergencies that may arise in the future and do so in a safe and knowledgeable manner.

The trainers have been taught. This fall, they will train other FDNY members and share all they've learned.

Members are urged to read the following articles in WNYF:

- "The Constellation Fire," no author given, in the Winter 1961 issue.
- "The Sea Witch...and a cauldron of fire and death!," by Battalion Chief Thomas P.J. Walsh, in the 4th/1973 issue.
- "General Slocum Afire! Hundreds perish!!...as it happened, 75 years ago," by Lieutenant Frank Cull, in the 2nd issue/1979.

Also, see:

- "Collision--Fire on the River," by Battalion Chief John Richmond, in the October 1958 issue.
- "Fire Amidships," by Deputy Chief Joseph F. Connor, in the 1st issue/1963.
- "Marine Disaster...naphtha tanker fire," by Deputy Assistant Chief Joseph F. Connor and FF F.P. Barry, in the 1st issue/1967 and "Marine Disaster...sequel to naphtha tanker fire," by Assistant Chief Joseph F. Connor, in the 1st issue/1968.
- "One Unlucky Boat: The Story of O-5," by FF Paul Hashagen, in the 1st issue/1990.

#### About the Authors...

Battalion Chief Donald F. Hayde is a 27-year veteran of the FDNY. Currently, he is assigned to the Special Operations Command. He holds a BA degree from Queens College and is working on an MS degree in Fire Protection Management. This is his third article for WNYF.

Captain Lou Guzzo is a 19-year veteran of the FDNY. Currently, he is assigned to Marine 6. He holds a Masters degree in Protection Management from CUNY--John Jay College and a BS degree in Marine Transportation from SUNY Maritime College. He serves as a Commander in the U.S. Naval Reserve and is a USCG licensed officer in the Merchant Marine. He teaches shipboard firefighting as an adjunct professor at the United States Merchant Marine Academy. This is his first article for WNYF.





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