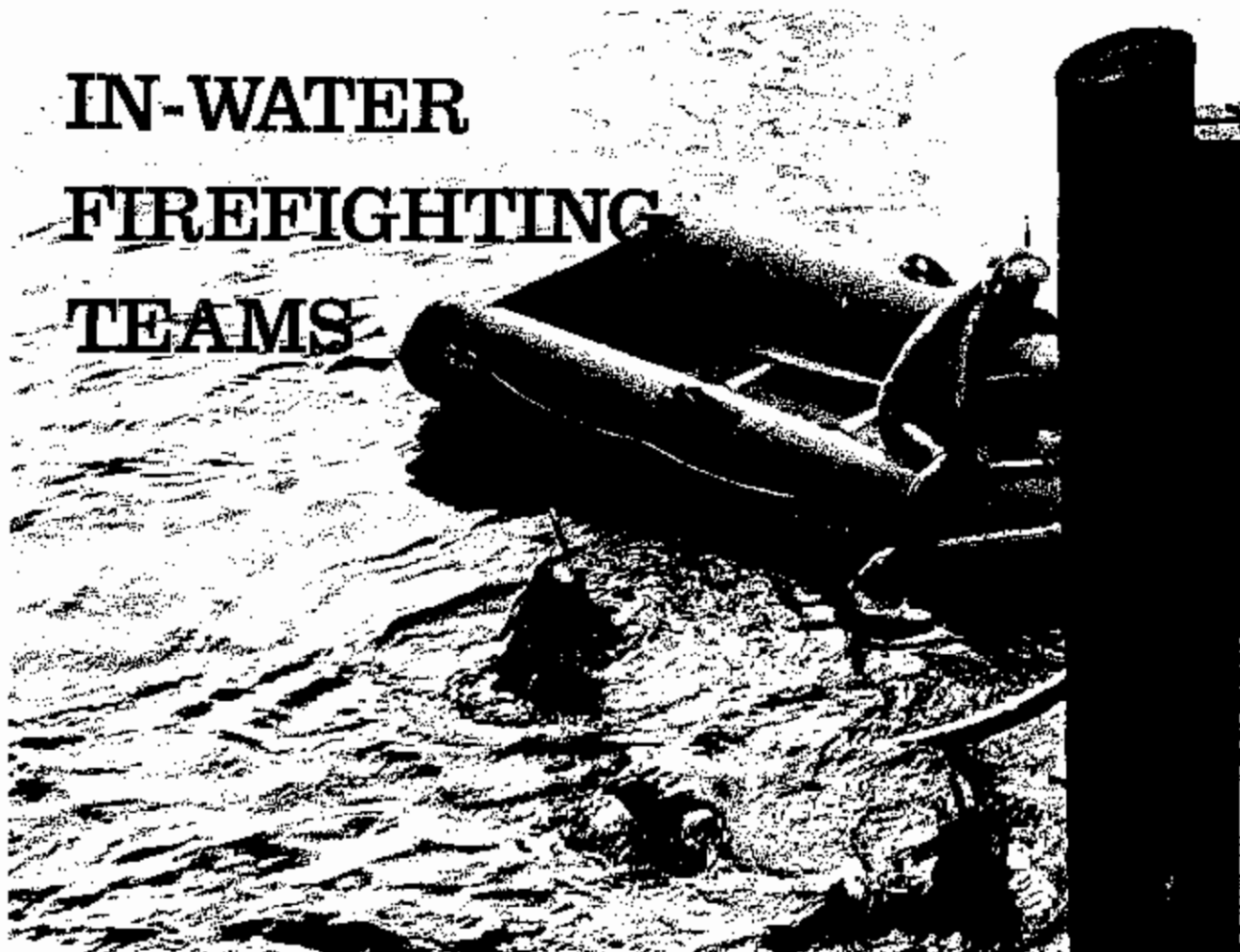


# IN-WATER FIREFIGHTING TEAMS



by

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On July 20, 1983, Department Order No. 97 announced the formation of two unique units: In-Water Firefighting Teams. Paragraph 2.2 of that D.O. reads: *Rescue Companies 1 and 2 are designated as 'In-Water Firefighting Teams.' Officers in command of incidents shall be aware of their SCUBA [SELF-CONTAINED-UNDERWATER-BREATHING-APPARATUS] capability. In-water firefighting teams have proven to be a very successful under-pier firefighting tool. SCUBA teams have a twenty-four (24) hour response capability. For further information contact Raymond M. Brown, Chief of Rescue Services, at 965-8304.*

## A BRIEF HISTORY

In 1977, an attempt to form In-Water Firefighting Teams was made in a proposal to then-Fire Commissioner John T. O'Hagan. At that time, Rescue Co. 2 had formed its own "dive club." The club consisted of fifteen Fire Department members; all qualified divers. Several members of that original dive club had more than ten years experience in various fields of diving, i.e., commercial, military, and sport. The feasibility of In-Water Firefighting Teams was proven by these members, who had gone as far as actually practicing

and establishing in-water firefighting techniques.

During the ensuing years, these members were called upon—both on and off duty—for their services. Citing just two unusual incidents, they were called upon to search for a fellow firefighter who was lost while operating at a water incident on Staten Island, and they were called upon to operate at a plane crash which occurred at LaGuardia Airport. They have also been called upon to recover numerous drowning victims, and have operated at several minor pier fires. A number of these men have not only received meritorious citations from the New York City Fire Department, but from several outside agencies as well.

Despite the advantages of establishing an In-Water Firefighting Team in the New York City Fire Department, the City's financial condition, at the time, precluded the forming of such a unit.

Events during July, 1981, changed all that. At that time, a stubborn pier fire occurred at 17th Street and the Hudson River. Extinguishing the fire at this pier, which was 100' wide and 1,000' long, proved to be extremely difficult for both land and marine units. The substructure, which was the most heavily involved area, could not be penetrated by the streams of either land or marine units. When the pier was constructed, the

wood pilings were creosote-saturated, and were placed tightly one against the other. This condition allowed the fire to travel, unhindered, through the substructure, and prevented our streams from penetrating to the seat of the fire.

The overall cost to the Fire Department, in terms of lost manpower due to injuries, in lost equipment, and in required overtime, prompted Chief of Department John J. Hart to direct then-Manhattan Borough Commander John J. Fogarty (now retired) to seek alternative firefighting strategies for these types of operations.

After a careful study of the critique that was written by the chief officers who were on the scene, it was concluded that an in-water firefighting team would have been highly effective at this fire. Deputy Chief John D. Rossi, 1st Division (now Deputy Assistant Chief, Deputy Borough Commander, Brooklyn), was assigned the task of organizing the Department's first SCUBA units. Rescue Co. 1 and Rescue Co. 2, whose response areas covered the majority of piers in the New York City area, were chosen as proposed SCUBA units.

Chief Rossi met with the company commanders of these units to establish a list of priorities that would be necessary to accomplish the task. Training, equipment purchases, policies, and operational procedures were just a few of the many areas that had to be researched. Members who were not qualified divers were trained at the Aqua-Lung Dive School of New York by Fran Garr, a highly recognized 'dive instructor.' Upon completion of this training, each unit was staffed with twenty qualified divers. This staffing provides between three and five divers, who would be on duty in each unit, every tour.

The equipment that was purchased was of the finest quality. In addition, bidding by vendors ensured the Department the best prices available. Each unit was provided with equipment that would allow them to suit up four men, complete with wet suits, tanks, regulators, masks, knives, and lights. Dry suits were purchased for use in extreme cold weather. A 12' inflatable Avon rubber raft, with a 15 horsepower motor, has been assigned to each unit. This boat allows for greater maneuverability of both manpower and equipment while in the water.

Operating handlines in the water requires a high degree of coordination and teamwork, and the training of our divers in this area was given a high priority. Floatation devices have been designed to assist in the handling and moving of lines. A perforated polyvinyl chloride pipe, mounted on a styrofoam floatation device, provides a water curtain for under-the-pier operation and protection. This device was designed and fabricated by Lieutenant George Rathjen, Marine Division, who was of great assistance during the formation stages of these units.

#### VALUE CONFIRMED

Correspondence with other fire department's who had established SCUBA teams helped us develop our operating policies and procedures. Large cities, such as San Francisco, Los Angeles, and Seattle have enjoyed much success with their SCUBA units, and were extremely cooperative with much valuable information.

The citizens of New York have, on more than one



Photo courtesy N.Y. Times

Ft. Bondy, R.2, discusses operational plans with Capt. O'Flaherty, R.1, and Fr. Williams, Weston, and VanVorst, R.2, don SCUBA gear as they proceed to seaplane/helicopter crash site on July 22, 1983.

occasion, witnessed the invaluable benefit provided by these newly formed units. A fire in the Washburn Wire Works, located on the East River in East Harlem, was brought under control quickly due to the efficient and effective work by Rescue Co. 1 SCUBA members. While our land units placed the fire under control from the top side of that pier, SCUBA teams extinguished the fire beneath the pier that, under former conditions, would have been inaccessible.

On September 19, 1982, a fire on the famous South Street Seaport Museum pier, located in lower Manhattan, quickly went to a 2nd alarm. Rescue Co. 2 members, responding from Brooklyn, could see this rapidly spreading fire from their side of the East River. (Rescue Co. 2 had been special-called because Rescue Co. 1, normally responding on this box, was operating at another multiple alarm.) This 200' x 1,000' pier was under renovation. With all the extra building material that was on hand, in addition to the aged pier itself, this fire had the potential for a major conflagration.

Rescue Co. 2 arrived on the scene with three divers suited up and prepared to enter the water. Being able to don diving gear while enroute to the scene is a unique advantage of these units. The 12' Avon raft was readied, a 1 3/4" line was supplied by the marine company on the scene, and the in-water firefighting team was able to start their operation immediately. The maneuverability of these members in the water provided them with the opportunity to engage in a close-up firefighting tactic; an advantage not available to members who were operating on the pier. Both of these pier fires were extinguished in a much shorter time than expected. The chief officers, in charge of these operations, were in agreement that the major factors in allowing for the quick and efficient extinguishment of these fires were the utilization and capabilities of the SCUBA units.

Besides being used at numerous pier fires, the SCUBA units have been used at various other water related incidents. In November, 1982, both units worked together to recover the body of the son of a New York City Police Officer, whose car ran off an abandoned pier in Staten Island.

On an extremely cold day in February, 1982, a young man, 16 years of age, was rescued from a van which



Photo by J. Pedin, N.Y. Daily News

Fr. G. Kreuscher, a member of R.I.'s SCUBA Team, operates under the pier at a fire located on the East River and 118th Street. This type of assistance to land operations has proven highly effective.

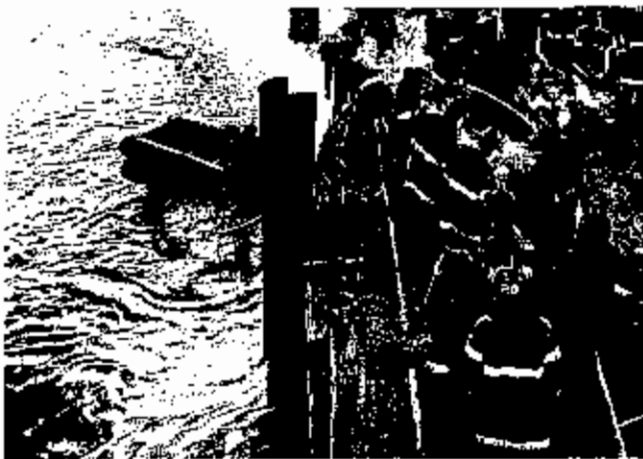
had been accidentally driven off a Greenpoint pier. Fr. Lee I. Ielpi, Rescue Co. 2, is credited with rescuing the youth, who had been trapped in the freezing water for over twenty minutes. Unfortunately, the youth, who had survived his grueling experience for almost twenty-four hours, succumbed to the effects of his ordeal.

Still another incident was the tragic crash of a Police Department helicopter and a seaplane on July 22, 1983. This incident brought the Police Department and Fire Department divers together for the first time in a joint operation. Superior officers of both Departments praised the efforts, cooperation, coordination, and team work displayed during this operation.

#### A BRIEF INTERRUPTION

An interruption of operations occurred during the summer months of 1982, when a number of divers were infected with amebiasis. Amebiasis is a disease caused by microscopic organisms, called protozoa, which affects the intestinal system. Many people who have traveled abroad have contracted this disease at one time or another. Ingestion of water containing raw sewage during training and operations was felt to have caused this condition. Monitoring by the Department of Health of

While land companies battle the fire from topside, SCUBA Team (Capt. Downey in boat, and Fr. Shelly and Van Vorst in water) operates under the pier at 2nd alarm at the South Street Seaport Museum.



these waters, and the use of a new full face mask and a dry suit will help to eliminate this problem.

#### ADVANCED TRAINING

The new full face mask is only part of the new state of the art equipment that has been put out for bid by our Department. The mask, in combination with a new light weight dry suit, will provide maximum protection against all the foreign elements with which our divers are faced. A voice communications system, providing contact between divers and members on land, is also part of the new equipment. The equipment was recommended by a nationally recognized expert in the diving field, Mr. Walter Hendricks, who operates "Lifeguard Systems." Lifeguard Systems is one of only a few such organizations in the United States that train divers in advanced rescue, recovery, search operations, and other real life situations related to SCUBA exercises.

Members of Rescue Co. 1 and Rescue Co. 2 completed their advanced training in November of 1983. The training took place at the Commercial Dive Institute in Whitestone, Queens. An old pier, formerly used by the United States Navy, provides an ideal location and site, with all the obstacles and problems that SCUBA units will most likely encounter while operating in the waterways of New York City. Members, who are detailed to the school for one week, are trained in team operations, team rescue, self-rescue, line tendering, underwater signaling, search, recovery, under pier operations, and many other water related techniques. During one day of training, a Fire Department Marine Company is special-called to the school for an on-hands session of working with the SCUBA teams. Practicing coordination with marine company personnel, SCUBA members stretch lines, operate under the pier, and set up water curtains. This also allows marine company members to familiarize themselves with water pressures that are needed, and affords them a real life look at some of the problems with which SCUBA divers are faced.

SCUBA members are afforded the opportunity to participate in a "decompression" exercise, which lets them feel what diving at 150 feet is like. At the completion of training, SCUBA members are tested and given ratings, which provides officers in command of those units with a workable selection of men for various types of operations.

Working towards a common goal, Deputy Chief Raymond M. Brown, Chief of Rescue Services, and Mr. Hendricks introduced plans and programs that not only tend to ensure the safety of our SCUBA members, but also increases their efficiency at operations. The expert training provided by Mr. Hendricks, and his staff, has already made a profound improvement on the excellent services that are provided by these units.

#### CONCLUSION

The purchase of state of the art equipment, the on-going and advanced training that is continually received, in addition to the dedication of both our members and our superior officers, have added yet another dimension to the unique and exceptional services that are delivered to the citizens of this City by the New York City Fire Department. ▲