

unday, August 31, 2003, began as a beautiful, clear, sunny morning, with comfortable temperatures. The day before Labor Day, it was a welcome change from the very rainy summer that New York City had just experienced. Later that afternoon, units throughout the City took note of an unusually large, black column of smoke and, in some cases, visible flame, from across the harbor in New Jersey. At one point, a caller from Brooklyn reported that Governor's Island was on fire.

Firefighters in Kearny, New Jersey, had their hands full. They had responded to an alarm from the Columbia Terminal area of that city at approximately 1530 hours to find a heavy fire condition below the deck of an abandoned heavy-timber pier that was approximately 100 feet wide and 1000 feet in length. The fire had a strong hold in the supporting structure beneath the deck and already had burnt through openings in the deck, extending fire along its topside.

Kearny is located at the northern end of Newark Bay, five miles north of Staten Island, between the Passaic and Hackensack Rivers. Jersey City is located to the east, while Newark is situated to the west. Kearny is 9.3 square miles, composed primarily of industrial and commercial occupancies, and a population of 40,500. Similar to many nearby New Jersey cities, it is protected by a paid fire department; in this case, five engine companies and a ladder company.

The location of the fire itself caused additional problems. The fire was located in a remote area of that city with limited road access. Water relays were needed to supply pumpers near the point of operation. At one time, the site had been a shipyard owned by United States Steel and was known as the Federal Shipbuilding and Drydock Company. During World War II, this facility was a major player in construction of destroyers, cruisers, cargo and transport ships built for the U.S. Navy. In more recent years, decommissioned naval vessels were dismantled here. The facility has been vacant and unused for several years.

Firefighters from Kearny and numerous other local fire departments that responded on mutual aid fought the stubborn fire, containing it to the original pier involved. (There was another pier in the same slip, opposite the original pier and about 100 feet away. However, the wind was not blowing that way. Additionally, there was an abandoned crane upwind of the fire.) Final extinguishment was more challenging; it was necessary to apply large quantities of water to the under-pier areas. None of these fire departments had the capability to do this in a reasonable manner.

At 1652 hours, Battalion 22--Battalion Chief John A. Calderone--and Engine 156, led by Captain Robert Shaffer, were assigned to Staten Island Box 376, Broadway and Richmond Terrace, to board Marine 9, the *Fire Fighter*, commanded by

Captain Thomas Whyte, and respond to Kearny to assist at this fire. While en route, through the FDNY dispatcher making contact with the Kearny dispatcher, Chief Calderone obtained the cell phone number of the Kearny, New Jersey, Fire Department Incident Commander at the pier fire. Contact was made with him to determine the exact location of the incident, conditions onscene and receive orders for FDNY operations on arrival.

Additionally, Chief Calderone requested that the Kearny Fire Department provide FDNY with a liaison, equipped with a portable radio on their fireground frequency. Using the information provided by the Incident Commander, the fireboat pilot, Edward Mauro, checked navigation charts to determine if the water was deep enough for the *Fire Fighter* to operate in. These charts showed the depth in the slip where FDNY would operate to be between 16 and 29 feet. The *Fire Fighter* requires nine feet.

Marine 9 arrived at a position just off the burning pier in Kearny at 1730 hours. A visual survey was conducted of the slip, pier and fire area. A decision was made to position the boat alongside the north end of the slip to afford maximum stream penetration under the pier. As the *Fire Fighter* slowly attempted to enter the slip, the boat touched bottom. The pilot quickly reversed engines and backed the boat into the channel. Contact was made with a small New Jersey State Police boat that was equipped with a depth finder. This boat entered the slip and conducted a survey. The actual depth in the slip was determined to be between two and nine feet, not the 16 to 29 feet indicated on the navigation charts. This shallow depth precluded Marine 9 from operating in the slip.

Chief Calderone now was faced with two alternatives. Members could sit in the channel for a few hours until high tide and attempt to enter the slip again. However, this option left open

the possibility that the water depth in the slip still would be inadequate for the *Fire Fighter*.

The other choice was to return Marine 9 and have Marine 6 respond in its place with the fireboat *Kane*. The *Kane* requires only $4^{1/2}$ feet of water in which to operate. In order to maximize operating time--considering the amount of daylight remaining--this was the course of action followed. Marine 6, under the command of

Setting up operations, Kearny, NJ, firefighters flake out hose-line. In photo above, members of the *Kevin Kane* operate in the slip to extinguish remaining hidden fire in the under-pier areas.

photo by Ronald Jeffers

KEARNY FIRE DEPT.

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(Above) Fire was contained to the original pier involved. (Below) *Kevin Kane* operated for more than five hours at this incident.



Lieutenant Henry Lombardi, was assigned and Marine 9 started back. The two boats met in Newark Bay, northwest of the Bayonne Bridge, and Chief Calderone transferred over to Marine 6. Since the *Kane* is much smaller than the *Fire Fighter*, insufficient room existed to safely accommodate the members of Engine 156 and that unit returned with Marine 9.

Marine 6 arrived at the burning pier, entered the slip without problem and tied up at the east end. Chief Calderone made contact and conferred with the Incident Commander. A portable radio on the Kearny Fire Department handie-talkie frequency was obtained. All personnel operating on the pier were removed a safe distance and Marine 6 started to operate. Employing three deck pipes and a hand-line, operating for a little more than an hour and by repositioning several times, Marine 6 knocked down all visible fire beneath the pier deck.

Although fire no longer was visible, it was obvious from the smoke condition still being generated that there was some deep-seated fire burning. To get at this hidden fire, it was necessary to cut the pier decking from above. Various New Jersey units were given this assignment, but the bulk of the work was handled by Elizabeth Rescue 1. Working with saws and hand tools, they opened the pier deck to expose hidden fire, then withdrew a distance from the hole. Marine 6 protected these members while they cut the holes and then operated deck pipes into the holes to extinguish the exposed fire.

This process was repeated for several hours under the supervision of the Incident Commander until the fire was placed under control. Several times during this process, members of Marine 6 used its chain saw and a hand-line to expose and extinguish hidden fire along the string piece, which is the wood over the pilings--similar to a joist--that holds them all together. After operating for more than five hours, Marine 6 headed home.

Comparison of Fireboats					
Boat Fire Fighter Kevin C. Kane	Length 134' 52'	Width 32' 16'	Draft 9' 4'6''	Capacity 20,000 gpm 6500 gpm	Year Built 1938 1992

Lessons learned

- Contact Incident Commander. When responding on mutual aid, if at all possible, the ranking FDNY Officer should make direct contact with the Incident Commander to determine existing conditions, an exact location to report to and operating orders. This will save time and ensure a more efficient operation. Almost everyone today has a cell phone. The FDNY dispatcher can make contact with the dispatcher of the department FDNY members are responding to and obtain a cell phone number for the Incident Commander or communications personnel at the scene. This number should not be transmitted over the radio. (For additional information on mutual aid and guidelines, see "FDNY Provides Mutual Aid to Yonkers," by Battalion Chief Michael J. O'Brien, and "Mutual-Aid Guidelines," by Assistant Chief Joseph J. Callan, Bronx Borough Commander, in the 2nd/2003 issue of WNYF.)
- Liaison/portable radio. The handie-talkie frequency used at the scene of a mutual-aid response will not be the same as that used on FDNY handie-talkies. Members will not be able to monitor operations or communicate with the Incident Commander or other personnel on the scene. It is imperative that FDNY members request that a radio-equipped liaison or, at the very least, a portable radio on the fireground frequency be assigned to the ranking FDNY Officer responding. This is a critical safety issue, because members need to know what is taking place on the fireground, if they are operating in a safe location and to receive orders promptly. Each time Elizabeth Rescue 1 opened a hole in the pier deck to expose hidden fire, it was necessary to remove operating personnel to a safe area before Marine 6 operated deck pipes into these holes. This was accomplished by the Kearny Incident Commander transmitting an evacuation tone over their handie-talkie frequency. Each time this tone was sounded, there was an orderly evacuation of operating personnel from the pier. The Incident Commander then advised Marine 6 via handie-talkie that it was safe to operate deck pipes. A radio-equipped liaison from the home fire department assigned to FDNY is the ideal situation because this person is knowledgeable about his department's operating procedures. However, to conduct a safe operation, the minimum requirement dictates that the ranking FDNY Officer operate with one of the other department's portable radios.
- Navigation charts. This incident proved that FDNY cannot place total reliance on navigation charts. There was a 14- to 20-foot difference between the minimum depth indicated by the chart and the actual existing water depth. In unused bodies of water where the tide does not flow as freely and there is little ship movement--such as in abandoned slips--silt accumulation can build up several feet, dramatically changing the actual water depth available for operations. Fireboats entering such suspect locations should do so slowly and be prepared to back out quickly, as Marine 9 did at this incident.
- *Incident Command System*. The Kearny, New Jersey, Fire Department--like FDNY and the vast majority of emergency response agencies throughout the United States--operates under the Incident Command System. While FDNY units have never drilled with Kearny units, members were able to integrate flaw-lessly at this ongoing operation and perform efficiently at this fire by becoming the marine branch at this incident.

About the Author...

Battalion Chief John A. Calderone has served the FDNY since 1973. Currently, he is working in Battalion 22. He holds a degree in Fire Protection from New York City Community College and has written extensively on the subject of fire apparatus. He is a regular contributor to WNYF.



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