

Special Apparatus--The Squads

by Battalion Chief John A. Calderone

At various times throughout the history of the New York City Fire Department, Squad companies have been established to perform specific functions, usually to compensate for manpower shortages.

For a short period of time during World War I, a "flying squadron" operated from the quarters of Engine 40. This unit was assigned a converted hose wagon and driven by a regular firefighter. It was staffed by as many as 30 members of the auxiliary corps and assigned to respond on second alarms throughout Manhattan and on third alarms in the Bronx. Its purpose was to provide additional manpower at major incidents to alleviate the critical manpower shortage caused by the war.

World War II again brought about manpower shortages, with many firefighters serving in the armed forces. To cope with this situation, three Squad companies were established. Squad 21 was organized at the quarters of Ladder 24, then located on West 33rd Street. Engine 20--then located on Lafayette Street--was reorganized as Squad 22 and Engine 204 was reorganized as Squad 24.

Staffing on these Squads consisted of an officer and 10 firefighters per tour. Their primary purpose was to furnish additional manpower to control the fire. They carried only hand tools. They were not used for overhauling and were returned to service as rapidly as possible, to be available for the next fire. Their apparatus consisted of hose wagons that had been converted into personnel carriers by the addition of bench seats in the hose beds. These units reverted to their pre-war status in 1945, as the manpower shortage eased with the return of the World War II veterans.

A study conducted in the mid-1950s showed that certain sections of the city were being stripped of engine and truck companies due to simultaneous alarms. The Department decided to create highly mobile units capable of moving quickly into any area where a critical temporary shortage of units existed, to provide coverage where the response of regularly assigned units was delayed or inadequate. These new units were established in areas that were primarily high fire incidence tenement areas.

In 1955, again using converted hose wagons, the Department organized Squad 1 in Harlem, Squad 2 in the South Bronx, Squad 3 in Bedford-Stuyvesant and Squad 4 in Brownsville. Starting in 1958, enclosed vans replaced the hose wagons.



Squad Companies 1 and 41 operate 1000-gpm rescue-pumpers, equipped with additional compartments to carry assigned equipment.

all photos by Battalion Chief John A. Calderone

During the next few years, five additional Squads were organized. Squad 5 was established on the Lower East Side. Squad 6 was organized on the Upper West Side and Squad 7 was organized in Greenpoint. These three units came on-line during 1959. The following year, Squad 8 was established in Chinatown. And in 1961, Squad 9 was organized on the Upper East Side.

This was a time period before engine and ladder companies had minimum staffing levels and manpower was balanced among units. It was not uncommon to have units responding with less than adequate personnel. The original purpose of these Squads was to supplement understaffed units responding on the initial alarm. Consequently, each Squad had a rather large first-alarm response district. They were used to help at whatever task was lacking in manpower: assisting in stretching and operating initial hose-lines, ventilating or performing the primary search. Generally, if the fire escalated beyond the first-alarm assignment, the Squad would take up and return to service when the second-alarm companies arrived on the scene. Only masks and hand tools were carried by these Squads.

Starting in 1966, pumpers began to replace the vans assigned to the Squads. As the Department entered what became known as "The War Years," it became an everyday occurrence in the busy areas not to have sufficient engine companies available. Three of the Squads were closed and their personnel used to organize new companies in these busy areas. Assigning pumpers to the remaining Squads, in effect, gave the Department six extra engine companies that could be deployed as needed.

With the Squad companies now arriving on the scene with fully equipped pumpers--often before the assigned engine companies--their function began to change and their mission was redefined. The Squads were relieved from responding on initial alarms and given larger geographic areas to respond to on working fires. Additionally, the Squads were used during certain hours to respond as the first section of busy engine companies, freeing those units to answer subsequent alarms. Unfortunately, the Squads did not survive the severe budget cuts during the financial crisis and all were disbanded on May 1, 1976.

When it appeared that the book had been closed on the Squads, Squad 1 was reorganized on December 3, 1977, in the former quarters of Engine 269, which had been closed during the budget crisis. The local community had placed great pressure on the City to reopen Engine 269 and a compromise was struck, establishing Squad 1. Squad 1 was assigned a fully equipped pumper, ladder company hand and power tools and a high-expansion foam generator. Responses included the former first-due boxes of Engine 269 and 10-75 signals within a designated area.

A similar situation arose in 1990, when Engine 41 was reorganized in the Bronx. This unit was equipped, operated and responded in a manner similar to Squad 1, but was designated as an enhanced engine company.

In recent years, the Department has been faced with new missions and functions. In addition to routine hazardous materials incidents, collapse and confined space operations, the Department



The remaining Squads operate conventional pumpers that have been modified with additional compartments and large equipment boxes.

has been charged, by Mayoral Directive, with mitigation of chemical or biological agents and decontamination of those affected in a terrorist attack. To perform these functions, it is necessary to have strategically located units that are properly trained and equipped. For these reasons, five additional engine companies--Engines 18, 61, 252, 270 and 288--were selected and designated Squads on July 1, 1998, giving the Department a total of seven Squad companies.

These units received intensive training in ladder company operations, collapse, confined space, high angle and other rescue operations. Additionally, they received extensive haz-mat mitigation and decontamination training. The Incident Commander can employ the Squads at fire operations as either an engine or ladder company, depending on the conditions and tasks to be performed.

These new Squads continue to respond to the first-alarm boxes that they were assigned to prior to their designation as Squads. Additionally, each Squad is assigned a large, 10-75 response district. A Squad also is assigned to respond on receipt of a 10-76. Upon receipt of a 10-60, the nearest available Squad and Squad 1 with the Technical Response Vehicle, are assigned to respond. In addition to standard engine and ladder company equipment, each Squad is assigned air bags, cutting torch, exothermic torch, Partner and chain saws, hydraulic tools, cellular phone, thermo-spy heat detecting device, thermal imaging camera, generator, sawzalls, whizzer saw, multi-gas detector meter, Paratech air gun, cribbing and a Hurst Tool system with cutter, spreader and rams.

Squad Companies 1 and 41 operate with custom-built apparatus called rescue-pumpers. These pumpers have 1000-gpm pumps and 500-gallon tanks, similar to standard engine company apparatus, but they also have extra compartments and a different body



Each of the Squad companies is designated a Hazardous Materials Technician Unit and operates a second piece of apparatus, designated a Haz-Mat Tender.

configuration to accommodate the additional tools and equipment carried by these units. The remaining five Squads are all equipped with standard pumpers that have been modified with extra compartments and equipment boxes.

All of the Squad companies also have been equipped and designated as Hazardous Materials Technician Units. The members have been trained in the selection and use of chemical protective clothing, haz-mat control equipment, air monitoring equipment, decontamination procedures and mitigation of leaks, spills and other releases. Each is assigned a second apparatus to carry the haz-mat equipment. These vehicles, designated Haz-Mat Tenders, have a standardized configuration and carry the same complement of equipment, except for Squad 1. Squad 1 staffs the Technical Response Vehicle as its second piece of apparatus. However, all equipment carried on the Haz-Mat Tenders also is carried on the Technical Response Vehicle. Rescue 5 also is designated as a Haz-Mat Technician Unit and assigned a Haz-Mat Tender.

All assigned haz-mat equipment is carried on the Haz-Mat Tender except for level-"A" suits, which are carried on the Squad's pumper to ensure availability at all times. Whenever a Squad leaves quarters for training or other non-response activities, the Haz-Mat Tender also is taken to ensure the unit's full haz-mat technician capability. For other than haz-mat responses from quarters, the Haz-Mat Tender remains in quarters. If necessary, it can be picked up by another unit and delivered to the scene.

Equipment carried on the Haz-Mat Tenders includes decon pool and supplies, level-"B" suits, grounding and bonding cables, non-sparking tools, resource books, over-pack drums, drum cart, an assortment of gloves and boots, air hose and regulator, fuel transfer pump, wedges, pails, tape, an assortment of portable extinguishers, sampling tubes, brooms, squeegees, shovels, radiological meter, binoculars, Vetter leak sealing kit, funnels and other assorted mitigation equipment. Supplies of absorbent booms and pads, speedy dry, bio-solve, soda ash and G-1 powder for metal fires are carried, too.

Whenever Haz-Mat 1 responds, a Haz-Mat Technician Unit also is dispatched. When Haz-Mat 1 is not available for a response, a Haz-Mat Technician Unit is assigned. The Haz-Mat Technician Unit will assist Haz-Mat 1. If the Haz-Mat Technician Unit arrives before Haz-Mat 1, members will perform an assessment of the incident and advise the Incident Commander of their ability to handle the incident or the need for additional resources. If an entry into a contaminated area is involved, the Incident Commander shall request the response of an additional Haz-Mat Technician Unit. At mass casualty haz-mat incidents, Haz-Mat Technician Units can be used for victim removal, first aid and decontamination. When many victims are involved, the primary function of Haz-Mat Technician Units will be decontamination.

The current seven Squad companies, with their training and additional equipment, offer the Incident Commander a valuable resource with enhanced capabilities to support a wide range of specialized operations, as well as normal, day-to-day firefighting.

About the Author...

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