

Special Apparatus--Thawing Apparatus

by Battalion Chief John A. Calderone

New York City's changing seasons often result in weather extremes. Winters can be harsh, with extreme cold spells that result in punishing firefighting operations. Apparatus and equipment often become ice-coated and hydrants freeze. Over the years, these winter problems were dealt with in a makeshift manner, such as redirecting steam from the boilers of steam pumpers onto the frozen surfaces, to melt the ice. Triple-combination pumpers ultimately replaced all of the steamers, eliminating steam as an option. To deal with these chronic winter weather problems, the Department created one of the least familiar special units in the fleet--the thawing apparatus.

The original thawing apparatus, designated Hydrant Service Units, consisted of gasoline-fired steam boilers, a water tank to supply water to the boiler and high-pressure, steam-applicator hose. This combination provided a suitable means to thaw out frozen equipment at the scene of operations, as well as thaw out frozen hydrants during severe, prolonged cold spells. Later models were oil-fired instead of gasoline- and finally, diesel-powered. At one time, a fleet of 13 such vehicles were operational, one assigned to each Division.

Currently, there are five thawing apparatus in service, one in each borough as follows: Thawing Apparatus 1 at Engine 76, 145 West 100th Street; Thawing Apparatus 2 at Engine 97, 1454 Astor Avenue; Thawing Apparatus 3 at Engine 151, 7219 Amboy Road; Thawing Apparatus 4 at Engine 247, 1336 60th Street; and Thawing Apparatus 5 at Engine 293, 89-40 87th Street.

There are two different types of thawing apparatus currently in the fleet. The older type was built in 1984 by Columbia Coach on four-wheel-drive GMC chassis. The actual installation of the



Older-type thawing apparatus are assigned to Thawing Units 2, 3 and 5. They are 1984 GMC four-wheel-drive units that were outfitted by the Shops.

photos by Battalion Chief John A. Calderone



Thawing Units 1 and 4 are assigned 1989 GMC four-wheel-drive apparatus. These have skid-mounted bodies that easily can be removed and remounted on other flatbed chassis.

steam generators and associated equipment in these vehicles was accomplished by the Shops. These apparatus were assigned to Thawing Units 2, 3 and 5.

The newer thawing apparatus were purchased in 1989 from Saulsbury and are built on GMC four-wheel-drive chassis. These apparatus are designed differently than earlier thawing apparatus. The bodies housing the steam generators and equipment are skid-mounted, enabling the chassis to be used for other purposes if required. This design also permits remounting the skids on other chassis. These two apparatus are assigned to Thawing Units 1 and 4.

Thawing Units are not permanently staffed. During extended periods of freezing weather or when a severe winter storm is predicted, Thawing Units are staffed by trained personnel. In addition to potential duty at fires or emergencies to thaw out frozen equipment, they also are used to thaw out hydrants that have been identified as recurrently freezing.

Although Thawing Units do not have automatic response assignments, they may be special-called to any

operation where their services would be of assistance. When not independently staffed, they are operated by their associated or trained back-up engine company.

About the Author:

Battalion Chief John A. Calderone is a 25-year veteran of the FDNY. Currently, he is assigned to 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.

