

Collapse Units

by Battalion Chief John A. Calderone

Prior to the terrorist attack on the World Trade Center on September 11, 2001, the Department's specialized collapse capabilities consisted of a single Collapse Unit quartered with Rescue 3 in the Bronx. This was a 1995 Ford/SuperVac tractor-trailer that carried trench jacks, air shores, hydraulic jacks, chain saws, air nailers and nail guns, surveyor's transit, carpenter's tools, ultra-sound listening device, fiber optics search camera and probe, pavement breakers, air compressor, exothermic torch, dewatering pumps, laser range meter and other specialized collapse equipment, in addition to a large quantity of shoring material.

The McKinsey Report, which focused on enhancing the Department's preparedness, suggested a re-evaluation of Special Operations capabilities with an eye toward dealing with simultaneous, multiple, large-scale incidents. Among other potential incidents considered were possible attacks on infrastructure, particularly bridges between boroughs. Accordingly, plans are being developed so that each borough can be self-sufficient and operate independently.

Using a 1991 Mack/Saulsbury apparatus that had been employed as a spare rescue, a second collapse unit was established at the quarters of Ladder 132 during February 2004. At that time, the City was split in half with the original Collapse Unit assigned initial collapse response in the northern half, while Collapse Rescue 2 responded to the southern half. This arrangement lasted for only a few months.

During the summer of 2004, reacting to specific threat assessments, the Department moved the apparatus of Collapse Rescue 2

to Ladder 25 in Manhattan, designating it Collapse Rescue 1. A rented vehicle replaced it at Ladder 132. Simultaneously, Collapse Rescue 6, a temporary unit, was established with Rescue 6 at the quarters of Ladder 20, also using a rented vehicle. The original Collapse Unit was designated Collapse Rescue 3 at this time.

During July 2005, three new collapse apparatus, built by Ferrara on Mack chassis, were placed into service as Collapse Rescues 1, 2 and 4. The 1991 Mack at Collapse Rescue 1 was reassigned as Collapse Rescue 5. This provides each borough with its own collapse apparatus and allows the Department to create five Collapse Rescue Task Forces consisting of a rescue company and a collapse rescue apparatus.

Collapse Rescue Task Forces 1, 2 and 4 also include the SOC Support Ladder Company with which the collapse rescue is quartered. Collapse Rescues 3 and 5 are quartered with their associated rescue companies. Each Collapse Rescue Task Force is assigned back-up units in the event the primary unit is unavailable. In such a case, the back-up unit would respond to the collapse rescue apparatus quarters, pick up the apparatus and respond to the scene. Each task force is assigned an initial response area that coincides with that of its associated rescue company.

Collapse Rescue 1 is located with Ladder 25. Ladder 14 is its back-up unit. Collapse Rescue 2 is quartered with Ladder 132, while Ladder 131 is its back-up unit. Collapse Rescue 3, now operating with a 2002 GMC tractor that replaced its original Ford tractor, is quartered with Rescue 3. This is the only Collapse Rescue apparatus that is a tractor-trailer.

all photos by Battalion Chief John A. Calderone



One of three new collapse rescue vehicles that are assigned to Collapse Rescues 1, 2 and 4. Collapse Rescue 5 operates a similar, but older apparatus.



Collapse Rescue 3 operates this tractor-drawn collapse rescue apparatus.

Ladders 27 and 42 are back-up units for Collapse Rescue 3. Collapse Rescue 4 is located with Ladder 116, with Ladder 146 functioning as the back-up unit. Collapse Rescue 5 is quartered with Rescue 5. Its primary back-up unit is Engine 160, housed in the same quarters. Ladders 77 and 79 are also back-up units for Collapse Rescue 5.

A Collapse Rescue Task Force will be assigned to respond to the initial report of a structural collapse or scaffold incident. Two Collapse Rescue Task Forces will

respond to reports of trench cave-in, major structural collapses and on transmission of a 10-60 signal.

To further enhance collapse capabilities, the Department has purchased 10 collapse pods, which have been stocked with shoring, metal and concrete-cutting saw blades and a cutting table with templates for fabricating shoring. These containers are dispersed at Department facilities throughout the City, with two containers in each borough.

To transport these containers, two 2004 Mack roll-off trucks have been placed into service. Engine companies have been trained to operate these vehicles. Roll-Off 1 is located at the Fire Academy. Engine 91 is the primary delivery unit, with Engine 60 as the back-up unit. Roll-Off 5 is located at the quarters of Ladder 79. Engine 156 is its primary delivery unit, while Engine 154 is its back-up unit. These pods are not intended for use during routine



Two roll-off trucks have entered service to transport 10 collapse pods that are pre-positioned throughout the City.

collapse operations and can be requested only by a Command Chief.

The establishment of Collapse Rescue Task Forces and pre-positioning of pods with stockpiles of supplies have greatly enhanced FDNY's collapse rescue capabilities.

About the Author...

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