

SPECIAL APPARATUS

Dry Chemical Units

by Battalion Chief John A. Calderone

Most fires involving ordinary combustible materials, known as Class A fires, are extinguished readily by water. Class B fires involve flammable or combustible liquids, flammable gases, greases and similar materials. Extinguishment of Class B fires is accomplished most readily by excluding oxygen, thereby inhibiting the release of combustible vapors and interrupting the combustion chain reaction. Class C fires involve live electrical equipment and extinguishment requires the use of non-conductive extinguishing agents.

Class B and C fires are more difficult to extinguish than Class A fires. Dry chemical extinguishing agent is quite effective on these two kinds of fire. While dry chemical extinguishers always have been part of the Department's fire-fighting arsenal, these were small-capacity units available in limited number and more suited to minor fires.

The ingredients used in dry chemical extinguishing agents generally are considered as non-toxic, but the discharge of large quantities of agent may cause temporary breathing difficulty and interfere with visibility, especially in enclosed areas. When introduced directly into the fire area, dry chemical causes flame extinguishment almost immediately. While the exact mechanism and chemistry of the extinguishing action are not definitely known, smothering, cooling and radiation shielding contribute to the efficiency of dry chemical as an extinguishing agent. However, studies suggest that a chain-breaking reaction may be the principal cause of extinguishment.

The rapid increase in the number of vehicles powered by alternate fuel poses a new fire problem for the Department. As a result, FDNY has placed into service two large-capacity dry chemical apparatus. These units are equipped with a Foam Boss dry chemical system containing 1000 pounds of extinguishing agent. The activation of two 300-cubic-foot nitrogen cylinders expels the extinguishing agent through hand-lines. There are two one-inch hand-lines carried on hose reels. Each hand-line is 100 feet in length. They can be used independently or simultaneously.

This firefighting package is mounted on vehicles that are slightly larger than pickup trucks, making them highly maneuverable. These vehicles are quite similar to rapid intervention vehicles and ramp patrol vehicles often found at airports. Portable dry chemical extinguishers also are carried on these units.

Both units are quartered in Brooklyn, with Engine 228 in Sunset Park and Engine 229 in Greenpoint. These locations offer rapid highway access. The Dry Chemical Units are staffed by the engine company with which they are quartered and are available by special call to any incident where their services could be beneficial.

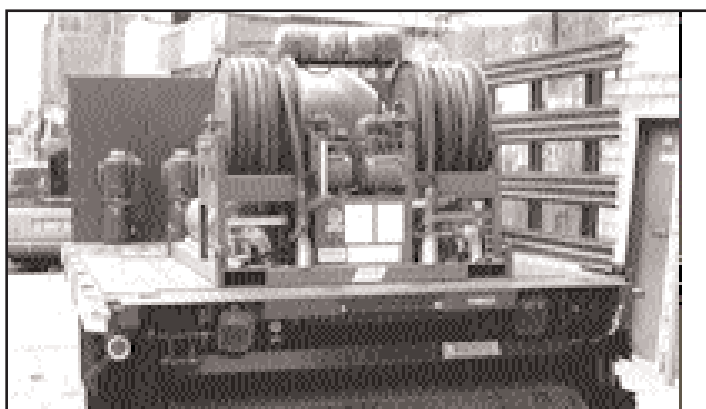


A 1000-pound dry chemical skid-mount package is mounted on a small flat-bed truck. The Department has two of these units in service.

all photos by Chief John A. Calderone



This view shows the two hose reels and the four portable dry chemical extinguishers that also are carried by these units.



A close-up rear view shows both nitrogen cylinders, nested under the hose reels. Nitrogen is used to discharge the dry chemical.

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.



you have been so pleasant that it only seemed like 60 years. All the best to you and Anne...Congratulations to **Roger** and **Daisy Holzmacker** on the birth of their daughter, Grace Ann...This year, Marine Six will celebrate the 60th anniversary of their boat named *Fire Fighter*. Anyone interested in participating in the ceremony, please contact Marine Six....*Squad One--SQ-1* wishes all the best to **Doug Roy** on his retirement. Smooth sailing, Doug!...Greetings from SQ-288...At Squad 288, we extend our deepest sympathy to the **Blackmore** and **LaPiedra** families. Our thoughts and prayers are with them. And, for the Brothers who were in the Burn Center, we wish them a speedy recovery...SQ-288 welcomes aboard a fine bunch of guys from all over the city...Thanks go out to Haz-Mat 1 for accepting us with open arms...Congrats to the SQ-288 volleyball team for placing fifth in the **Lieutenant Williams** Volleyball Tournament in Long Beach...Don't worry, guys, we will eventually figure out where we are going. Anybody have a map?...Maspeth residents would like to thank **Tim Welty** for the fine job he did saving "Muffy" the local cat. He just knew he had to do it...Congrats to **Hank, Jerry, John** and **William** for graduating at the top of their chauffeur school class.

Retirees

by James R. (Jim) King

The music long since has been silenced, the lights gone out and the crowd gone home, but the memories of a fantastic evening at the **1998 FDNY Retirees Reunion** lingers on. A crowd of 450 former and current firefighters, wives, friends and significant others attended the gala dinner/dance at the Original Antun's and enjoyed the opportunity to meet and greet all their old friends and comrades in blue. The spotlight, however, was on the guest of honor for the evening, **James Curran**, the President of the NYC Firefighters Burn Center Foundation at Cornell Medical Center and New York Hospital. Through Jim's efforts, more than \$250,000 recently was donated to our Burn Center in what has become an annual event. The salute to Jim Curran was a real tribute to a humanitarian who has truly furthered the cause of care for burn victims--be they firefighters or civilians. Awards of appreciation were presented to **Vince McCarthy** and **Ken Nagle** for their dedicated service to the retiree movement. Both honorees always have been in the forefront for the good and welfare of all retired firefighters and they were warmly received by the party-goers. Making the



Grand March: Lined up were (left to right) NYS Supreme Court Justice William Bellard (formerly of E-255), Award of Appreciation winner Ken Nagle, former Fire Commissioner Gus Beekman, guest of honor Jim Curran, FDNY Chaplain Rev. Everett J. Wabst, Award of Appreciation winner Vince McCarthy, Dr. Harvey Himmel from the Burn Center staff and Jim King, representing the United Retired Firefighters Association and President of the Retired Men's Association.



Salute for Curran: Representing the FDNY United Retired Firefighters Association, James King presented guest of honor James Curran with his award for outstanding achievement as President of the NYC Firefighters Burn Center Foundation.



Top Whip Award: Gus Cafiero, 90 years young, won the "Top Whip" Award as the senior member present at the affair. Making the presentation were former UFOA President Ray Gimmler (left) and former Chief of Department John O'Rourke (right).

presentations was the Vice President of the United Retired Firefighters Association, **Jim King**. McCarthy served both the UFA and UFOA as a labor official, while Nagle served for many years as Treasurer for the United Retired Firefighters Association. The Proby Classes of 1948-1949, led by former Fire Commissioner **Gus Beekman**, were there to take a salute as they celebrated the 50th anniversary of their



Former Assistant Chief Al Mendy traveled all the way from Sun City, Arizona, to be with his Brothers. Chief Mendy won this award for traveling the greatest distance to attend the retiree bash. Making the presentation were former UFA President Dick Vizzini (left) and former Chief of Department Tony Fusco (right).



Golden Jubilarians: FDNY members appointed 50 years ago. (Front row, left to right) Mortimer Nolan, Vincent McDonough, former Fire Commissioner Gus Beekman, Carl Chiarelli and Vincent Fowler. Up in the tiller and bringing up the rear, were (left to right) Arthur Walka, John McCotter, Steven Daunt, Edward Kienzle and Nicholas Troianiello.



FDNY Speedsters: Members of the 1947-1948 FDNY Track Team: (front, left to right) Bill Farrell, John Lyden, Wilbur Hutchins (Treasurer, FDNY Retired Men's Association), Hugh McCabe (Vice President, FDNY Emerald Society) and Honorary William T. Bellard (NYS Supreme Court Justice). In the anchor spot, bringing up the rear, is former Fire Commissioner Gus Beekman.

all photos by FF John Strandberg

appointment to the "Long Blue Line." Each "proby" present received a plaque to commemorate his golden jubilee. Also receiving plaques were the members of the 1947-1948 FDNY Track Team, who also were celebrating their 50th anniversary. They were led by their "anchor man," New York State Supreme Court Justice