

Fire Watch

Los Angeles Fire Department Newsletter

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Our Mission

“To preserve life and property, promote public safety, foster economic growth through leadership, management and actions, as an all-risk fire and life safety response provider.”

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Los Angeles Fire Department

HISTORY OF HAZ MAT RESPONSE TEAMS



THE FIRST HAZARDOUS MATERIALS SQUAD VEHICLE

The Los Angeles Fire Department has responded to hazardous materials incidents for many years. There is a history of significant incidents that influenced changes in the LAFD's response system. Several of these incidents occurred in the early 1970's.

One of the first was the GATX chemical fire in which a ruptured pipe touched off 21 tanks of various chemicals in San Pedro on August 8, 1972. Foam rigs from the airport were used to extinguish this fire.

Next was the Star Trucking and Warehouse explosion at 6th and Mateo Streets in downtown Los Angeles. On August 17, 1974, a truck trailer parked in the storage yard was loaded with highly unstable organic peroxide called Methyl Ethyl Ketone Peroxide. The explosion leveled an entire city block and was felt as far away as 20 miles.



A series of hazardous materials incidents following the Star Trucking explosion made the Department realize it was ill-prepared to cope with the growing Haz Mat problem.

On April 10, 1975, an overturned tanker fire with one trailer loaded with tires and the second loaded with toxic insecticides caused several members to exhibit signs of exposure.

In January 1976, an early morning fire at Pacific Coast Lithograph caused several Firefighters wearing full personal protective equipment (PPE) to collapse outside the building. In addition, one Engineer standing approximately 40' from the building noted that his "red rags" were turning bluish-green. Several blocks were evacuated, and 46 Firefighters were sent to the hospital for observation. Members had been wearing all of their PPE, but it had provided insufficient protection from the chemicals. A Los Angeles County Health Department follow-up report recommended better protective clothing.

The Fire Department was moving in this direction when, on June 15, 1976, the LAFD responded to a fire in Leslie's Pool Mart on Balboa Boulevard in North Hills. This was a large warehouse stocked with mixed packaging of 24 tons of chlorine and other oxidizers. Initial Firefighters attacked the fire from the outside, but were immediately overcome with fumes from chlorine gas released from the building. Again, several blocks had to be evacuated, and the Firefighters' breathers and turnouts failed to protect them from the chemicals.

And, on June 17, 1976, a bulldozer cut into a gasoline pipeline in the Palms area killing six persons, injuring 24 persons, and destroying 6 structures on Venice Boulevard.

Chief Engineer Kenneth R. Long directed that a Haz Mat response vehicle with specialized equipment and trained individuals be put into service immediately.

On June 18, 1976, the Department put the first "Mobile Lab" into

paper, and 4 Acid King entry suits and BA's were the basic tools carried. Within a brief period of time, a "probe eye" was acquired. This was an early version of a thermal imaging camera. The Mobile Lab was able to respond to emergencies but needed the staffing from on-call Inspectors that delayed response times.

In July 1982, the next step in the advancement of the Haz Mat Response Program was the implementation of three SCAT



THE CONVERTED 1972 AMERICAN LAFRANCE HAZ MAT SQUAD VEHICLE

service under the watchful eye of Inspector James Daneker who held a doctorate of pharmacology degree. Inspectors Daneker and Don Krumsiek staffed the Mobile Lab under the overall supervision of Battalion Chief Leo Najarian in the Research Section of the Bureau of Fire Prevention and Public Safety (BFP&PS). Chief Najarian was a chemical and explosives expert due to his previous military training and experiences.

The Mobile Lab was a converted van with chemical protective suits and some limited detection equipment. An MSA explosimeter, an open cup flash point tester, some MSA colorimetric tubes, PH

(Strategic Chemical Attack) Teams. These were staffed at Fire Stations 4, 27, and 39 with one Captain and four firefighters. Two GMC and one Ford vehicles were converted from the staffing squads that were previously assigned to these stations, and they carried much of the same equipment that was previously carried on the Mobile Lab. All members of Fire Stations 4, 27, and 39 were given six days of training to prepare them for operation at Haz Mat incidents.

In 1985, the "SCAT" name was changed to Hazardous Materials Squads. The vehicles were upgraded to 1972 American LaFrance engines that had the pump, tank and hose beds



1992 SEAGRAVE/SALISBURY, THE FIRST VEHICLES PURCHASED SPECIFICALLY AS HAZ MAT RESPONSE VEHICLE

OPERATIONS CONTROL DISPATCH SECTION (OCDS)

removed, and a box with compartments adapted to the rear of the vehicle. Included with this vehicle upgrade was a training curriculum that was one week in length. Several members of the LAFD who were active in Haz Mat helped develop and adopt State regulations governing Hazardous Materials response teams. These Squads remained at Fire Stations 4, 27, and 39. The staffing consisted of a Captain, an Apparatus Operator, and 2 Firefighters.

On April 13, 1985, a fire occurred on De Garmo Street in Fire Station 77's district. It was a large commercial building housing the Research Organic-Inorganic Chemical Co. and contained a myriad of chemicals including ketones, alcohols, benzene, and acids that overcame several Firefighters on the scene. Firefighters from Haz Mat Squad 39 and the Mobile Lab donned special protective suits and analyzed the contents. Fifty-six Firefighters and several police officers were transported to the hospital for exposure. Fortunately, they were all able to return to duty. This fire contributed to the passage of the Right-to-Know Ordinance, in which all businesses that handled

hazardous substances were required to submit a complete inventory to the Fire Department. This information was then compiled into a database readily accessible by the field Haz Mat response teams.

In order to collect and organize this database, a new and dedicated Section was created in the BFP&PS. This new Hazardous Materials Section surveyed all businesses, collected hazardous substance information, and entered it into a database created by the LAFD. This database is

currently in use, and updated annually or upon business change. It has given response personnel a great deal of information about the amounts and locations of storage at any business in the City of Los Angeles.

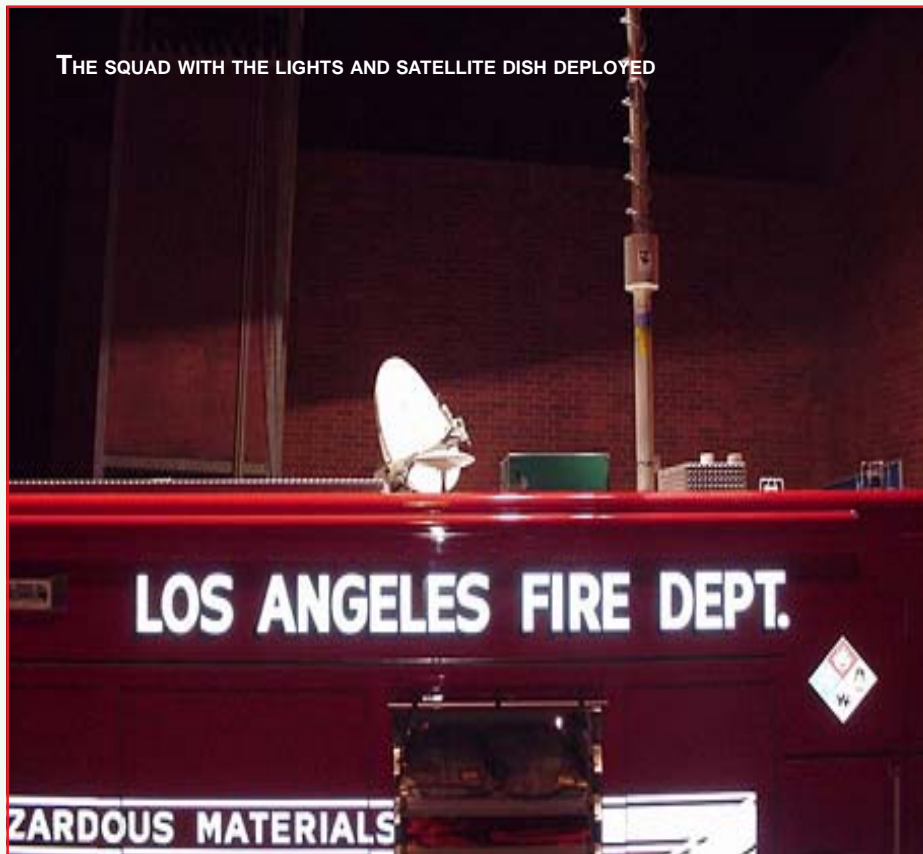
Information contained in the Materials Safety Data Sheet for each product or raw material used at a business gives

detailed hazards, response information, mitigation information, physical and chemical properties, and incompatibilities.

During this same period of time, the LAFD upgraded the Mobile Lab to 2 large motor homes with a "mini-lab" on board each vehicle. These were known as the Haz Mat Response Units or HMRU's. These Mobile Labs responded upon request by on-scene Haz Mat personnel. The Labs were housed at Fire Stations 3 and 88. The vehicles were dispatched to the scene and driven by station personnel. On-call certified Fire



THE NEW 2005 PIERCE HAZ MAT SQUAD



Prevention Inspectors responded separately to the scene. This vehicle carried additional equipment including a chemistry hood and a very sophisticated gas chromatograph.

In July 1992, due to budget constraints, the staffing on Squad 27 was removed, and it became an “active reserve” Haz Mat Squad. The vehicle remained at Fire Station 27 and, when necessary, was activated for response and staffed by members of Task Force 27.

In 1992, the LAFD purchased three vehicles from Seagrave, with the Haz Mat command modules built by Salisbury. These were the first vehicles that were specifically designed

as Hazardous Materials response vehicles. They had an interior command center and shelving to store Haz Mat suits and equipment. In addition, these vehicles were equipped with computers with Haz Mat information databases, phones, fax machines, generators for 110 power, and several new meters and monitors.

The 1992 Seagrave/Salisbury Squads were placed into service in mid-1993 at Fire Stations 4, 27, and 39.

In July 1994, the Haz Mat Squad was moved from Fire Station 27 to Fire Station 48. The apparatus and equipment moved, but there was no staffing assigned to the Squad. Under this configuration, when 48’s was dispatched to a Haz Mat incident, the engine was shut down and personnel were moved to the Squad, and an additional trained Decontamination company was dispatched with them to form a full complement of trained members.

In 1998, the LAFD adopted the California Specialized Training Institute curriculum as the standard of training, and all members of the three Haz Mat Task Forces were given 160 hours of training. Upon completion of training, they were State certified as Haz Mat Technicians. In addition, some members received formal training to the level of “Specialist” by taking 80 additional hours of instruction. This configuration of Hazardous Materials Response teams remained the same until the events of September 11, 2001. Immediately following the attacks in New York, the Squad at Fire Station 48 was activated full time through variable staffing. In July 2002, full staffing became permanent.

In early 2002, due to the high call load at Fire Station 39, Haz Mat Task Force 39 was moved to Fire Station 70 in Northridge where it is currently housed, serving the San Fernando Valley.

Following 9/11, the Federal government assessed the needs of the largest metropolitan areas in the United States. As a result, much of the direction of the training and equipment received relative to Haz Mat also began to include the ability to detect and handle Weapons of Mass Destruction (WMD). Federal grants



were received to train and equip both the Hazardous Materials Response Teams and first responders. From 2002 to the present, several changes were made to the overall Hazardous Materials Response System.

Many of the changes reflected the need to have first responders better equipped and trained to handle the initial stages of a large-scale Haz Mat or WMD incident. Each member is now equipped with a radiation dosimeter/detector. Each truck company is equipped with a 3-gas monitor for detection of flammable vapors and oxygen levels. In addition, each engine is equipped with a decon kit with Level "B" protection capable of decontaminating 10 civilians. Training was provided for all members to recognize and initiate appropriate first responder actions. Members were also trained in rapid extraction to perform emergency removal of civilians from contaminated atmospheres. Additional equipment to support Haz Mat responses includes mass decon trailers and vehicles with equipment to support large-scale Haz Mat or WMD incidents.

In 2004, members of Fire Station 95 were trained to the State certified Haz Mat Technician level. At the time of this writing, they are being brought online as the fourth Hazardous Materials Task Force in the City of Los Angeles. This Task Force will have the same configuration as Fire Station 48 prior to 9/11.

Through Federal grants, the LAFD was able to acquire four new Haz Mat response vehicles. These four Pierce vehicles represent the state of the art technology currently available. These Squads now have satellite dishes with both Internet and satellite cell phone capabilities, and broadband Internet access to various chemical databases. In the command center is a complex computer system with the ability to communicate directly with the meters and monitors carried by Haz Mat personnel. Readings from the meters displayed in the command center are directly interfaced with an information database contained in the computer or online. The ability of members in the command center to view direct readouts from the meters is a huge step forward for the safety of our members. The Squads also have a light tower. The last of these four vehicles is presently being placed into service. They will be assigned to Fire Stations 4, 48, 70, and 95.



ROBERT M. ROSE
BATTALION CHIEF

Chief Rose is a 32-year veteran of the Los Angeles Fire Department. He has been associated with the Hazardous Materials Program for approximately 15 years. He was a Haz Mat Task Force Commander for 9 years and is now the Haz Mat Response Teams Coordinator.

In addition, a great deal of information about early incidents was taken from the LAFD Centennial Book authored by Paul Ditzel. The author recognizes the contributions of several members (especially retired Captain James Daneker) in researching this article.