FIRE PREVENTION DIVISION

Arson Squad

A great deal of attention was focussed on the Arson Squad during 1982 because of the large number of arson related fires which occured during the summer. Despite the overall decline in building fires during recent years, the number of arson fires has been slowly increasing. During June, July, and August of 1982 this activity climaxed in a rash of suspicious fires which occurred mostly in vacant buildings in Dorchester, Roxbury, Jamaica Plain, and South Boston. Many of these fires occurred simultaneously during the early hours of the morning and focused national attention on the City, with the media describing Boston as the arson capital of the country.

The responsibility for investigating every fire and explosion in the City of Boston belongs to the Fire Department Arson Squad which has been unable to cope with this problem in recent years because of depleted manpower which resulted because of budgetary In order to meet the problem of an increasing workload, the Fire Comissioner authorized an increase in the strength of the Arson squad, and the complement of men assigned to this unit was increased by more than 35%. All of the new members in the squad are college trained and had arson investigator training prior to being assigned. In addition, all members attended an intensive 80-hour advanced course on arson investigation during 1982 which was held at Fire Headquarters to insure uniformity of investigation methods. To eliminate duplication of effort a cohesive strike team was organized consisting of Fire Department personnel, three Boston Police detectives, and agents from the Alcohol, Tobacco, and Firearms Division of the Treasury Department. newly enlarged arson squad was moved to larger quarters at a disbanded firehouse next to Fire Headquarters where two computer consoles were installed. One of the computers is directly connected to City Hall and gives access to the records of other city departments such as the Building and Assessing Departments. All arson case data is now being entered into the new Wang Computer system using the new report format called the BARS system - Boston Arson Reporting system - which is a complete arson reporting and tracking system that allows for the translation of the narrative report into computer format. The sorting and analysis of information by computer allows the arson investigator to study each fire location in relation to an entire neighborhood as well as with other case histories with similar characteristics.

As a result of the improved methods used during the past year, there were 105 arrests made by the Arson Squad in 1982. There were 289 cases heard in Municipal Court during 1982, out of which 65 convictions were received, and 51 cases heard in Superior Court of which 16 were convicted. As a comparison, the data for the

previous five years is as follows;

Year		Fires*	Arrests	Convictions
1978	-	624	104	46
1979	-	610	113	51
1980	-	706	77	70
1981	-	761	80	78
1982	-	798	105	81

* Suspicious, Incendiary, or Undeterined Fires investigated by the Arson Squad.

During the month of November a meeting was held at Fire Headquarters with Arson investigators from the surounding cities and towns to discuss the arson problem on a metropolitan basis and to see if any similar patterns existed in the other communities. Many of the suburban cities were experiencing an arson problem and we discovered the same patterns emerging in the suburbs, such as changing neighborhoods, gentrification, deteriorating housing, overinsurance, straw ownerships, etc.. The meeting was considered successful with the goal of sharing information to be pursued in the future.

A survey taken by the Fire Department during 1982 revealed that there are about 1200 vacant buildings in the City of Boston. This has been a continuing problem for the Fire Department because vacant structures are the source of most of the multiple alarm fires in the city. Meetings were held during the year with representatives of other city departments such as the Building Department in an attempt to maintain an inventory of these structures so they can be identified as hazardous locations during firefighting operations. A file of current and previous owners of vacant structures is also helpful to the arson investigator.

During the year, the Fire Department encouraged greater citizen participation in the arson problem by holding meetings with several neighborhood groups at which which people were urged to maintain surveillance over vacant structures and report suspicious behavior to the arson squad.

Photo Unit

The Department has a very professional and active photo unit which responded to 632 suspicious or undetermined fires and 155 multiple alarm fires during 1982. The photo unit has the responsibility of making a photographic record of the source and spread of building fires as well as the evidence to be used in court cases of arson fires. The unit also makes photo records of varous

fire prevention programs such as building hazards and violations being investigated by the Division as well as public relation campaigns that are conducted during the year. The unit also responded to 68 calls for Department vehicles that were involved in accidents and processed 378 ID photographs for Department members. A total of 11,466 photographs were printed during the year.

Plans Examiner

The Plans Examiner receives and checks all plans submitted to the Fire Department for approval of major construction and renovation projects in the City of Boston to make sure of compliance with Fire Prevention codes and regulations. Meetings are then scheduled with building owners and developers to insure Fire Department input regarding fire safety in these buildings. During 1982, 663 sets of plans were submitted to this office for approval and a total of \$7,178.00 in fees were collected for this service. A copy of all building plans which are approved are kept on microfilm and filed in the Plan Examiners office.

Another function of this office is to convey information to the public relative to code requirments for smoke detectors, alarm systems, sprinklers, and other fire protection devices. Appearances are made at both local and state hearings to voice the opinion of the Boston Fire Department regarding legislation on these subjects. Self service gas stations are inspected before opening to insure compliance with state and city fire prevention regulations. Research on existing and proposed code revisions are part of the examiners job and he is the Fire Commissioners representative on the Fire Prevention Board of the State Building Code Commission.

Permits - Licenses

Permit revenues which were received from January 1 to December 31, 1982 totaled \$223,825.82. This revenue was earned from licenses and permits which are issued by this Department.

PLANNING AND LOGISTICS DIVISION

The Planning and Logistics Division serves as liaison between the Fire Department and many public and private agencies such as the MBTA, Massachusetts Department of Public Works, Massachusetts Port Authority, Massachusetts Turnpike Authority, the Boston Redevelopment Authority, and other city agencies such as the Boston Water and Sewer Commission. Participation with the private sector includes meetings with the developers and contractors at the many large development projects currently underway in Boston, and utility companies such as Boston Edison and the Boston Gas Company.

The Division has worked closely with the MBTA during the installation of dry standpipe systems throughout the tunnel and station areas in the subway. At the present time, the project has been completed and work is underway on a color coded identification marking system which will be installed at all aboveground inlet locations and at the discharge locations in the tunnels and station platforms below ground. Mapbooks with color coded schematics showing the entire standpipe layout will be issued to the Department in the future. The Division continues to have meetings with the MBTA Safety and Engineering Department regarding the construciton of the Southwest Corridor project in Roxbury and Jamaica Plain which will relocate the elevated Rapid Transit Line on Washington St to the railroad Right of Way between South Cove and Forest Hills. The Fire Department is reviewing plans of the new stations on this route for approval of the standpipe systems, emergency lighting and communications, emergency exits, and emergency exhaust fans.

Laison with the Mass. DPW continues with regards to the posting of bridges that may be inadequate to sustain the weight of Fire Department apparatus. Applications for the use of certain bridges are submitted to the DPW for their review and approval.

The Planning and Logistics Division attends pre-construction conferences with the Boston Public Works Department before work is started on city street construction. Information regarding such work is forwarded to Deputy and District Chiefs and temporary or permanent street closings are posted in General Orders. Meetings have also been held with the Boston Traffic Department concerning the development of new traffic patterns in the vicinity of major construction projects.

A continuous reporting system is in effect with the Boston Water and Sewer Commission whereby the Fire Department submits daily reports concerning defective hydrants which are then repaired by the commission. Notification is also received from the commission regarding sprinkler or standpipe systems which may be out of service.

Other activities coordinated by the P & L Division include radiological training and response to radiological incidents, review of new plot and development plans for proper layout of hydrants, and the coordination of drill and in-service inspection schedules for all fire companies in the Department.

TRAINING AND RESEARCH DIVISION

The purpose of the Training and Research Division is the training of new recruits and firefighters, the evaluation of new equipment, and the maintenance of tools and equipment. When an important firefighting duty or emergency occurs, the Officer in charge must have trained men with the proper equipment and knowledge to perform the needed function.

Recruit training is conducted at the John A. Martin Training Academy where thirty-nine new men are currently being trained as Firefighters on Probation. The Division presents a twelve week course of instruction on every phase of the fire service including the structure and organization of the fire department, department rules and regulations, fire alarm operations, driver training, and basic firefighting techniques. The recruits then receive a written examination on the subjects which were covered during the previous week, and are assigned to fire companies during the day tours of Saturday and Sunday for actual fireground training. At the completion of their training at the Academy, the new firefighters will be tested orally by the Deputy Chiefs of both Firefighting Divisions.

Drills for firefighters are held mostly on the company level. The Training and Research Division supplies subject matter on a monthly basis to the firehouses where drills are conducted under the supervision of the company officers. Officers from the Division periodically visit the fire stations to assist and guide the drills and check on the operation of the apparatus. Companies also report to the fire academy during the summer months on a scheduled basis and engage in various evolutions such as pump drills, deck gun, and ladder pipe operations.

At the end of 1982, the division was involved in the testing and evaluation of new hose. Synthetic rubber and nylon four and five inch hose is being tested as feeder line and 1 3/4 inch hose and nozzles are being tested for use as attack line. The five inch hose has proven difficult to use because of its size and the Department prefers the four inch line which is more practical when time and conditions permit to move large volumes of water. Because of the success with 1 3/4 inch attack line, the Department has ordered and plans to put in service cotton jacket, rubber lined hose similar to the type that has been in service in this department for several years.

The Division is also testing a four way hydrant valve that will allow a pumper to be connected to a hydrant with its four inch suction after the hydrant has been opened to supply water to a feeder line. The water flow would be diverted from the hydrant into the pump and then to the feeder line, thereby increasing the volume and pressure of the water at the second pump which would be parked closer to the fire building.

The Training and Research Division is charged with the maintenance of the Departments air masks and bottles. The Division maintains a mask repair unit where the face pieces are cleaned and serviced and where repairs and services on the regulators and other parts are done to keep 400 masks in excellant working condition. The quality of the air in the compressor must be tested every day in our ecolyzer for the carbon monoxide level to make sure the air is uncontaminated. The Division plans to convert all 400 4.5 MSA masks to the positive pressure type with automatic shut-offs, and equip the companies with one hour bottles that will replace the Chemox masks.

The Divison conducts a year round service and repair program of firefighting equipment which is done by trained men to maintain continuous operation of firefighting tools and appliances. This maintenance program avoids delay and reduces cost to the city by eliminating repairs done by outside contractors.

Fire College is held yearly at Memorial Hall for company officers with various firefighting and administrative subjects covered. Chiefs meetings are held with the Commissioner and information is given to the Chiefs concerning new techniques and training plans. Special classes are also conducted such as L.N.G. training at the State Training Academy, radiation training at the New England Nuclear Company, and MBTA drills which are conducted at their yards for officers and companies.

During the year 1982, the Training and Research Division conducted a promotion school to instruct interested candidates in various courses of study which will prepare them for the Civil Service examination for promotion to Fire Lieutenant. There were over 500 applicants for the course which is held two nights a week. All classes are conducted for two hours using Fire Department Officers as instructors.

During 1983 the Training and Research Division will formalize plans to use video cassettes as a supplement to our company training program. This new program will utilize the new cable TV network which is currently being installed throughout the city and slated for completion during 1983.

FIRE DEPARTMENT CHEMIST

The Fire Department Chemist has duties and responsibilities in both the Fire Prevention Division and the Training and Research Division; he also receives special assignments directly from the Fire Commissioner. The salient features of the activities pursued by the Department Chemist during the past year include the following:

- (1) The Department achieved a substantial increase in the regulation of combustible building contents such as draperies, upholstered furniture, and floor and wall coverings. This action particularly affected materials and procucts for hotels, hospitals and high rise office buildings. The enforcement of the expanded fire prevention regulations was acheived in part through information and education meetings with designers, specifiers, purchasing agents, safety personnel, building owners, and building managers where the Chemist discussed the reasons for the new regulations and then presented visual demonstrations of burning furniture and bedding. He also provided information on the procedures used to apply for, and obtain approval of, regulated materials and products.
- (2) During 1982, new testing procedures to evaluate products containing combustible foam padding such as upholstered furniture and mattress pads were implemented which included the use of full scale fire tests. Action taken by the Boston Fire Department on the basis of these evaluation procedures has materially contributed to decreasing the risk of serious fire problems in the City. The development of new upholstered furniture with improved fire safety which is now being specified in many locations throughout the country has brought national recognition to the Department. In April of 1982 the Commissioner, acting on the recommendation of the Fire Department Chemist, isssued a ban on the uncontrolled use of highly flammable foamed plastic mattress pads which were being used in many of the City's hospitals. A number of new mattress pads were subsequently developed and have been approved for use in hospitals. This action received widespread attention and similar regulations have been adopted across the nation.
- (3) Administrative procedures were organized to implement and enforce regulations controlling the transportation of hazardous materials in the City of Boston. This effort required designation of special police powers for the Chemist and support personnel to enforce the above regulation. The enforcement effort included stopping motor vehicles which were transporting hazardous materials, examining the contents, and then carrying out administrative action in court proceedings for the offenders. The result of this effort was possible because of considerable interaction and cooperation between the Chemist and the City Law Department. These Regulations have proven effective in substantially reducing the transportation of LNG (Liquified Natural Gas), LPG (Liquified Propane), and flammable liquids including gasoline through the city.

- (4) The Department Chemist worked with the Fire Fighting Division and the Boston Edison Company to develop a standard operating procedure for responding to fires and other emergencies involving high voltage transformers. Special procedures were developed to protect members of the department working at incidents which involve the potentially dangerous dielectric fluids containing PCB's (polychlorinated biphenyls).
- (5) Activities in the Training and Research Division included updating specifications for fire coats, field testing a new glove for fire fighters, and development of a specification for improved trousers to be worn by firefighters, particularly when fire boots are not worn. The Department Chemist also represented the Boston Fire Department as Chairman of the NFPA Committee on Protective Clothing and Equipment for Fire Fighters.
- (6) The Chemist was involved in emergency response to fires and emergencies where chemicals were involved, and where fire fighters or building occupants had been exposed to potentially hazardous conditions. In several of these incidents it was necessary for the Chemist to don protective clothing and together with suitably protected fire fighters, enter a building which was, or had recently been, involved in a fire or where a spill of hazardous material had occurred.

EMERGENCY MEDICAL SERVICE DIVISION

Emergency Medical Services

During 1982, the Emergency Medical Office conducted training at each firehouse on current techniques used to perform C.P.R. (Cardiopulmonary Resuscitation) as well as training in the proper use of other Emergency Medical Service equipment and materials. All members of the Department are required to have C.P.R. training on a yearly basis under the first responder law. In addition, a 21 hour mandatory refresher course for Registered E.M.T.'s was conducted at the Fire academy. The Office kept abrest of the latest techniques and procedures in emergency medical care through a liaison with the American Heart Association, the American Red Cross, Office of Emergency Medical Services of Massachusetts, American Medical Association, and through attendance at various training seminars.

The Recertification of Registered Emergency Medical Technicians and the verification of required training programs was coordinated with the State Office of Emergency Medical Services. That agency frequently answers questions and solves problems for us which arise during the year. We continued to maintain and update the records of our 1500 First Reponder trained firefighters as per Chapter 795 of State Law.

The Emergency Medical Service Office also supplies materials for trauma boxes at the various fire companies such as bandaging materials, splints, backboards, straps, obstetrical kits and other materials as needed, and also made repairs to resuscitators, cases, valves, hose, O-rings, gauges, and facepeices. Old Civil Defense Medical Kits which are removed from deactivated shelters at various locations are sorted and reused in Fire Department trauma boxes. The ability of the City to utilize Civil Defense EMS supplies has resulted in the saving of thousands of dollars to the city each year because Civil Defense supplies are available to the City at no cost.

Underwater Recovery Team

The Underwater Recovery Team is comprised of eight carefully selected men headed by a Dive Master and an Assistant Dive Master. The members of this team work a regular schedule on their respective fire companies and are on call around the clock for response to water related incidents through the use of pagers which they keep on their person at all times. Drills are held monthly to maintain a high level of proficiency. This consists of in-water search under ice, water sled drills, search patterns, signals, techniques of entering the water from various shore areas, use of compass, swimming, and checking of each man's equipment at various depths.

The team keeps abreast of the current diving procedures and techniques through periodicals in the field of diving, since new

techniques and equipment are constantly being developed which can improve the ease and safety of the divers. The Dive-Master attends seminars on the various aspects of diving including injuries and diseases.

Reports of drills and diving incidents are maintained on a regular basis. A maintenance and repair service for the two fireboat hulls is provided on a regular basis through the removal of debris such as rope, wire, and tires, which would cause considerable damage if neglected. The team is used to aid in the placement of straps that are used when the boats are periodically drydocked for major repairs. The Scuba Team saves the Department thousands of dollars on maintenance, as well as important time out of service.

Assistance was provided to the Boston Police Department during the year in the search for weapons and other evidence discarded into various bodies of water in the City. During 1982 the team responded to 45 incidents including 2 building fires, 1 ship fire, 4 pier fires, 19 auto's in the water, 8 drownings, 9 people in the water for various reasons, and 2 debris removals from Fireboat props. On the night of January 23, the Scuba Team responded to Logan Airport to aid in the rescue of victims of the World Airways L-1011 which skidded off the runway into the water.

OFFICE OF CIVIL DEFENSE

The Civil Defense Office maintained liaison with the Federal and State offices of Civil Defense, the general public, and the business community during 1982 in order to effectively conduct the Civil Defense program at the local level which meets our obligation under Federal, State, and Local Civil Defense Laws (P.L. 920, Chapter 639, and Chapter 8 respectfully) and to insure continued Federal financial support to the City of Boston, which is approximately \$34,000 per year.

The Civil Defense Office conducts all RADEF Training within the city and coordinates with the Police Department for the rotation and calibraton of the 860 Radiological Monitoring Survey Meters which are stored at the 5 area police stations.

Several visit's were made to the Federal and State surplus property location at the Taunton Surplus Depot to assure continued participation of the city in the acquisition of surplus property for various city departments at a fraction of it's initial cost (not over 5% of original value).

We maintained the necessary records and reports which are submitted quarterly to the Federal and State Offices of Emergency Preparedness. Submission of our annual program and progress report as required by law is necessary for us to remain eligible for reimbursement.

Required emergency planning was conducted with State and Federal Office of Emergency Preparedness personnel relative to the National "CRISES RELOCATION" program which relocates major population centers such as the City of Boston in time of war.

Emergency response to major fires was provided to coordinate immediate and long term assistance to both the public and private sectors of the community where applicable. We worked closely with the State and Federal Emergency Management Administration and Defense Civil Preparedness officials in channeling material and financial assistance through the Federal Disaster Assistance Administration, Small Business Administration, Health Education and Welfare, Army Corps of Engineers, Red Cross, Etc., in order to insure that assistance is both adequate and expeditious.

Information and materials were disseminated to the general public upon request to keep them informed of the varous aspects of the Civil Defense program, including various means of protecting themselves during major emergencies.

FIRE ALARM DIVISION

In the year 1982 the operating force of the Fire Alarm Division handled 44,484 incidents including 81 working fires and 177 multiple alarms. The period which reflects a great amount of credit to the operating force was from May to August when 25 working fires and 85 multiples occurred. This period greatly strained all the resources of the Department but most particularly those of the Fire Alarm Office. During this period the on duty strength of the office was normally four men, but quite often one of these men was a volunteer from the Construction Force whose normal duties did not include dispatching. At a time when it was not uncommon to have 2 or 3 multiple alarms at the same time the Fire Alarm Office met all the challenges of providing service to the Fire Fighting Force in the manner which the Department expects of it.

Radio Shop

The radio Shop is responsible for maintaining 36 Base Stations and 12 satellite receiving sites. These include the four new radio channels, the dispatch channel, Fire District 13, the MBTA tunnel radios and the paging system.

During the year four base stations were removed from the Quincy City Hospital and placed at St. Margeret's Hospital to improve coverage in the Meeting House Hill area. Equipment was also installed in Engine 55's quarters to improve coverage in the West Roxbury - Hyde Park area.

The year 1982 was remarkable in that our radio system which includes all of the above equipment, plus 216 mobile radios, 90 portable radios, and receivers and P.A. systems for each firehouse was maintained by three members of the Fire Alarm Division during a period in which the resources of the Department were strained to the limit.

Construction Force

In 1982 the Fire Department acquired 1.4 miles of underground duct from the MBTA in connection with the Southwest Corridor development. In addition to this the Fire Alarm Division installed 7000 feet of 61 conductor cable, 5000 feet of 19 conductor cable, 6000 feet of 10 conductor cable and 2900 feet of four conductor cable in connection with the same project. All labor and materials were paid for under a grant from the MBTA.

In cooperation with the Economic Development Corporation the Construction Force began a major project to replace all the cable in the old South Boston Navy Yard. Over the course of the next two years all such cable will be replaced in this area and work will be begin on the renovation of the Army Base fire alarm system.

In cooperation with the Boston Redevelopment Authority, that portion of the Charlestown Navy yard taken over by the BRA was recabled and six voice fire alarm boxes were installed. The cable in that portion of the old Navy yard now known as the National Historic park was replaced in cooperation with the Natonal Park Service.

During 1982, the constructon force erected radio antennas at St. Margaret's Hospital, at Engine 55, and at Faulkner Hospital. They also made the initial installation of conduit at Fire Headquarters for the routing of cable for the new Wang Computer System

Under the requirements of Fire Prevention Order 80-1, which covers Hotel Fire Alarm Systems, 24 Hotels were tied to the Fire Alarm Office through the installation of master boxes. In addition to these, 38 other master boxes were installed including that which protects the USS Constitution.

The Division also carried out inspection of 134 fire alarm systems connected by master boxes and removed 84 street fire alarm boxes from service in connection with the false alarm reduction program.

MAINTENANCE DIVISION

The Maintenance Division is responsible for the testing, repair, and maintenance of 224 pieces of fire aparatus and automotive equipment in the Department and for the repair and maintenance of all buildings and grounds. The automotive fleet consists of pumpers, aerial ladders, aerial towers, squrts, rescues, staff cars, pick ups, vans, and two fire boats. The Division has a Motor Squad which is on duty 24 hours a day and handles all minor repair work in the field. During 1982, they responded to over 6500 calls for help as well as to multiple alarm and working fires.

During 1982 the division ordered and put into service 15 new Ford LTD sedans which are equipped with a heavy duty police package and were assigned in November to four Deputy Chiefs and eleven District chiefs.

A 1973 Maxim 1500 GPM Pump, Serial 176, formerly assigned to Engine 12, was refurbished by outside contract during the year under the supervision of the Division and assigned to Engine 22 on October 3. The last of the Sutphen/GMC midi-pumpers purchased during 1981 was assigned to Engine Company 49 which was reactivated in July of 1982.

The Canvass and Hose Shop is responsible for maintaining the 315,400 feet of hose which is in service in the Department along with making canvass covers and helmet devices.

The Carpenter and Ladder Shop instituted a preventative maintenance program in 1982 and inspected all aerial and ground ladders at the Training Academy. All defective ladders were removed from service and replaced with new equipment from stock with repairs being made on the old equipment at a later date

VEHICLE INVENTORY

<u>s</u>	In ervice	Spares	Reserve	<u>Total</u>
Pumps	36	15	17	68
Ladder Trucks	21	8	7	36
Hose Wagons	3	1		4
Rescues	2	1		3
Aerial Towers	1	1		2
Fireboats	1	1		2
Tank Trucks	1	1		2
Sedans	34	18		5 2
Station Wagons	16			16
Vans	8			8
Pick Up Trucks	16			16
Maintenance Trucks	13			13
Fire Alarm Trucks	2			2
TOTAL	154	31	24	224

BOSTON FIRE DEPARTMENT EQUIPMENT ROSTER

Compa	ny		Year	Make		Type	<u>Serial</u>
Engine	2		1970	Hahn	1250	GPM Pumper	147
Engine	3		1970	Hahn	1250	GPM Pumper	112
Engine Engine	4	P W	1979 1981	Sutphen/Ford Sutphen/GMC		GPM Pumper GPM Pumper	115 116
Engine Engine	5	P W	1970 1964	Hahn International		GPM Pumper GPM Pumper	114 193
Engine	7		1979	Sutphen/Ford	1250	GPM Pumper	102
Engine Engine	8	P W	1979 1981	Sutphen/Ford Sutphen/GMC		GPM Pumper GPM Pumper	117 118
Engine	9		1979	Sutphen/Ford	1250	GPM Pumper	119
Engine :	10 10	P W	1971 1975	Hahn Maynard	1500 (Hose V	GPM Pumper Wagon	157 305
Engine 1	14		1976	WLF	1500 (GPM Pumper	151
Engine 3	16		1976	WLF	1500.0	GPM Pumper	130
Engine 3	17		1976	WLF	1500 (GPM Pumper	126
Engine 3	18		1978	Hahn	1500	GPM Pumper	104
Engine 2	20		1970	Hahn	1250	GPM Pumper	149
Engine 2	21		1973	Maxim	1500	GPM Pumper	175
Engine 2	2 2		1973	Maxim	1500 (GPM Pumper	176
Engine 2	24		1976	WLF	1500	GPM Pumper	194
Engine 2	28		1971	Hahn	1500	GPM Pumper	155
Engine 2	29		1970	Hahn	1250	GPM Pumper	110
Engine 3	30		1971	Hahn	1500	GPM Pumper	154
Engine 3	3 2		1970	Hahn	1250 (GPM Pumper	143
Engine 3	33		1973	Maxim	1500 (GPM Pumper	174

Compar	<u>iy</u>	Year	Make	Type	Serial
Engine	37	1978	Hahn	1500 GPM Pumper	109
Engine Engine		1971 1972	Hahn Ford/Maxim	1500 GPM Pumper Squrt Wagon	156 306
Engine	41	1970	Hahn	1250 GPM Pumper	145
Engine Engine		1973 1970	Maxim Ford/Maxim	1500 GPM Pumper Squrt Wagon	179 300
Engine	48	1970	Hahn	1250 GPM Pumper	150
Engine	49	1981	Sutphen/GMC	750 GPM Pumper	120
Engine	50	1970	Hahn	1250 GPM Pumper	153
Engine	51	1970	Hahn	1250 GPM Pumper	111
Engine	52	1978	Hahn	1500 GPM Pumper	106
Engine	53	1976	WLF	1500 GPM Pumper	103
Engine	55	1970	Hahn	1250 GPM Pumper	127
Engine	56	1970	Hahn	1250 GPM Pumper	146

W L F = Ward LaFrance

Company	Year	<u>Make</u>	Type	<u>Serial</u>
Ladder 1	1973	Maxim	100 Ft Aerial Ladder	220
Ladder 2	1975 1956	Maxim / Seagrave	100 Ft Aerial Ladder	204
Ladder 4	1976	Seagrave	100 Ft Aerial Ladder	298
Ladder 6	1972	Maxim	100 Ft Aerial Ladder	221
Ladder 7	1976	Seagrave	100 Ft Aerial Ladder	299
Ladder 9	1972	Maxim	100 Ft Aerial Ladder	229
Ladder 10	1976	Seagrave	100 Ft Aerial Ladder	292
Ladder 11	1976	Seagrave	100 Ft Aerial Ladder	294
Ladder 14	1970	ALF	100 Ft Aerial Ladder	202
Ladder 15	1976	Seagrave	100 Ft Aerial Ladder	295
Ladder 16	1973	Maxim	100 Ft Aerial Ladder	208
Ladder 17	1971	Maxim	100 Ft Aerial Ladder	218
Ladder 18	1976	Seagrave	100 Ft Aerial Ladder	293
Ladder 19	1970	ALF	100 Ft Aerial Ladder	206
Ladder 21	1972	Maxim	100 Ft Aerial Ladder	222
Ladder 23	1976	Seagrave	100 Ft Aerial Ladder	297
Ladder 24	1971	Maxim	100 Ft Aerial Ladder	219
Ladder 25	1973	Maxim	100 Ft Aerial Ladder	224
Ladder 26	1976	Seagrave	100 Ft Aerial Ladder	296
Ladder 28	1976	Seagrave	100 Ft Aerial Ladder	291
Ladder 29	1976	Seagrave	100 Ft Aerial Ladder	290
Rescue 1	1977	Ford / Providence	Rescue Van	301
	1970	Sutphen	85 Ft Aerial Tower	248

A L F = American LaFrance