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ANNUAL REPORT

OF THE

FIRE DEPARTMENT

FOR THE PERIOD

JULY 1, 1977, to JUNE 30, 1978

BOSTON, July 1, 1978.

HON. KEVIN H. WHITE,
Mayor of Boston.

DEAR MR. MAYOR:

I am proud to submit a report of the activities of the Boston Fire Department for the period July 1, 1977, to June 30, 1978.

During this period, the members of the department continued to perform their duties with the highest degree of courage, excellence, and professionalism in carrying out our mission of fire suppression and protection.

In addition to providing our round-the-clock fire fighting and emergency medical service to the citizens, commuters, and visitors to Boston, the department continues to expand and accelerate its efforts in vital fire prevention and protection areas by taking the lead in advancing new technologies and developments in the fire service field.

You may sure that the Boston Fire Department will continue to serve the people of Boston with pride and professionalism.

Respectfully submitted,

GEORGE H. PAUL,
Fire Chief/Commissioner.

1977-1978

Fire Commissioner, GEORGE H. PAUL

Chief of Department, GEORGE H. PAUL

Deputy Fire Chief, Executive Assistant to the Commissioner
JOSEPH M. CLASBY

Senior Administrative Assistant, JOHN F. O'NEIL

Medical Examiner, RICHARD H. WRIGHT, M.D.

Deputy Fire Chief in Charge of Training and Research Division, GERALD P. HART

Deputy Fire Chief in Charge of Fire Prevention Division, JOSEPH L. DOLAN

Deputy Fire Chief in Charge of Planning and Logistics Division, JOHN J. MCCARTHY

Superintendent of Maintenance Division
JOSEPH M. ROPER (to August 1, 1977)

Superintendent of Maintenance Division
JOHN E. FAGAN (from August 1, 1977)

Superintendent of Fire Alarm Division
JOHN M. MURPHY

Chaplains, REV. MSGR. JAMES J. KEATING, Catholic
REV. JOHN E. BARCLAY, Protestant
RABBI IRA A. KORFF, Jewish

STATISTICS

COMPARATIVE FIRE DEPARTMENT EXPENDITURES

		1976-1977	1977-1978
1.	PERSONAL SERVICES		
	Permanent employees	$32,992,713 95	$35,773,357 00
	Overtime	1,893,617 02	2,395,408 00
	Total Personal Services	$34,886,330 97	$38,168,765 00
2.	CONTRACTUAL SERVICES		
	Communications	122,685 32	122,841 00
	Light, heat, and power	321,285 80	374,652 00
	Repairs and maintenance of buildings and structures	120,917 59	88,852 00
	Repairs and servicing of equipment	315,631 47	244,601 00
	Transportation of persons	2,077 00	2,859 00
	Miscellaneous contractual services	58,923 14	76,375 00
	Total Contractual Services	$941,520 32	$910,180 00
3.	SUPPLIES AND MATERIALS		
	Automotive supplies and materials	315,640 73	310,333 00
	Heating supplies and materials	219,724 92	223,948 00
	Household supplies and materials	28,840 86	29,604 00
	Medical, dental, and hospital supplies and materials	836 00	261 00
	Office supplies and materials	30,784 86	16,493 00
	Miscellaneous supplies and materials	665,441 11	293,431 00
	Total Supplies and Materials	$1,261,268 48	$874,070 00
4.	CURRENT CHARGES AND OBLIGATIONS		
	Other current charges and obligations	328,460 70	353,842 00
	Total Current Charges and Obligations	$ 328,460 70	$ 353,842 00
5.	EQUIPMENT		
	Automotive equipment	52,583 10	26,340 00
	Office furniture and equipment	6,776 88	1,773 00
	Miscellaneous equipment	322,022 83	147,754 00
	Total Equipment	$ 381,382 81	$ 175,867 00
	Grand Total	$37,798,963 28	$40,482,724 00

FIRE COMMISSIONERS

*1874-1876	Alfred P. Rockwell
1877-1879	David Chamberlain
1879-1883	John E. Fitzgerald
1883-1885	Henry W. Longley
1885-1886	John E. Fitzgerald
1886-1895	Robert G. Fitch
1895-1905	Henry S. Russell
1905	Patrick J. Kennedy (Acting February 17-March 20)
1905-1908	Benjamin W. Wells
1908-1910	Samuel D. Parker
1910	Francis M. Carroll (Acting May 27-September 16)
1910-1912	Charles C. Daly
1912-1914	Charles H. Cole
1914-1919	John Grady
1919-1921	John R. Murphy
1921-1922	Joseph P. Manning (Acting November 8, 1921-April 1, 1922)
1922	William J. Casey (Acting April 1-August 24)
1922-1925	Thedore A. Glynn
1926	Thomas F. Sullivan (Acting January 26-July 6)
1926-1930	Eugene C. Hultman
1930-1933	Edward F. McLaughlin
1933-1934	Eugene M. McSweeney (October 16, 1933-January 5, 1934)
1934-1938	Edward F. McLaughlin
1938-1945	William Arthur Reilly
1945-1946	John I. Fitzgerald (June 7, 1945-January 7, 1946)
1946-1950	Russell S. Codman, Jr.
1950-1953	Michael T. Kelleher
1953-1954	John F. Cotter
1954-1959	Francis X. Cotter
1959	Timothy J. O'Connor (March 2-December 31)

*Previous to 1874, the Boston Fire Department was in charge of the Chief Engineer

1960-1961	Henry A. Scagnoli
1961-1966	Thomas J. Griffin
1966	Henry A. Scagnoli (Acting July 1-August 17)
1966-1968	William J. Fitzgerald
1968-1975	James H. Kelly
1975	George H. Paul

CHIEFS OF DEPARTMENT

1826-1828	Samuel D. Harris
1829-1835	Thomas C. Amory
1836-1853	William Barnicoat
1854-1855	Elisha Smith, Jr.
1856-1865	George W. Bird
1866-1874	John S. Damrell
1874-1884	William A. Green
1884-1901	Louis P. Webber
1901-1906	William T. Cheswell
1906-1914	John A. Mullin
1914	John Grady (1 day)
1914-1919	Peter F. McDonough
1919-1922	Peter E. Walsh
1922-1924	John O. Taber
1925-1930	Daniel F. Sennott
1930-1936	Henry A. Fox
1936-1946	Samuel J. Pope
1946-1948	Napeen Boutilier
1948-1950	John F. McDonough
1950-1956	John V. Stapleton
1956	Edward N. Montgomery
1956-1960	Leo C. Driscoll
1960-1963	John A. Martin
1963-1966	William A. Terrenzi
1966-1967	James J. Flanagan
1967-1969	John E. Clougherty
1969-1970	Joseph F. Kilduff
1970	George H. Paul (from April 1, 1970)

MEDAL OF HONOR MEN
BOSTON FIRE DEPARTMENT — 1977

"John E. Fitzgerald Medal"

Awarded to Fire Fighter ROBERT T. GORMAN
of Engine Company 29

"Walter Scott Medal for Valor"

Awarded to Fire Fighter ROBERT F. MACKEY
of Rescue Company 1

"Patrick J. Kennedy Medal"

Awarded to Fire Fighter JAMES W. RANAHAN
of Ladder Company 14

ROLL OF MERIT — 1977

Fire Fighter THOMAS WHALEN, Fire Prevention Division

Fire Fighter JOHN J. HARRISON, Engine Company 21

Fire Fighter THOMAS F. MYERS, Engine Company 21

Fire Fighter PAUL R. MOORE, Ladder Company 30

Fire Fighter PETER F. NEE, Ladder Company 20

Fire Fighter ROBERT T. KILDUFF, Ladder Company 29

Fire Fighter DANIEL C. PATTERSON, Engine Company 11

Fire Fighter JAMES B. STACK, Engine Company 20

Fire Lieutenant JAMES J. FAMOLARE, Engine Company 22

Fire Fighter JOHN D. SHEEHAN, Engine Company 26

Fire Lieutenant DENNIS G. CALLANAN, Engine Company 37

Fire Fighter PATRICK A. MUNROE, Engine Company 22

Fire Fighter ROBERT F. BOWEN, Aerial Tower 1

Fire Lieutenant WILLIAM W. HAYHURST,
Headquarters Division

Fire Lieutenant WILLIAM P. AHERN,
Fire Prevention Division

Fire Fighter LAWRENCE P. KELLEY,
Fire Prevention Division

Fire Lieutenant MICHAEL J. BRUNO,
Ladder Company 10

"Distinguished Service Awards"

Awarded to Fire Fighter PAUL H. KING,
Engine Company 12

Awarded to District Fire Chief JOHN P. VAHEY,
District 8

Awarded to Fire Fighter ROBERT G. BRADY (Retired)

In Memoriam

Deaths of Active Members During 1977

September 30, 1977
THOMAS J. MCGRATH
District Fire Chief, Headquarters Division

October 16, 1977
THOMAS A. FAY
Fire Fighter, Engine Company 4

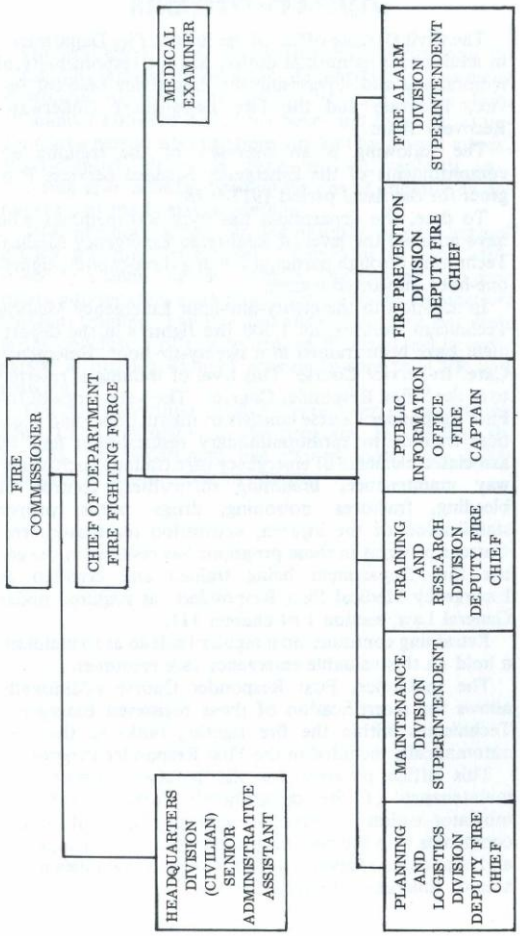
November 22, 1977
GEORGE W. DALY
Fire Fighter, Engine Company 30

December 1, 1977
DENNIS J. CROWE
Fire Fighter, Aerial Tower 1

Deaths of Active Members During 1978

January 31, 1978
FRANCIS J. SHEEHAN
Fire Fighter, Engine Company 20

February 7, 1978
JOHN J. MCDONOUGH
Fire Fighter, Lighting Plant 1



CIVIL DEFENSE OFFICE

The Civil Defense office of the Boston Fire Department, in addition to its normal duties, has the responsibility of maintaining and supervising the Emergency Medical Services Program and the Fire Department Underwater Recovery Team.

The following is an overview of the training accomplishments of the Emergency Medical Services Program for the fiscal period 1977-1978:

To date, the department has over 500 members who have attained the level of Registered Emergency Medical Technician through participation in a three-month, eighty-one-hour, advanced course.

In addition to the eighty-one-hour Emergency Medical Technician Courses, all 1,700 fire fighters in the department have been trained in a twenty-six-hour, Emergency Care, In-Service Course. This level of training is referred to as the "First Responder Course." The basic scope of the First Responder Course consists of instructional and practical training in cardiopulmonary resuscitation and all associated elements of emergency care training such as airway maintenance, breathing difficulties, control of bleeding, fractures, poisoning, drugs, burns, proper stabilization of the injured, extrication techniques, etc. Current progress in these programs has resulted in the entire Fire Department being trained and certified as Emergency Medical First Responders, as required under General Law, section 1 of chapter 111.

Retraining continues on a regular basis so as to maintain a hold on this valuable emergency care resources.

The In-Service, First Responder Course additionally allows for recertification of those registered Emergency Technicians within the fire fighting ranks as they are automatically included in the First Responder Program.

This office provides for the purchase, repair, and maintenance of the department's forty resuscitator-inhalator-aspirator instruments and supplies all of the fire companies with the necessary associated medical supplies, and appliances necessary to fulfill its responsibilities in the area of Emergency Medical Services.

HEARTSAVER PROGRAM

On January 1, 1978, the Boston Fire Department instituted its Heartsaver Program, designed to train as many Bostonians as possible in cardiopulmonary resuscitation, or manual resuscitation of the heart and lungs of an unconscious person who has been stricken by a heart attack, electric shock, drowning, drug reaction, asphyxia, etc. Training also includes assisting victims of choking by application of the Heimlich Method.

This four-hour course consists of a film on choking and a CPR training film entitled, "The Pulse of Life," followed by a lecture on each subject. The training then continues into separate work groups for the hands on practical manikin training. The Fire Department is confident that, at the conclusion of this course, each citizen will be well-versed in the provision of emergency care for CPR and choking.

The Fire Department utilizes thirty-seven of its certified EMT/CPR instructors in the program. In the first six months, the department has trained more than 3,000 residents of Boston, free of charge.

TRAINING AND RESEARCH DIVISION

The primary function of the Training and Research Division is twofold:

1. To initiate and supervise the job development of the fire fighter, commencing with the probationary period and continuing throughout his career.

2. To become involved in research programs designed to improve fire-fighting techniques, fire-fighting apparatus and equipment, and protection of fire fighters; to prepare specifications for new fire apparatus; to test and evaluate newly acquired fire apparatus; to test and evaluate new tools and appliances before recommending their use in the department.

The following summary covers in general the activities of this division during the past fiscal year.

Available Facilities

1. Training and Research Division Office, Headquarters Building.
2. Fire Fighting Equipment Stockroom and Repair Facility, Headquarters Building.
3. Memorial Hall, Headquarters Building.
4. Pump Test Pit, Maintenance Division Yard.
5. John A. Martin Fire Academy. Moon Island.
6. Compressed Air Tank and Fire Extinguisher Recharging Station, Moon Island.
7. Compressed Air Cylinder Recharging Station (5,000 lb. capacity), Headquarters Building.
8. Drill Tower and Classroom, Engine 29, Brighton.

Department Drilling and Training Program

This division develops, formulates, and conducts drilling and training procedures covering the wide range of subjects, both basic and newly developed, that must be taught and reviewed to insure sufficient operations at fires and other incidents requiring the response of the Fire Department. It is absolutely essential that personnel of our department be trained and continuously reviewed on the necessary tasks facing them in the fire service. A manual of standard operating procedures, previously established, covering the various activities of this department for the guidance of personnel and for uniform operations of the department was used in our training programs. These procedures are revised as required. Forty-four engines, twenty-eight ladders, two rescue, two aerial towers, two fireboats, and two lighting plant companies (making a total of eighty fire companies) were instructed during the past period covered in this report.

1. Equipment Familiarization
2. Apparatus Familiarization
3. Provisional Appointees
   a. Drill School—144 new men trained at drill school
   b. Physical Fitness Standards
4. MBTA
5. Exhibition Drill Team
6. Boston Gas Company
7. Fire Science Courses
8. State College Cooperative Plan
9. Standard Operating Procedures Review

Basic Fire Fighting

This department conducted courses of instruction in the fundamentals of fire fighting and fire safety for groups in the city and within the surrounding areas. The facilities of the Fire Academy, as well as the classrooms are used. These groups included other fire departments, insurance companies, security agencies, police departments, municipal organizations, hospitals, etc. In addition, members from the various surrounding fire departments have attended our probationers' drill school.

Mutual Aid Program for emergency recharging of high-pressure, air mask cylinders initiated with Mass. Training Academy, Cities of Quincy, Revere, and Worcester.

LNG

In March, 1977, the Energy Transportation Corporation of New York, at their expense, constructed a Liquefied Natural Gas Training Center at the Moon Island Academy grounds for training crew members of the LNG tankers being constructed at General Dynamics Shipyard, Quincy.

During the past year personnel from three LNG supertankers, local gas companies, and our department have used these facilities for training purposes.

Conrail

In cooperation with Consolidated Rail Corporation, a system has been initiated for immediate ascertainment of hazardous commodities on Conrail trains.

Surveys
Inspections and Tests

Annual surveys, inspections, and tests are carried out throughout the department to determine the condition of the various tools and appliances used in the fire service. It is of extreme importance that periodic tests and checks of equipment be carried out to also insure the safety of personnel who may be called upon to use this equipment.

Servicing and Repair Programs

In order to maintain and guarantee safe and continuous operations of fire-fighting equipment, tools, and appliances, a year-round servicing and repair program is conducted by this division, at our repair facilities at Headquarters and at the Fire Academy. These facilities avoid delay and reduce the cost to the city of servicing and repairing this equipment.

Inventory—Fire Fighting Equipment

In order to carry on our servicing and repair programs and to insure the efficient operation of companies at fires, it is necessary for this division to maintain an inventory of fire-fighting tools, equipment, and parts for same. This requires extensive record-keeping and constant review.

Research

A very important function of this division is to conduct tests and experiments and throughly evaluate the merits of new equipment, materials, and appliances developed for the fire service. We are always alert to take advantage of progress made by manufacturers when the purchase of equipment becomes necessary and manufacturers are encouraged to submit samples of their products for test and evaluation. These responsibilities will be increased as the requirements for occupational safety under OSHA and NIOSH are put into effect.

Following are some of the research programs conducted by this division:

Protective Breathing Equipment

The research program on protective breathing equipment was continued in cooperation with Professor Burgess of the Harvard School of Public Health.

Field testing of various gas masks, experimental and otherwise, was continued.

The two projects utilizing air sampling devices and particles sampling devices to measure carbon monoxide and oxygen exposures of fire fighters at actual fires were continued.

Scott Aviation, manufacturer of the Scott-Air Pack, has received government approval of a new type of air mask. Fifty masks were initially purchased and placed in service on two Rescue Companies and nineteen Engine Companies for evaluation. Since these evaluations were very successful, all fire companies have been issued the new 4.5 mask. These masks are repaired by members of the Training Division who have been instructed and certified by Scott Aviation Company. The enforcement of the mandatory gas mask rule has resulted in a substantial reduction of injuries to the members of the department.

Protective Clothing and Equipment
Work Clothes and Uniforms

Field testing and evaluation programs were continued in an effort to obtain safer, suitable, nonhazardous and flame retardant materials and products for fire fighters. Among the materials evaluated were Nomex, Dynel, and permapress. DuPont Company, J.P. Stevens Company, Monsanto Chemical Company, and NASA have been very cooperative in this regard.

Fire Coats

Various types of fire coats (including vinyl and Nomex) continued to be field-tested and evaluated in the department. New specifications were formulated by this division in an ever-continuing effort to design and produce a coat suitable for fire-fighting purposes which would be an improvement over the present type. Cooperation has been received from the ALB Rubber Company, the Globe Manufacturing Company, DuPont Company, the Bureau of Standards, and NASA. In addition the experience and knowledge of this department has been provided to assist other fire departments in this field.

New reflective material manufactured by Reflexite Corporation of Connecticut is being used and tested on fire coats.

Fire Helmets

Field-testing was continued and will continue to be conducted on the various models and various types of

materials. Leather and plastic fire helmets from Cairns Company are presently being field-tested in various fire companies in the department. Nonmetallic and other designs are being examined.

Fire Fighters Work Gloves

Field-testing of work gloves is being continued not only on original issue but also on a new type glove, incorporating nonskid surface material for better handling of tools, etc. Research is still being conducted to find a glove that will give adequate protection.

Fire Boots

Field-testing and evaluation on various types of boots, and related equipment was continued.

Miscellaneous Fire-Fighting Equipment

Testing and evaluation on various tools and equipment, including nozzles, hose, fire-extinguishing compounds, rescue and forcible entry tools, etc. were continued.

New Apparatus and Equipment

The following equipment was received and placed in service during period 1977-1978.

Five XL-98 Homelite saws were issued to Ladder Companies. All Ladder Companies, Rescues, and Aerial Towers are now equipped with these saws.

Seven sets of cutting shears for new Hurst tools, commonly called "Jaws of Life" were placed throughout the department.

Eight Indian fire pumps necessary for extensive brush fires were placed in service.

The hydrant-thawing devices are in the process of being rebuilt.

Specifications have been drawn up and contracts awarded to purchase three Hahn 1500 GPM pumpers and four Sutphen, combination high-pressure hose wagon and 1250 GPM pumpers. Delivery of this apparatus is expected in September or October, 1978.

The Training and Research Division of this department compares favorably with the outstanding training setups throughout the country. We have every reason to believe that the Fire Department will continue to be trained and maintained at its present high caliber and that progress through teaching and training will be the forerunner of greater efficiency.

FIRE PREVENTION DIVISION

Arson Squad

The Arson Squad of this division is charged with the responsibility of investigating the cause and circumstances of every fire and explosion occurring within the city limits. The Boston Fire Department and Boston Police Department combination Arson Squad went into effect in April, 1977, and is still in progress. Thanks to the cooperative efforts of Fire Commissioner Paul and Police Commissioner Jordan, with the approval of Mayor White, this has greatly increased the effeciency of the Arson Squad as shown by their number of arrests and convictions. Results of investigations are to determine whether a fire was caused by carelessness, design, or is a violation of law. These investigations are carried on for the use of the Boston Fire Department in removing causes of fires and explosions, apprehending of culprits responsible for fires, and turning over all facts and evidence in the course of their duties to the office of the State Fire Marshal. Many hours are spent on these investigations. Undetermined, suspicious, and incendiary fires totaled 668. Injuries reported and investigated totaled 130, with deaths attributed to fires totaling 24. During the past twelve months, 123 arrests were made and 111 Municipal and Superior Court appearances. As a result of these appearances and arrests, we were able to get twenty-nine convictions. This work by The Arson Squad in obtaining these convictions deserves a "well done" because in arson investigation and detection, they have succeeded in obtaining these convictions in one of the most difficult crimes there is to prosecute. The Massachusetts Training Academy conducted an arson investigation couse—Level I and Level II—at the Boston Fire Department Headquarters which was attended by all police and fire personnel assigned to the Arson Squad.

Personnel

The Night Division of Inspection concentrated its efforts in the area of high populations wherein our citizenry may be assembled for shopping, amusement or entertainment with particular emphasis in regard to "rock show" performances in the City of Boston. A night inspection team has been put into service under the direction of a fire captain.

These night teams consist of all Fire Prevention day inspectors who work alternate night shifts. The main purpose of these teams is to inspect all places of assembly within the City of Boston.

Personnel has been assigned to new construction sites for the purpose of ensuring the available water supplies and the fire protection equipment as well as seeing that good housekeeping is being maintained at these sites.

The vacant building program of inspections is still being maintained at a high level. Approximately 1,070 vacant buildings have been inspected at least once. This allows the Fire Prevention Division to keep a very close surveillance on demolitions and removal of all debris from their locations, thereby allowing for both the prevention of blight in the neighborhood and increasing the fire safety of the neighborhoods. This program also includes the supervising and posting of hazardous location signs.

The Fire Prevention Division also keeps a close watch and supervision on all temporary closings of gasoline stations.

Gasoline tank truck inspections are still in effect in relation to the affixing of safety decals.

A special, in-depth inspection by Fire Prevention personnel of the Symphony Road area is now in its second year.

A special investigation team continues to check problem areas of the city with particular emphasis on Brighton and parts of Roxbury and Dorchester.

All hospitals, clinics, and schools containing laboratories were inspected for illegal use and storage of propane. These inspections remain a continous effort.

During the fiscal year, members of the Fire Prevention Division have been called upon numerous times to give nightly talks and demonstrations to civic groups, neighborhood meetings, etc.

Massachusetts Fire Prevention Association Seminar

This seminar was held at Florian Hall with chief officers from various parts of the State of Massachusetts in attendance. Guest speaker at this seminar was Fire Commissioner George Paul, who attracted a tremendous response.

Target Hazards

In keeping with the program, the Fire Prevention Division is continuing on the inspections of large industrial complexes and warehouse areas along with the hospitals and schoolhouse inspections. These inspections are made by officers of the Fire Prevention Division who are accompanied by the district chief of the fire district concerned and the company officer in whose subdistrict the occupancy may be located. Some of the inspections were follow-ups of last year and some are new ones that have been added.

In schoolhouse inspections, a lieutenant has been assigned with an inspector from the Department of Public Safety to perform in-depth inspections of all public, parochial, and private schools located within the confines of the City of Boston. These inspections are in addition to the regularly scheduled quarterly inspections required by law and performed by this division in conjunction with fire fighting officers from the fire districts concerned. The assigned lieutenant worked with the city officials of the School Department and the district chiefs in the school desegregation program which is still of great concern.

Large Loss Fires

During the past twelve months, large loss fires encompassed all sections of the city that taxed the capabilities of the Boston Fire Department. In view of these large loss fires, both in material things and human life, the Fire Prevention Division maintains their "beefed-up" inspection program and their community relations and educational program with neighborhood committee meetings partly aimed at the minority groups located within our city and also those who do not speak our tongue. These educational programs and community relations programs have been aimed at the Spanish-, Italian-, and Chinese-speaking people and the black communities. This is being brought out by presentations and civic meetings of neighborhood committees and through educational programs in the schools.

The Fire Prevention Code has been rewritten and is now being reviewed by the Law Department in preparation for the City Council.

The Housing Court, under the direction of Judge Daher, has been heard in various parts of the city. This court has been extremely helpful in assisting the Boston Fire Department and we have had a very fruitful year.

Photographic Activity

This unit responds to all multiple alarms; accidents involving fire department vehicles or property; special calls for specific photographic records; fire prevention code violations and fire hazard conditions for correction or prosecution; provides Id. card photographs; data assembly and lamination of Id. cards for issuance to all members appointed or promoted. A total of 13,378 prints were made in the course of the past twelve months.

In-Service Inspections

This department continues with its routine, in-service inspections by company units of this department. Information and inspections recorded are appraised in this division, and in those instances where further action is required, the inspection report is brought to the attention of Fire Prevention inspectors for closer study of the problem. Their findings are made known to the district fire chief and the fire company involved with recommendations and corrective action necessary. These inspections are in excess of 7,000 in the course of a year.

Plans Examiner

During the past twelve months, the plans examiner has examined and approved a total of 440 sets of plans. He is also required to convey by telephone, information relative to applicable codes for specific occupancies. Review of plans are made for autonomous authorities, preliminary discussions are made relative to proposed structures with regards to requirements, and appearances are made at both state and local public hearings to voice opinions of the Fire Department. As a result of a complaint or request, on-site inspections are made of various projects, particularly in the area of self-service gasoline stations prior to their openings, to assure compliance with the fire prevention regulations of the state and the fire prevention orders of this department. Research work on existing and proposed code changes or additions are also part of the plans examiner's function. From time to time, he is called upon to read and

comment on various items of interest to this department such as other city code requirements and proposed changes to accepted fire protection reference standards. In addition, clerical work is necessary to maintain microfilm files on projects approved by this department. The plans examiner is also a designated representative of the Fire Commissioner at Fire Prevention-Fire Protection Board meetings.

Licenses

From July 1, 1977, through June 30, 1978, receipts from licenses issued totaled $10,689.50.

Permits

Permit revenues from July 1, 1977, through June 30, 1978, amounted to $137,125.80, including miscellaneous permits. Total revenue from all sources for the past twelve months was $147,815.30.

Inspection Force

The Inspection Force of this division has established a program of inspection designed so that the occupants of the premises to be inspected can make no advanced preparations to circumvent the honest viewing of any location. The total number of inspections made by the Inspection Force of this division totaled 13,582. Places of assembly were also inspected by this force for a total of 2,363. Additional inspections were made by the officers in the subdistricts where the places of assembly are located. In locations requiring a specialized knowledge, the inspectors of this division specially trained in that field were assigned to make inspections to ascertain that no fire hazard existed or continued due to a lack of knowledge. All matters concerning other city departments were reported by the inspectors of this division on the necessary forms to the department charged with this responsibility. These totaled 1,142.

Chemist

The department chemist's responsibilities in the Fire Prevention Division include, among other things, the performance of laboratory evaluations of flammability and related properties of materials intended for use as draperies, upholstery materials, and other miscellaneous

decorative items. In addition, fire and related test data supplied by manufacturers are evaluated for the use of rugs and other floor coverings, ceiling constructions, furnishings, and a variety of materials used in various group-use occupancies. During the past year, considerable effort was relegated to participation in the code development activities of the Massachusetts State Building Code.

Responsibilities for the Training and Research Division include the development and implementation of purchase specifications for protective clothing and equipment for fire fighters and the monitoring of air quality for the breathing air in the self-contained breathing apparatus used by the Boston Fire Department.

The department chemist has also been appointed as chairman and/or consultant to various committees, i.e., NFPA, National Advisory Committee, ASTM, etc.

Schools

Every school in the city is inspected with frequency and regularity by a company officer within whose subdistrict the school building is located. A total of 6,400 fire exit drills were held. The Fire Prevention Division maintained a program called the "Boston Junior Fireman" based on the Fire Marshal Plan which claimed national recognition since its inception in Boston in 1948. This plan is supported by the Sears Roebuck and Company and is aimed at the sixth-grade pupil of public, parochial, and private schools for fire prevention education. The approximate number of pupils lectured on fire prevention during the school year was 9,465.

Fire Prevention Activity

The Fire Prevention Division again this year continued its efforts with an around-the-clock program of fire prevention, 365 days. Financial assistance is obtained through funds donated by the Fire Safety Council which is a citizen-sustained group that aids in the purchase of educational material in our fire prevention program. Their assistance in our effort is extremely valuable.

Some of the highlights of the week's special activities were members of the Boston Fire Department in uniform passing out pamphlets containing a brief history of the department at the corner of Summer and Washington Streets in the heart of the shopping district. At this same

location was one of the most modern rescue companies in the country and one of the oldest steam fire engines still active. These props were used to direct attention to a large display window which had been donated by one of the larger department stores. The Dandy Drillers were activated again this year and made over twenty appearances.

Officers and men of the Fire Prevention Division appeared on many and varied live television shows during the week. Film clips and slides were also utilized in the television industry and spot announcements and talk shows were carried on all local radio stations. Evacuation drills and safety lectures were held at many large public buildings. local merchants sponsored ads in local newspapers. It is felt that through the use of the various news media, as we use them, the message of fire safety reached most every citizen of Greater Boston.

Members of the Fire Prevention Division supervised and assisted in the shoveling of snow from fire hydrants during the February blizzard. This ensured the availablity and easy access to hydrants by fire companies, thereby, once again, significantly contributing to the protection of property and life safety of the citizens of Boston.

A special plaque and note of thanks was awarded to the members of the Fire Prevention Division for their cooperation, dedication and overall support against muscular dystrophy. The amount of money collected was quite substantial.

General

The Fire Prevention Division maintains a constant, in-service training of all members assigned to this division. A weekly seminar is held for all members assigned to the Fire Prevention Division to keep abreast of current changes in inspection techniques, changes in rules and regulations, and any changes in statute law. This includes the explanation, use, and implementation of the new State Building Code with regards to changes as it affects the Boston Fire Department. These seminars also are extended to members of the fire fighting forces by holding instructional periods on the Fire Prevention Code with its enforcement and also instructional courses for officers of the department relative to their responsibilities in inspections and corrections and the issuance of all necessary notices ordering the correction or the appearance of delinquents into the various district courts.

A cooperating in-service training program is also held with the other various departments of city government involved in code enforcement, i.e., Building Department, Housing Inspection Service, and Health and Sanitation. Members selected to be fire inspectors assigned to the Fire Prevention Division start with a basic knowledge of fire fighting because of their service in the various fire companies of the department throughout the city. These men usually have a background knowledge of building construction, electricity, plumbing, and a knowledge of the various occupancies and their related fire hazards. As this division deals constantly with the public, these men must be able to portray a good example of the fire service to the citizenry of Boston. They must acquire a knack of explaining to the public how they should safely live, work, and play to prevent fire from taking their lives, cause painful injuries, and destroy property. In order to get this message across to the general public, a man must be adept in public relations so that the message we have to give is received in a proper manner.

It must always be kept in mind that fire prevention is an intangible. Therefore, it is never known how many lives are saved or how much property is protected from destruction by the inspections made and the corrections obtained during these inspections by members of this division. The work of the Arson Squad in the investigation of these serious fires and other fires occurring within the city which were incendiary, suspicious, or undetermined and those fires which were a violation of law, resulted in the apprehension and convictions of twenty-nine persons. This work by the Arson Squad will prove to be a deterrent to others who, for any reason, hope to avoid punishment for the crime of arson or the violation of law which jeopardizes public safety in this city.

The constant supervision by the night club inspectors and theatre inspectors of this division results in the continuing correction of any violations or deficiencies or overcrowding in places of assembly. The thoroughness with which the fire prevention inspectors follow through on the flameproofing of decorative materials used in the various occupancies within this city, i.e., places of assembly, institutions, theatres, etc., maintains a high level of safety to life from fire in these occupancies. Therefore, it is with

great pride that I point out that the work performed by the members of this department and particularly the inspectors assigned to the Fire Prevention Division whether they be field inspectors, night club inspectors, or arson investigators, through their efforts have made the City of Boston a safer place in which to work, live and play.

PLANNING AND LOGISTICS DIVISION

During the past year the Planning and Logistics Division has broadened its activities so as to improve existing programs and to develop new ones that allow us to keep abreast of changing conditions within the city. The activities this division gets involved in are varied, consisting of attendance at meetings with community, city, state, federal agencies, public authorities, and private building owners and developers.

Response Cards

The nine-alarm, response cards are now at the stage where the involvement of the computer is the remaining item for their implementation. Additional computer refinement is necessary before this new concept of response will be in operation within our department.

This division's involvement with the fire departments in the Greater Boston area are referred to as the Metro Fire Chiefs. Our interests are represented for their ten-alarm, response card which is an extension of the established mutual aid that the communities involved in Metro now have. This division informed this group of Boston's automatic response on fourth and fifth alarms so it could be incorporated in the Metro Card.

Attendance at these meetings also provides us with the opportunity to take part in discussions that are beneficial to our department, such as a recent meeting that had representatives from the state and Civil Defense to answer questions relative to the severe snowstorm in February. Many of the chief's felt that the state failed to provide adequate support to the cities and towns.

MBTA

Standpipe work in the subways has been completed except for some additional loose ends. The installation of radio communications in the entire subway system has been completed. Both of these projects were initially proposed by this division and the programs we have established of acquainting all companies with the operation of these systems has been successful.

This division has been striving for some time to convince the MBTA of the need for a mechnical ventilation system

that would cover the areas of the Blue Line for the section between Aquarium and Maverick stations beneath Boston Harbor. Recently it was announced that such an installation will be undertaken in the near future. The many improvements that have been made are for the safety of the riding public and for improved efficiency of the Fire Department's operations. This requires that the department must maintain programs of instruction that inform our members so that our operations at the time of an emergency will reflect credit on our department.

Traffic

This division was involved in discussions for the installation of a system of traffic controls that will allow responding apparatus to control traffic lights at approaching intersections. Such a system is known as the OPTICOM Traffic Control and it is being proposed for the new Crosstown Street that eventually will run from the area of Southampton Street and Massachusetts Avenue to the area of Columbus Avenue and Weston Street.

Preplanning

The Preplanning Program has been adjusted and a new concept has been introduced whereby each company's subdistrict has been divided into four subsections so that each work group will have an assigned responsibility for the inspection of hydrants and fire alarm boxes in their designated areas. This allows each work group to become thoroughly familiar with all of the hydrants in their respective areas. At the present time, when we have damaged hydrants from the recent severe winter and the continued vandalism, it is important for members to be aware of where these hydrants are in case of a fire in the immediate area.

This division will maintain records of all reported defective hydrants and will forward this information to the Water and Sewer Commission for correction. There are too many times when the public puts blame on the Fire Department for hydrant conditions, so our records are intended to show that we have reported conditions to the authority responsible for their repair.

High-Rise

Continued interest in high-rise buildings was shown by our continuing programs of instructions concerning opera-

tions in these buildings, with more detailed emphasis on the use of the fire-fighter's key switch, operation of the building's fire pump, and the use of the standpipe system. The program whereby companies from outlying areas cover companies in the inner city area, assume their response and receive instructions on the different type of hydrants, the MBTA emergency exits and standpipe locations also was a very successful program. A minimum of forty companies participated in these drills, approximately 100 fire fighter's key switches were demonstrated, and standpipe flow tests were done.

Harassment

Thts division receives the harassment reports from the companies, and during the past year, we devised a more informative tally record that indicates the area of the city where the harassment occurs, and the type of assault and the weapon used. Serious incidents are forwarded to the Police Department and we try to keep abreast of any further action they make take. Incidents involving motor vehicles are forwarded to the Registry of Motor Vehicles, and we keep tabs on what action they take.

FIRE ALARM DIVISION

The Boston Fire Department responded to a total of 59,769 incidents for the period July 1, 1977, through June 30, 1978, involving more than 251,776 separate movements of apparatus. The Fire Alarm Office received and transmitted more than 711,000 separate radio messages in the dispatching of apparatus and for incidental department operations. There were 12,966 false incidents pulled from the street boxes. There were 2,619 false telephone incidents during the same period.

During this period, there were ninety-one second alarms, thirty-six third alarms, thirteen fourth alarms, and six fifth alarms. There were 154 working fires requiring additional apparatus being dispatched to the fire but not considered multiple alarms.

On June 30, 1977, there were a total of 2,449 fire alarm boxes in service in the City of Boston. There were twenty-six new boxes installed for a net increase of twenty-six boxes. As of June 30, 1978, there were 2,475 fire alarm boxes in the City of Boston.

The Fire Alarm Construction Force installed a total of 38,955 feet of underground cable for a total of 257,170 feet of conductors. A total of 7,225 feet of overhead wire and cable was installed for a total of 14,450 feet of conductors. A total of 7,225 feet of overhead wire and cable was removed. Wire and cable removed was defective or damaged and in most instances was replaced.

Voice Alarm Boxes

Two years ago the department installed six, voice, fire alarm boxes as part of a pilot study as to their effectiveness. The statistics developed from this study are very interesting. In the last calendar year, as telegraph boxes, these six locations experienced 553 false alarms. In the first full year as voice fire alarm boxes, there were twenty-two false alarms from these boxes.

This represents a reduction of over 94 percent in the number of false alarms from these six boxes. In terms of dollars saved, using the $500 per alarm cost, the department saved $165,500 in reduced responses.

An additional eighty-four boxes will be installed at various locations in downtown Boston, Roxbury, and Dor-

chester by August 1. The installation of these boxes is expected to reduce the department's response to false alarms by significant numbers, both in alarms and response expenditures.

The department expects to extend the coverage of the voice boxes to embrace other sections of the city in the next few years.

The design of the voice boxes allows them to be integrated into circuits which contain telegraph boxes without any special circuitry changes other than for a receiving console at the Fire Alarm Office.

In addition to reporting fires, a citizen can also call for police assistance, an ambulance, or to report any situation which might affect the safety of the public. In essence, the Fire Alarm System becomes a Public Safety Communications System.

Master boxes connected to the Fire Alarm System provide protection to a great many buildings in the city among them hospitals, schools, and nursing homes.

There are forty hospitals with a patient load of approximately 11,000 connected to the system. All of the public schools of the city are also connected. Most of the colleges and universities are also connected. The total number of schools thus protected is 243.

Ninety-six nursing homes, with approximately 25,000 patients, are protected by master boxes.

Master box protection also extends to a great many of our historical buildings such as Faneuil Hall, the Old State House, and the U.S.S. "Constitution" and Quincy Marketplace.

The remainder of our master boxes extend coverage to such diverse buildings as the Hancock Tower, The Stop and Shop warehouse in Readville, and the Federal Reserve Bank.

The total number of master boxes in service is 765.

In total, these boxes provide direct connection to the Fire Department for more than 100,000 citizens and property valued at many millions of dollars.

The Massachusetts Bay Transportation Authority has delivered to the department twenty portables for use in conjunction with the subway radio system. These portables are for use by Engine and Ladder Companies which are first due at any of the subway stations on the MBTA

system. The funding for these portables and the subway radio system were obtained by the MBTA through the federally funded Urban Mass Transportation Administration.

Very shortly, the final link in this system, the Dorchester Tunnel, will be operational. The total system cost is more than $100,000, and would not have been possible except for the excellent cooperation this department received from the MBTA.

MAINTENANCE DIVISION

The Maintenance Division is responsible for all testing, repairs, maintenance, and preventive maintenance of all fire apparatus and automotive equipment, and for the repair and maintenance of all department buildings and grounds.

The foregoing includes 210 pieces of rolling stock, consisting of Fire Department pumpers, ladder trucks, small cars, and pickup trucks; two fire boats and forty-two buildings. In addition, the Maintenance Division is also responsible for working on specifications for the procurement of new fire apparatus and other vehicles. The Maintenance Division repairs fire fighters clothing, and supplies, and materials for the operation of department vehicles, and has the care of over 350,000 feet of fire hose.

The Maintenance Division consists of the main apparatus repair shop, small vehicle shop, machine shop, welding and metal shop, carpenter shop, hose and canvas shop, paint shop, plumbing shop, battery and ignition room, and the maintenance stockroom.

The high-pressure air compressor room was redesigned to accommodate 5,000 pounds pressure. A new Ingersoll Rand 15T420 H.P. 5,000 P.S.I. air compressor was installed, a new storage system for compressed air was installed increasing the stored air from 1,600 cubic feet to 4,200 cubic feet of air. This allows the air compressor room to fill four times the amount of air bottles that the station could originally charge.

Painting of department buildings consisted of the following: Engine 2, Engine 4, Engine 33, Engine 18, Engine 25, Engine 49, Engine 10; Maintenance Division office; Headquarters (115 Southampton Street) building corridors; and Memorial Hall; and the hulls and inside of both fire boats.

The department hose shop has issued 32,000 feet of hose, in various sizes, and has repaired 44,000 feet of hose in various sizes. Also, the Maintenance Division hose shop has repaired 302 fire coats, and also made 471 fire helmet fronts, and 140 window shades for fire stations.

The department paint shop, has done complete paint jobs on Engine Company 10, and Engine Company 48, and have changed the color from RED to LIME GREEN,

and have lettered the vehicles with the new style of lettering and markings. The paint shop has also painted three small cars white, which will be the color of department cars in the future. Two cars were painted for special Arson Squad, and another for Emergency Medical Technicians.

The department welder and carpenter shops have installed in the Headquarters building, eight air conditioners. This involved the cutting of metal frames and the fitting of air conditioners in the windows.

The department welders have done body work on department vehicles and many welding jobs. Also, the department shop has replaced aerial ladder rungs on aerial ladders.

The department carpenter shop has built a new photographer laboratory at the department Headquarters building, which included new cabinets and counter top.

The department carpenter shop also made a new docking platform for the fire boat. Kitchen tables, and protective plexiglass shields for ten new Seagrave ladder trucks were also made.

During the past year, the Maintenance Division carpenter shop has replaced rake handles, axe handles, and sharpened axes for fire companies. Our shop repairs door handles and panels, windows at fire stations in the city, and poles that are usually loose or damaged. replacing aerial ladder rungs that have been broken at least five times are repaired at our shop. Aerial cables on ladders and ground ladders are also repaired.

Backboards for the Emergency Medical Technicians are repaired by our shop with all cases used by the Emergency Technicians.

The shop has also made additional office space on the second floor by making a complete addition to the existing office.

The delivery of four new hose wagons with 1,000-gallon pumps and two high-pressure deck guns, is expected in October of this year. Also three, 1,250-gallon pumpers, have to be delivered at the same time. A new fuel wagon has been delivered. It will replace the gasoline and fuel trucks that were in service. The new fuel wagon has 900 gallons of diesel in one compartment and holds 300 gallons of gasoline in another compartment, all combined in one fuel truck. This one vehicle will now take the place of the two vehicles previously used.

The delivery of thirteen new automobiles, which will be 1978 Novas is expected in July. The cars will be painted white, with new department markings on them.

PUBLIC INFORMATION OFFICE

During the past year, the Public Information Office and the Office of Community Relations have been involved in the directing and overseeing of the following:

Arrangements for approximately 5,000 visitors to the various fire stations and facilities of the Boston Fire Department.

Acquisition and distribution of printed fire prevention and fire safety material to the above-mentioned visitors and interested parties.

In-depth involvement with the minority recruitment program.

News media coverage of multiple alarm fires and unusual incidents, including fatal fires.

Maintaining records of multiple alarm fires.

Providing research materials and information for television documentaries, radio programs, and newspaper magazine articles.

Research and answering several various types of surveys.

Participation in several career exhibition programs.

The public information officer represented the Boston Fire Department on several occasions on television and radio programs as well as public speaking engagements before interested groups.

Arranging and covering department's promotional ceremonies and award presentations.