

DOCUMENT 11 -- 1974

ANNUAL REPORT
OF THE
FIRE DEPARTMENT
FOR THE PERIOD
JANUARY 1, 1973 TO JUNE 30, 1974

BOSTON, August 1, 1974.

HON. KEVIN H. WHITE,
Mayor of Boston.

Dear Mr. Mayor:

I have the honor to submit herewith a report of the activities of the Boston Fire Department for the period January 1, 1973 to June 30, 1974.

During this period the Boston Fire Department became the first major Fire Department in the country to spearhead and eventually have legislation enacted to require the mandatory installation of sprinklers in all new high-rise buildings, and the installation of smoke and heat detectors in all new residential construction up to seventy feet in height.

The enactment of these two laws are the most progressive steps taken by any Fire Department in the country to protect the lives and property of its residents and taxpayers and those individuals visiting or working within their cities.

Considerable research is being conducted to upgrade fire protection and to protect our fire fighters from the occupational hazards of their duties.

CITY DOCUMENT NO. 11

The Boston Fire Department continues its role as the foremost Fire Department in the country, and it is my great pleasure to serve as Fire Commissioner of this most noteworthy Fire Department.

Respectfully submitted,

JAMES H. KELLY
Fire Commissioner

FIRE DEPARTMENT

1973 - 1974

Fire Commissioner, JAMES H. KELLY

Chief of Department, GEORGE H. PAUL

Executive Secretary, WILLIAM D. SLATTERY (to
August 1, 1973)

Executive Secretary, ROSEMARY L. GRIFFIN (from
August 1, 1973)

Medical Examiner, EDWARD H. HOMMEL, M.D.
(to November 1, 1973)

Medical Examiner, RICHARD H. WRIGHT, M.D.
(from November 1, 1973)

Deputy Fire Chief in Charge of Training and Research
Division, JOHN J. SULLIVAN (to April 1, 1973)

Deputy Fire Chief in Charge of Training and Research
Division, JOHN R. HARRISON (from June 13, 1973)

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

Superintendent of Fire Alarm Division, JOHN M. MURPHY

Superintendent of Maintenance Division, WALTER J.
KEARNEY

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

HISTORY

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 Theodore 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)
 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- James H. Kelly
 (From November 27)

HISTORY

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 Boutillier
 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)

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

CITY DOCUMENT NO. 11
IN MEMORIAM
DEATHS OF ACTIVE MEMBERS DURING 1973

January 28
EDWARD J. HIGGINS
Fire Fighter, Motor Squad

February 2
ARTHUR J. CEURVELS
Fire Fighter, Ladder 20

March 30
WILLIAM P. HARPER
Fire Fighter, Maintenance Division

April 19
JOHN J. COSTELLO
District Fire Chief, District 2

May 30
THOMAS F. FRAHER
Fire Fighter, Training and Research Division

August 4
JAMES M. RYAN
Fire Lieutenant, Engine 28

September 21
YSAYA W. DIROSARIO
Fire Fighter, Engine 37

October 14
JOHN W. CARLSON
Fire Fighter, Engine 28

October 19
WILLIAM J. KENNEALLY
Fire Fighter, Engine 53

November 9
HENRY E. BERNASCONI
Fire Fighter, High Pressure

FIRE DEPARTMENT
IN MEMORIAM

November 18
FELIX F. COSGROVE
Fire Fighter, Engine 5

November 21
WILLIAM H. GREENE
Fire Fighter, Engine 14

DEATHS OF ACTIVE MEMBERS DURING 1974

January 17
GEORGE L. AYLWARD
Fire Lieutenant, Ladder 24

January 22
BERNARD G. TULLY
Fire Fighter, Engine 30

February 18
DANIEL J. LYDON
Fire Fighter, Ladder 10

March 9
JOHN V. DONOVAN
Fire Fighter, High Pressure

May 17
JAMES W. MCDONALD
Fire Fighter, Training and Research Division

June 17
ROBERT F. CULLITY
Fire Fighter, Fire Prevention Division

CITY DOCUMENT NO. 11
MEDAL OF HONOR MEN
BOSTON FIRE DEPARTMENT -- 1972

"John E. Fitzgerald Medal"

Awarded to Fire Lieutenant GEORGE H. RUSHTON of
Engine Company 12

"Walter Scott Medal for Valor"

Awarded to Fire Lieutenant WILLIAM F. ROACHE of
Rescue Company 1

ROLL OF MERIT -- 1972

Fire Fighter ROBERT W. BEALS of Engine Company 9
Fire Fighter HOWARD K. LOMAS of Ladder Company 2
Fire Fighter EDWARD J. HUDALLA of Engine Company 43
Fire Fighter WILLIAM M. BURNS of Ladder Company 29
Fire Fighter ROBERT E. DILLON of Ladder Company 29

"Distinguished Service Award"

Awarded to Fire Fighter PAUL A CHRISTIAN of
Ladder Company 20

FIRE DEPARTMENT
MEDAL OF HONOR MEN
BOSTON FIRE DEPARTMENT -- 1973

"John E. Fitzgerald Medal"

Awarded to Fire Fighter FRANK E. WILLIAMS of
Engine Company 55

"Walter Scott Medal for Valor"

Awarded to Fire Fighter PAUL F. O'BRIEN of
Engine Company 1

"Patrick J. Kennedy Medal of Honor"

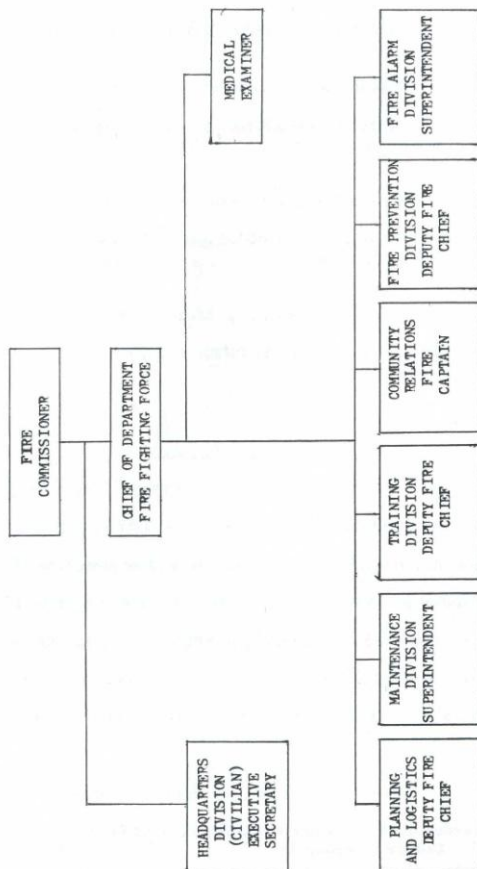
Awarded to Fire Fighter STEPHEN J. CLOONAN of
Rescue Company 2

ROLL OF MERIT -- 1973

Fire Lieutenant ACACIO J. GAZO of Ladder Company 29
Fire Fighter BRADLEY RATTIGAN of Engine Company 17
Fire Fighter FRANCIS SHAUGHNESSEY of Engine Company
17
Fire Fighter ROBERT T. KILDUFF of Ladder Company 29
Fire Fighter DONALD LAPORTE of Engine Company 12

"Distinguished Service Award"

Awarded to Fire Fighter NORMAN L. MAYER of
Ladder Company 20



STATISTICS

CITY DOCUMENT NO. 11
COMPARATIVE FIRE DEPARTMENT
EXPENDITURES

1. PERSONAL SERVICES	
Permanent employees	
Overtime	
Total Personal Services	
2. CONTRACTUAL SERVICES	
Communications	
Light, heat, and power	
Repairs and maintenance of buildings and structures	
Repairs and servicing of equipment	
Transportation of persons	
Miscellaneous contractual services	
Total Contractual Services	
3. SUPPLIES AND MATERIALS	
Automotive supplies and materials	
Food supplies	
Heating supplies and materials	
Household supplies and materials	
Medical, dental, and hospital supplies and materials	
Office supplies and materials	
Miscellaneous supplies and materials	
Total Supplies and Materials	
4. CURRENT CHARGES AND OBLIGATIONS	
Other current charges and obligations	
Total Current Charges and Obligations	
5. EQUIPMENT	
Automotive equipment	
Office furniture and equipment	
Miscellaneous equipment	
Total Equipment	
Grand Total	

FIRE DEPARTMENT
COMPARATIVE FIRE DEPARTMENT
EXPENDITURES

	1972	1973	1974
....	\$27,189,480.75	\$26,981,926.86	\$15,335,278.56
....	<u>1,113,821.27</u>	<u>1,246,818.24</u>	<u>639,763.08</u>
....	\$28,303,302.02	\$28,228,745.10	\$15,975,041.64
....	81,532.29	47,046.75	43,330.20
....	167,882.77	178,713.68	84,572.43
....	167,427.05	195,472.75	75,108.40
....	204,193.95	242,600.85	108,306.28
....	3,210.88	1,718.51	1,779.71
....	<u>56,777.25</u>	<u>36,449.86</u>	<u>13,825.21</u>
....	\$ 681,024.19	\$ 702,002.40	\$ 326,922.23
....	200,941.90	219,961.87	124,826.14
....	77.00	-----	-----
....	96,257.70	97,366.09	107,208.40
....	18,774.81	19,184.00	6,206.30
....	2,618.99	1,286.02	138.95
....	25,570.36	22,361.71	14,035.43
....	<u>667,961.72</u>	<u>369,360.78</u>	<u>161,932.36</u>
....	\$ 1,012,202.48	\$ 129,520.47	\$ 414,347.58
....	<u>177,266.26</u>	<u>127,525.53</u>	<u>56,013.40</u>
....	\$ 177,266.26	\$ 127,525.53	\$ 56,013.40
....	92,982.58	54,604.26	-----
....	4,435.17	5,866.95	1,007.80
....	<u>176,042.84</u>	<u>118,295.06</u>	<u>111,506.95</u>
....	\$ 273,460.59	\$ 178,766.27	\$ 112,514.75
....	\$30,447,255.54	\$29,966,559.77	\$16,884,839.60

PLANNING AND LOGISTICS DIVISION

The Planning and Logistics Division has a proud record of achievements for the period 1973-1974. The ground work that was started in 1972 produced results that will prove to be beneficial to both the public and our operating personnel. As a result of our activities, this division is called on for problems involving water supplies, building elevators, response card assignments, high-rise buildings, the M. B. T. A., Logan Airport, traffic and street layouts, and neighborhood renewal projects.

M. B. T. A. - The Planning and Logistics Division played an important part in the development of improved fire safety in the tunnels. This included the updating of procedures for our department to follow for emergency conditions and the installation of a fire standpipe system that was originally proposed by this division. This installation has progressed rapidly, and in each location this division was present when the layout for standpipes in a particular location was being designed. As each new location was completed, we arranged for the Fire Department personnel to visit the site and become acquainted with all features that can assist them at times of emergencies. Included in our contact with the M. B. T. A. was the development of programs involving the emergency exits and the proper procedures to follow when ordering a power shutdown and the restoration of such power. The M. B. T. A. provided qualified personnel to assist us in our programs, and the result is a better understanding by both departments of the importance of close contact so as to provide better safety for the public.

Water Supplies and Testing - Extensive work was performed in this area in all sections of the city. A lot of the success achieved in this work is the result of the splendid cooperation we have established with the Water Department. We endeavor to bring to the attention of the Water Department those conditions that it is felt are within their jurisdiction for correction, and this includes the replacement of lowry hydrants with post hydrants wherever possible. Also, meetings have been held with the Water Department trying to do something about the illegal opening of hydrants. All new construction sites are surveyed for adequate hydrant distribution, standpipe flow tests are performed, and the Building Department notified.

FIRE DEPARTMENT

Elevators - A great deal of work has been done relative to conveying to the members of this department information on the essentials of elevator operation and safety. Today, with the vast assortment of elevator controls, it is necessary to keep Fire Department personnel abreast of the latest information and we are endeavoring to do this.

The installation of the Firefighter's Key Switch has afforded an opportunity to explore its use and pass the information on to Fire Department personnel. All fires that involve the building's elevators are investigated so as to seek out faults that can be eliminated to prevent a serious life safety problem. All buildings where the Firefighter's Key Switch is installed are visited so as to determine the status of the switch, the location of the repository box, witnessing tests and noting any variances. This forms the basis for several points brought to the attention of the State Board of Elevator Regulations.

A program of workable cooperation with the Elevator Division (State and City) has been initiated for Fire Department notification at buildings where the key switch has been accepted by the Inspector.

Response Card Assignments - The shifting of companies and the contemplated new fire houses that are in the construction stages necessitate concern about readjustments of alarm response for the companies involved. This problem is being approached in a manner that provides the greatest input from those involved. This includes the District Fire Chiefs and Company Commanders, the Fire Alarm Office and the personnel of this division.

Important changes were made in the response to Logan Airport and new procedures were established for the striking of Box 612. A system of phantom boxes was put into service to cover the vast amount of property on the Airport and to pinpoint those emergencies involving aircraft from fires in the buildings and similar locations that do not involve aircraft.

Adjustments were made in the response of our fireboats to the Island boxes where our newer boat (Engine 47) has a shallow draft and can make a closer approach.

This division maintains records of all pre-planning projects and prepares and distributes the schedules for company participation in this program. They also set up the scheduling of drills at M. B. T. A. installations, involving standpipes, emergency exits and third rail procedures for shut down and restoration.

New Construction - High-Rise Buildings - Relations with the construction industry have been established and site supervisory personnel have welcomed the men from the Planning and Logistics Division and have endeavored to work closely with them. This has proved to be very beneficial, as it enables us to keep abreast of those changes at the sites that can help or hinder our operations at the time of an emergency.

The extension of the stairs and the standpipes, the access to the building's siamese connections, unsafe practices by workers that can contribute to fire, and the availability and safe operation of the personnel's hoists are items that are closely observed. Fire companies are periodically taken to these sites for familiarization purposes and the Chief Officers and Company Officers are supplied drawings where necessary.

We are continuing our work in the finished buildings of implementing our established evacuation procedures and acquainting our fire companies with the essentials of the elevators, the building's fire pumps, the emergency power, and the Central Control Room. An understanding of these features of the building can be of tremendous value at the time of an emergency.

This division supplies lecturers to our Training Academy to cover the subjects of water supplies, building elevator problems, M. B. T. A. procedures in case of a fire, and high-rise new construction and evacuation procedures for the finished buildings.

TRAINING AND RESEARCH

DIVISION

CITY DOCUMENT NO. 11
TRAINING AND RESEARCH DIVISION

The primary function of the Training and Research Division is two-fold:

1. To initiate and supervise the job development of the fire fighter, commencing with the probationary period and continuing throughout his career. This, of course, entails the keeping of comprehensive records regarding the actual training of the various groups involved.

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.

Secondary functions of this division are enumerated in the summary which follows:

To properly fulfill its mission, this division must be constantly aware of advances made in engineering, science, and industry as they affect the techniques of fire fighting, fire protection, and fire extinguishment. This requires a program comprehensive enough to cover all phases of modern day fire fighting and the imparting of acquired information to and the training of approximately two thousand men.

The number of business and industrial employees trained by this division in fire protection and extinguishment has increased considerably over the past few years.

In a department such as ours, close cooperation among the various divisions is essential in order for us to fulfill our obligation to the city. This division acknowledges and appreciates the assistance and cooperation of the Headquarters, Fire Fighting, Fire Prevention, Fire Alarm, Community Relations, Maintenance, Planning and Logistics, and Civil Defense Divisions in helping us meet our obligations.

The following summary covers in general the activities of this division during the eighteen month period covered in this report.

FIRE DEPARTMENT

A. 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. Drill Tower, Engine 2, South Boston
8. Drill Tower, Engine 29, Brighton

B. Department Drilling and Training Programs

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 efficient operation 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. As required, these procedures are revised. Forty-four engine, twenty-seven ladder, two rescue, two aerial tower, two fireboat, and two lighting plant companies (making a total of seventy-nine fire companies) were instructed during the past period covered in this report.

1. Equipment Familiarization
2. Apparatus Familiarization
3. First Aid
4. Probationers
 - a. Drill School
 - b. Evaluation Program
 - c. On-The-Job Training Program
5. Officer Training Courses
6. Safety Driving Program
7. Exhibition Drill Team

8. High-Rise Buildings
9. Buildings Under Construction
10. Boston Gas Company
11. Fire Science Courses
12. State College Cooperative Plan
13. Emergency Medical Technician Training

C. Training Available to Outside Groups

1. Fire Service Applicants Training Program
2. Basic Fire Fighting

D. Surveys

1. Inspections and Tests

Annual surveys, inspections, and tests are carried out throughout the department to determine the condition of the various tools and appliances that are 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.

2. Servicing and Repair Programs

In order to properly maintain and guarantee safe and continuous operation of fire fighting equipment, tools, and appliances, a year round servicing and repairing 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.

3. 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.

Because of the energy crisis requirements, this division maintains records of all its issues and consumption of gasoline, oil, and diesel fuel.

E. Research

A very important function of this division is to conduct tests and experiments and thoroughly 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.

1. Protective Breathing Equipment

a. The research and evaluation program on protective breathing equipment was continued.

Much progress has been made and will continue in an effort to improve presently available gas masks for fire fighting. This department acknowledges and appreciates the assistance and cooperation of Professor William A. Burgess of the Harvard University School of Public Health and Deputy Fire Chief Leo D. Stapleton of the Boston Fire Department for their time and effort in the field of respiratory protection. This department also acknowledges the cooperation received from many sources, such as United States Government Agencies, including NASA, the Bureau of Mines, the National Bureau of Standards, the Department of Commerce, OSHA, NIOSH, and HEW; several mask manufacturing companies, including Mine Safety Appliances Company, BioMariné Industries, Inc., Scott Air Pak Company, Koehler Manufacturing Company, and AGA Corporation (a Swedish firm); International Association of Fire Fighters, National Fire Protection Association, Massachusetts Institute of Technology, and Legislators.

b. The third and fourth phases of the continuing respiratory study and gas mask research program conducted by the School of Public Health of Harvard University was continued in which uniformed members of the Boston Fire Department were interviewed and each one given a breathing test in quarters with portable air sampling devices furnished by

Harvard University. These devices measure concentrations of carbon monoxide encountered by fire fighters under actual working conditions, and the information gathered will be used to devise specifications for breathing equipment which will result in improved respiratory protection.

- c. Extensive field testing of gas masks has taken place at our Fire Academy, among which have been prototypes of three manufactured by Bio Marine Industries, Inc. for this department.
 - d. Further health studies are being conducted utilizing new equipment with the heart, lungs, and environmental conditions in mind. This program has been initiated at the quarters of Engine Company 17 and Ladder Company 7, in which EKG instruments are worn by fire fighters during actual tours of duty to test the heart, actual working conditions at fires, and CO₂ concentrations.
 - e. Deputy Fire Chief Stapleton and District Fire Chief Buchanan have attended meetings at various locations to witness tests. Deputy Fire Chief Stapleton has been appointed to the NASA Advisory Committee on Breathing Equipment. In this capacity, he has attended several meetings at various locations in the country.
 - f. Federal legislation was passed affecting Chemox masks (OSHA), relative to their discontinuation after 1979. This department is watching further developments.
2. Protective Clothing and Equipment
- a. District Fire Chief Buchanan and Department Chemist Clougherty attended the NASA Fire Protective Equipment Status Meeting at the Manned Spacecraft Center in Houston, Texas, to witness tests and demonstration of the latest in material and design of protective clothing and equipment. Boston was one of the few selected to participate in this endeavor in recognition of its activities over the past five years in developing specifications for functional turnout equipment. Several items

of protective clothing and equipment were later received from NASA for field testing and evaluation by this division. Tests were also conducted at Logan Airport, in cooperation with the Massport Fire Department, in which the crew at that location actually walked through fire wearing the above. This equipment is still being field tested by three fire companies in this department with favorable reaction.

b. Work Uniforms

Various types of materials have been field tested at our Fire Academy for work uniforms and clothing, including Nomex, Dynel, and regular permappress. The DuPont Company has been very cooperative in this regard.

c. Fire Coats

Various types of fire coats and materials are still being field tested and evaluated in service in the department. Cooperation has been received from the Alb Rubber Company, the Globe Manufacturing Company, and the DuPont Company. Dr. Clougherty is still cooperating with this division in an effort to design and produce a coat suitable for fire fighting purposes which would be an improvement over the present type.

d. Fire Helmets

Field tests were continued and will continue to be conducted on various models and various type materials. Plastic fire helmets from MSA and Cairns Company are presently being field tested in various fire companies in this department.

e. Fire Fighters' Gloves

During the period covered in this report, twenty-five hundred gloves were ordered as per specifications prepared by this division. Samples have been received from several manufacturers of varying types, and these are being field tested and evaluated within the various fire companies.

f. Fire Boots

Various types of boots and related equipment were field tested and evaluated, including a type with shin reinforcements.

3. Miscellaneous Fire Fighting Equipment

Test and evaluation was continued on various items, including sprinklers, fire extinguishing compounds (foam, "light" water, etc.), rescue and forcible entry tools, nozzles, wheatlights, coated and uncoated plywood, plexiglas, and a piece of equipment known as the "probeye", a device to help locate trapped victims in buildings.

F. Specifications - New Apparatus and Equipment

1. During the period covered in this report, specifications for a second rescue-emergency vehicle were prepared and work was commenced on specifications for new ladder trucks, in cooperation with the Maintenance Division of this department.
2. Specifications for 1 1/2", 2 1/2", and 5" suction hose were prepared in this division, in cooperation with the Maintenance Division.
3. Specifications for fire fighters' masks, fire coats, and gloves were covered elsewhere in this report.
4. Consideration was also given to new types of fire equipment utilized by other cities or communities throughout the country, and careful study and tests were made where possible to obtain first hand knowledge of such equipment.

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 this 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

FIRE PREVENTION DIVISION

Personnel

The Night Division of Inspection concentrates 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. These Inspectors cover all types of occupancies where this assemblage might be encountered and are under the control of a Lieutenant Inspector, who is supervised periodically by a District Chief for an appraisal of the effectiveness and the efficiency of the work being performed by this division.

Personnel have 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.

Also, the vacant building program of inspection is still being maintained at a high level, particularly in the critical areas where, because of Federal highways, redevelopment, rehabilitation, model cities, etc., large numbers of vacant buildings are found. These inspections permit us to have these buildings secured against trespass and the elements, thereby allowing for both the prevention of blight in the neighborhood and increasing the fire safety of the neighborhoods.

Inspections were conducted throughout the entire city to eliminate the selling of illegal gasoline cans, and a close watch and supervision was maintained on the temporary closing of gasoline stations.

Inspections were also conducted of all safety devices in relation to gasoline tank trucks and safety decals were affixed thereto.

Inspection Forces

The Inspection Forces of this division have 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 totaled 31,071. Places of assembly were also inspected

FIRE DEPARTMENT

by this force for a total of 4,457. 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 these 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 2,063.

Licenses

From January 1973 through June 1974, receipts from licenses issued totaled \$156,652.90.

Permits

Permit revenue from January 1973 through June 1974 amounted to \$141,205.87, including miscellaneous permits. Total revenue from all sources for the past eighteen months was \$297,858.77.

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. His 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 7000 in the course of a year.

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 7100 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 Foundation 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 68,430.

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 I. D. card photographs, data assembly and lamination of I. D. cards for issuance to all members appointed or promoted. A total of 12,272 prints were made in the course of the past eighteen months.

Nursing Home Seminar

Three seminars were conducted which were a huge success. Various demonstrations were held to acquaint nursing home personnel with proper procedures in the event of fire. Pamphlets were distributed in both Spanish and English in relation to life safety in the nursing home. We look forward to more seminars in the future.

Plans Examiner

During the last eighteen months the Plans Examiner has examined and approved a total of 975 sets of plans. 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 the opinions of the Fire Department. As a result of a complaint or request, on-site inspections are made of various projects. Research and work on existing and proposed code changes or additions are also part of the Plans Examiner's function. In addition, clerical work is necessary to maintain microfilm files on projects approved by this department.

Chemist's Activity

During the past eighteen months, approximately 3,000 samples of various materials were submitted for testing and/or evaluation of manufacturers' test data. Among

other things, these samples included vinyl and cloth upholstery, synthetic drapery materials, inherently flame-proofed synthetic and treated natural fabrics, wall coverings, ceiling tiles, foamed cellular plastics and miscellaneous decorations. Approximately 150 samples of the samples submitted were rejected for not meeting the strict requirements of the Boston Fire Prevention Code.

In addition to responsibilities to the Fire Prevention Division, the Department Chemist continued to provide technical support to the Training and Research Division and to other city departments, including the Purchasing Department, School Department, Hospitals Department and Public Facilities Department.

The responsibilities for the Training and Research Division include the development of specifications for protective clothing and equipment, including fire fighter turnout coats and gloves. Materials advisory services and testing are also extended in other aspects of this division regarding specifications and evaluations of work clothing, helmets and boots. At present, several problems are being examined relating to the operational features of respiratory breathing apparatus in use. New nonmetallic helmets and new helmet designs are being examined.

Participation in the National Fire Protection Association was expanded to include an assignment in the Sectional Committee on Protective Equipment for Fire Fighters. The Department Chemist has been required to join and participate in the American Society of Testing Materials, and also represents the Boston Fire Department in the Massachusetts Fire Prevention Association.

Target Hazards

In keeping with this program, the Fire Prevention Division is continuing 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 Fire Chief of the fire district concerned and the company officer in whose subdistrict the occupancy may be located. Some of the inspections made were follow-ups of last year and some are new ones that have been added.

Large Loss Fires

During the past eighteen months the City of Boston experienced several spectacular fires involving various types of occupancies, and particularly one large fire which attracted the attention of the nation and brought commendations and favorable comments from all sections of the country. That fire occurred in the Hyde Park section of the city and burned a very famous landmark, namely Allis Chalmers.

Other tragic fires occurred in the Brighton section of the city in which three civilian lives were lost. In a separate location not too far distant, two young children perished.

In the Dorchester section of the city there was another tragic fire in which five civilians perished. During the past eighteen months large loss fires encompassed all sections of the city.

There were several other large fires that taxed the capabilities of the department during this period. In view of these large loss fires, both in material things and human life, the Fire Prevention Division has "beefed-up" their inspection program and their community relations and educational programs partly aimed at the minority groups located within our city and also those who do not speak our tongue. These educational programs and community relation programs have been aimed at the Spanish, Italian and Chinese speaking people and the black communities. This is being brought about by presentations and civic meetings of neighborhood committees and through educational programs in the schools.

The Fire Prevention Code has been rewritten and is still in the hands of the Traffic, Police, Building, and Law Departments.

At the present time the new Housing Court, under the direction of Judge Garrity, has been extremely helpful and we look forward to a most fruitful future.

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 Prevention Council which is a citizen sustained group that aids in the purchase of educational material in our fire prevention program. This includes various news media, prizes, pamphlets and posters. Their assistance in our effort is extremely valuable.

Inspection Squad

The Inspection 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. These results of the investigations are to help determine whether such 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 of all the facts and evidence to the Office of the State Fire Marshal. Many hours of investigation were spent in the course of their duties. Undetermined, suspicious and incendiary fires totaled 1,452. Injuries reported and investigated totaled 302 with deaths attributed to fires totaling 49. There were 112 arrests made during the past eighteen months and 289 Municipal and District Court appearances. There were 101 appearances made before the Superior Court and 27 appearances made before the United States Court and Grand Jury.

General

The Fire Prevention Division maintains a constant In-Service Training of all members assigned to the division. A weekly seminar is held for all members assigned to the division to keep them abreast of current changes in inspection techniques, changes in rules and regulations, and any changes in statute law. These seminars also are extended to members of the Fire Fighting Force 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 49 persons. This work by the Arson Squad will prove to be a deterrent to others who may for any reason hope to avoid punishment for the crime of arson or the violation of law which jeopardizes public safety in the 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 the 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.

CITY DOCUMENT NO. 11

MAINTENANCE DIVISION

The Maintenance Division is responsible for all testing, repair, maintenance and preventive maintenance of apparatus and automotive equipment, and for the repair and maintenance of all buildings and grounds. The foregoing includes 228 pieces of rolling stock, consisting of 135 pieces of apparatus, 34 trucks of varied description, 59 cars, 2 fireboats, and 44 buildings. In addition to meeting this heavy schedule, the division is also responsible for the compilation of specifications, and procurement of new fire apparatus and all other vehicles, the purchase and upkeep of fire fighters' uniforms and fire clothing, the supplies and materials necessary for efficient operations, and care of over 300,000 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 rooms, uniform and clothing division, and main stockroom.

Personnel is comprised of 56 civilian employees, proficient in various skills and crafts, 22 fire fighters, 13 of whom are assigned to the Emergency Motor Squad, which responded to over 9,000 calls of varying exigencies throughout the city.

The program of rehabilitation and reassignment of apparatus continued during this eighteen month period, with the cooperation of the Training and Research Division, in the acquisition of new equipment. Preventive maintenance was improved and made more comprehensive. Repowering of older apparatus continued with the installation of Detroit 671N model diesel engines for Engine 56, Reserve Pump 135P, and Ladders 1 and 21.

The age old traditional garb for fire fighters was phased out and replaced with a standardized navy blue work uniform.

Most fire companies were equipped with emergency medical spine boards for transporting accident victims. These boards were constructed by the carpenter and hose shops according to national specifications.

A new fire station at 975 Blue Hill Avenue, quartering Engine 52, Ladder 29, and Rescue 2, was opened and

FIRE DEPARTMENT

dedicated. The fire station at 434 Warren Street, Roxbury was closed. Engine Company 24 was relocated to the former quarters of Rescue Company 2 at 36 Washington Street, Dorchester. Extensive renovations and enlargement construction were underway on the quarters of Engine Company 55, 5115 Washington Street, West Roxbury, which will result in the accommodation for a ladder company. Construction also began for a new fire station at Dudley Street and Harrison Avenue, Roxbury, to quarter Engine Company 12, Engine Company 14, Ladder Company 4, and the Special Service Unit. Major repairs were completed at the firefighting facilities at the Moon Island Training Academy. A new house heater boiler was installed at the quarters of Engine Company 39.

During the eighteen month period, the following equipment was placed into service by the department:

- 5 - Maxim 1500 G.P.M. Pumpers
(Assigned to Engine Companies 12, 14, 21, 24, and 42)
- 3 - Maxim 100' Aerial Ladder Trucks
(Assigned to Ladder Companies 4, 7, and 15)
- 1 - International Rescue Vehicle
(Assigned to Rescue Company 2)
- 5 - Station Wagons
(Assigned to Districts 5, 7, 8, 9, and SSU)
- 6 - Sedans
- 5 - Emergency Service Trucks
(Assigned to Motor Squad, Training and Research Division, and Fire Alarm Division)
- 1 - 2 1/2 Ton Truck from Government Surplus
- 1 - 300 Gallon Per Hour Steam Generating Machine

Purchase orders were issued for the following:

- 7 - 671N Model Diesel Engines
- 1 - Radio Van Truck
- 1 - 2 1/2 Ton Emergency Tow Truck

Hose purchased - 28,000 feet
Hose repaired - 33,650 feet
Hose condemned - 21,300 feet

CITY DOCUMENT NO. 11

FIRE ALARM DIVISION

The Boston Fire Department responded to a total of 73,624 incidents for the period January 1, 1973 through June 30, 1974. This involved more than 290,000 separate movements of apparatus. The Fire Alarm Office received and transmitted more than 800,000 separate radio messages in the dispatching of apparatus and incidental department operations. There were a total of 21,568 false incidents, for a total of 29.3% false incidents from all sources.

There were a total of 149 second alarms, 38 third alarms, 12 fourth alarms, and 11 fifth alarms. During this period, there were 282 working fires which required additional apparatus being dispatched to the fire but not considered as multiple alarms.

This department furnished Mutual Aid to adjacent cities and towns a total of 472 times during this period. Adjacent cities and towns furnished Mutual Aid to the Boston Fire Department a total of 947 times.

The largest Mutual Aid response by this department was to the City of Chelsea on October 14, 1973. This Mutual Aid involved 11 Engine Companies, 3 Ladder Companies, and 3 Chief Officers.

On January 1, 1973, there were a total of 2,386 Fire Alarm Boxes in service in the City of Boston. During this eighteen month period, 40 new Fire Alarm Boxes were installed, and 13 Fire Alarm Boxes were discontinued, for a net increase in boxes of 27. As of June 30, 1974, there were 2,413 Fire Alarm Boxes in service in the City of Boston Fire Department.

During this period, the Fire Alarm Construction Force installed a total of 24,310 feet of underground cable for a total of 281,120 feet of conductors. A total of 12,000 feet of overhead wire and cable were installed for a total of 72,000 feet of conductors. A total of 8,000 feet of overhead wire and cable were removed. Cable removed was defective or damaged, and in most instances was replaced with new cable.

On Tuesday, April 30, 1974, two new transistorized tapper transmitters were installed in the Fire Alarm Office.

A program for development of Computer Aided dispatching was started in the Fire Alarm Division.

CITY DOCUMENT NO. 11

COMMUNITY RELATIONS DIVISION

During the period January 1, 1973 through June 30, 1974, the Community Relations Division, which also embraces a Public Relations Section, has been expanded to include various projects and assignments in an effort to keep abreast of the changes in modern day firefighting.

One function of this division has almost doubled in the last year and a half, and that is the requests for tours of the various fire houses, our modern Fire Fighting Academy, our new fireboat, as well as many requests to tour the updated Fire Alarm Operating Section at 59 Fenway. This increase in requests for tours is due largely to the acquisition of new up-to-date firefighting apparatus by the City of Boston.

The records will show a marked increase in the number of multiple alarms, which necessitated an increase in the television, radio, and news media reports handled by this department.

Our efforts to bring to the citizens of Boston meaningful messages of community interest are proving successful. Avenues of communications have also been established between the radio and television (news and feature) editors, which has proved very helpful.

Another important function of the Community Relations Office is to prepare and distribute an Annual Run and Statistical Report for the entire Fire Department on an individual company basis.