

DOCUMENT 11 -- 1975

ANNUAL REPORT
OF THE
FIRE DEPARTMENT
FOR THE PERIOD
JULY 1, 1974 TO JUNE 30, 1975

BOSTON, July 1, 1975.

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 July 1, 1974 to June 30, 1975.

During this period, the department continued its progress in all areas covered in this report and continued to maintain its high standing as one of the foremost Fire Departments in the country.

We are continuing our program of streamlining our services and affording the residents and taxpayers the best in protection against fire.

Respectfully submitted,

JAMES H. KELLY
Fire Commissioner.

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1974 - 1975

Fire Commissioner, JAMES H. KELLY

Chief of Department, GEORGE H. PAUL

Executive Secretary, ROSEMARY L. GRIFFIN

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

Deputy Fire Chief in Charge of Training and Research
Division, JOHN R. HARRISON

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, WALTER J.
KEARNEY

Superintendent of Fire Alarm Division, JOHN M.
MURPHY

Chaplains, REV. MSGR. JAMES J. KEATING, Catholic
REV. JOHN E. BARCLAY, Protestant
RABBI SAMUEL I. KORFF, Jewish
(deceased December 18, 1974)
RABBI IRA A. KORFF, Jewish
(from January 20, 1975)

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 | |
| | 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

| | 1973 | 1974 | 1974-1975 |
|------|---------------------|-------------------|---------------------|
| .... | \$26,981,926.86 | \$15,335,278.56 | \$28,989,740.00 |
| .... | <u>1,246,818.24</u> | <u>639,763.08</u> | <u>1,589,562.00</u> |
| .... | \$28,228,745.10 | \$15,975,041.64 | \$30,579,302.00 |
| .... | 47,046.75 | 43,330.20 | 93,186.62 |
| .... | 178,713.68 | 84,572.43 | 288,121.17 |
| .... | 195,472.75 | 75,108.40 | 245,300.00 |
| .... | 242,600.85 | 108,306.28 | 270,200.28 |
| .... | 1,718.51 | 1,779.71 | 2,000.00 |
| .... | <u>36,449.86</u> | <u>13,825.21</u> | <u>53,087.00</u> |
| .... | \$ 702,002.40 | \$ 326,922.23 | \$ 951,895.07 |
| .... | 219,961.87 | 124,826.14 | 386,900.00 |
| .... | 97,366.09 | 107,208.40 | 187,454.98 |
| .... | 19,184.00 | 6,206.30 | 14,720.00 |
| .... | 1,286.02 | 138.95 | 1,620.00 |
| .... | 22,361.71 | 14,035.43 | 29,103.00 |
| .... | <u>369,360.78</u> | <u>161,932.36</u> | <u>482,220.00</u> |
| .... | \$ 729,520.47 | \$ 414,347.58 | \$ 1,102,017.98 |
| .... | <u>127,525.53</u> | <u>56,013.40</u> | <u>270,790.00</u> |
| .... | \$ 127,525.53 | \$ 56,013.40 | 270,790.00 |
| .... | 54,604.26 | ----- | 104,000.00 |
| .... | 5,866.95 | 1,007.80 | 4,235.00 |
| .... | <u>118,295.06</u> | <u>111,506.95</u> | <u>77,000.00</u> |
| .... | \$ 178,766.27 | \$ 112,514.75 | \$ 185,235.00 |
| .... | \$29,966,559.77 | \$16,884,839.60 | \$33,089,240.05 |

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 L. 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 1974

July 27

JAMES F. WALSH
Fire Fighter, Aerial Tower 2

November 13

HENRY M. WHEELER
Fire Alarm Operator, Fire Alarm Division

December 18

RABBI SAMUEL I. KORFF
Jewish Chaplain

December 24

PAUL P. ARATHUZIK
Fire Fighter, Headquarters Division

December 29

JOHN F. LYNCH
Fire Fighter, Engine Company 5

DEATHS OF ACTIVE MEMBERS DURING 1975

February 11

ARTHUR J. CULLINANE
Fire Fighter, Ladder Company 25

February 22

JOHN J. REARDON
Fire Fighter, Headquarters Division

April 24

DANIEL F. DUFFY
Fire Fighter, Engine Company 50

May 29

PHILIP F. CURRAN
Fire Fighter, Engine Company 2

FIRE DEPARTMENT

IN MEMORIAM

June 4

*HUBERT F. MORAN
Fire Lieutenant, Ladder Company 6

June 5

THOMAS M. HORAN
Fire Fighter, Engine Company 30

*Line of duty

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MEDAL OF HONOR MEN
BOSTON FIRE DEPARTMENT -- 1974

"John E. Fitzgerald Medal"

Awarded to Fire Lieutenant BIAGGI GERMANO of
Engine Company 42

"Walter Scott Medal for Valor"

Awarded to Fire Fighter PAUL F. MAHONEY of
Ladder Company 23

"Patrick J. Kennedy Medal of Honor"

Awarded to Acting Fire Lieutenant CHARLES E. GRAUL
of Aerial Tower 2

ROLL OF MERIT -- 1974

Fire Fighter EDWARD K. FITZGERALD of Engine
Company 53

Fire Lieutenant ROBERT D. CALLOW of Ladder
Company 10

Fire Fighter PAUL R. MOORE of Ladder
Company 30

Fire Fighter JOSEPH M. WELSH of Ladder
Company 10

Fire Fighter WALTER E. O'HEARN of Ladder
Company 19

Fire Fighter JOHN J. SIMPSON of Ladder
Company 15

FIRE DEPARTMENT

ROLL OF MERIT -- 1974

Fire Fighter FRANCIS A. BAXTER of Ladder
Company 17

Fire Fighter JOHN A. STANTON of Engine
Company 42

Fire Fighter FRANCIS A. BAXTER of Ladder
Company 17

Fire Fighter JAMES B. FITZGERALD of Engine
Company 7

Fire Fighter EUGENE P. IRWIN of Engine
Company 7

Fire Fighter ERNEST A. LAPORTE of Engine
Company 7

"Distinguished Service Award"

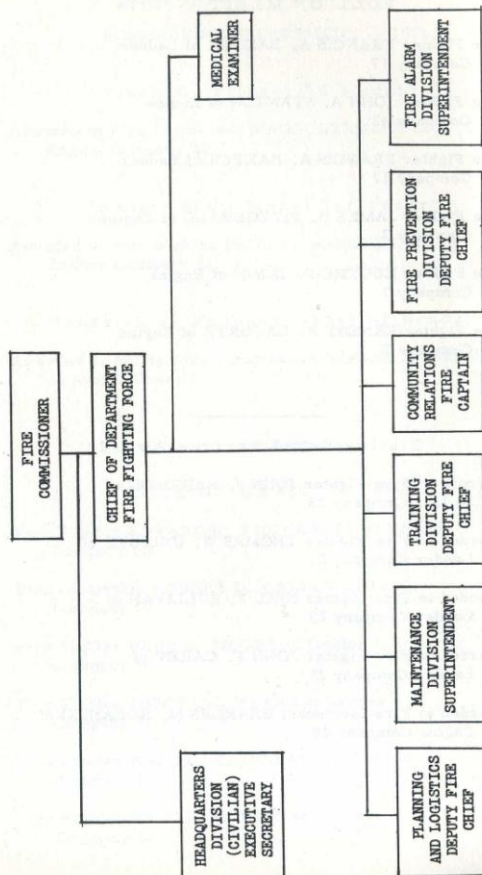
Awarded to Fire Fighter JOHN J. HARRISON of
Ladder Company 23

Awarded to Fire Fighter THOMAS W. UNIACKE of
Ladder Company 23

Awarded to Fire Fighter NEIL F. SULLIVAN of
Ladder Company 23

Awarded to Fire Fighter JOHN F. CAREY of
Ladder Company 23

Awarded to Fire Lieutenant CHARLES M. ROZANSKI of
Engine Company 29



PLANNING AND LOGISTICS DIVISION

PLANNING AND LOGISTICS DIVISION

As a result of the efforts extended by this division in previous years, the period 1974-1975 has been productive. This division takes credit for new programs that have produced beneficial results in improving the image of this department. Great strides have been made in our Pre-Planning Program and we look forward to additional improvements. The operating forces of the department have made frequent visits and familiarization tours of high-rise buildings to acquaint themselves with the hazards of these buildings and the necessity to be fully informed about the particular features of each building that can influence operations at times of emergency.

Elevators - Building elevators and the problems they can create for fire fighters have been explored by this division. We have been closely related with the installation of new elevators and have developed programs that include:

1. In quarter drills with slides describing the function of the Firefighter's Key Switch.
2. Attendance at hearings of the State Board of Elevator Regulations.
3. A cooperative program with the Elevator Division (City and State) for Fire Department notification when the Firefighter's Key Switch has been accepted by their inspector.
4. A program of visiting buildings under construction to instruct fire fighters on the operation of the temporary personnel hoists so that they are familiar with its operation for use when emergencies occur during off hours.

Pre-Planning Program - This program has been a success and plans are being made to expand it so that all companies will be familiar with as many of the unusual features of our city as is possible. Fire Captain McHugh of this division has developed great rapport with many city agencies, including the Building Department and the Water Division of the Public Works Department, and many private contractors involved in new construction throughout the city. This has resulted in great benefits to the department. Also, the close contact with the Traffic Department and the Boston Redevelopment Authority keeps us abreast of future developments and allows us to bring to the attention of contractors the need for keeping the Fire Department informed of their activities. We have

PLANNING AND LOGISTICS DIVISION

had occasions where contractors have shut off water mains and blocked access on certain streets, unaware of the problems that situations such as these can pose for this department. We can eliminate most of these problems by our close contact with the above named agencies.

Response Card Assignments - We are continuing our work on adjusting the response cards and are aware of the condition of our assignment cards. The installation of the computer system in the near future prompts us to bring all series of the cards up to correction where needed and be ready when the new system is in service. It is now contemplated that we will have a new type of card and a system whereby we can replace damaged and worn cards.

We are pleased to note that the changes we made in district lines have been justified. The response by District 8 would have been unreasonable if the change had not been made to have District 12 assume a portion of the response in this area. The adjustments that were made in District 2 and District 10 were also steps in the right direction.

M. B. T. A. - Our efforts for improved cooperation between the M. B. T. A. and our operating forces have been productive. Conditions have improved for our operations at times of emergency because some of our suggestions have now become a reality. We now have standpipe siamese connections at the street level leading down to the station platforms. Progress is now being made to extend this standpipe between stations in the subway. This can be considered a noteworthy accomplishment by this division when you consider the number of years we have had to operate at subway fires under the most difficult circumstances. Another recommendation that has become a reality is the improved illumination within the subway afforded by a new A. C. lighting system that is not affected by the shutdown of the third rail. This improvement has received wide praise from our personnel as well as M. B. T. A. personnel.

With the opening of the new Orange Line from North Station to the Bunker Hill Community College Station and the new Sullivan Square Station, we arranged for an on-site inspection with District 2 and District 3 so as to fully acquaint them with approaches to this line and the new Emergency Exits.

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PLANNING AND LOGISTICS DIVISION

During this year we have established working relations with the Boston Housing Authority and it has resulted in improvements for Fire Department operations at the various housing projects throughout the city. This includes more efficient response of service agencies for incidents involving stalled elevators.

The Planning and Logistics Division represents the department at meetings at the Metropolitan Planning Council for expansion of the established mutual aid plan involving many communities not now tied into our established plan.

This division also attends meetings of the Marine Protection Committee which is endeavoring to set up a program of education for Fire Departments for pre-fire planning of waterfront areas and ships.

TRAINING AND RESEARCH

DIVISION

The Training and Research Division is responsible for the development and implementation of training programs for Fire Department personnel. This includes the development of new training materials, the revision of existing materials, and the coordination of training activities with other departments and agencies. The division also conducts research into new firefighting techniques and equipment, and provides technical assistance to other departments and agencies. The division is currently working on a number of projects, including the development of a new training program for fire investigators, the revision of the Fire Department's training manual, and the coordination of training activities with the Boston Housing Authority and the Metropolitan Planning Council.

TRAINING AND RESEARCH DIVISION

The primary function of the Training and Research Division, of which Deputy Fire Chief John R. Harrison is the Deputy Fire Chief in Charge, 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 obligations to the city. This division acknowledges and appreciates the assistance and cooperation of the Fire Prevention, Headquarters, Fire Fighting, Community Relations, Fire Alarm, 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 past fiscal year:

TRAINING AND RESEARCH DIVISION

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 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-eight ladder, two rescue, two aerial tower, two fireboat, 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. First Aid
4. Provisional Appointees
 - a. Drill School
 - b. Physical Fitness Standards
 - c. On-The-Job Training Program
5. Officer Training Courses
6. Safety Driving Program
7. Exhibition Drill Team

TRAINING AND RESEARCH DIVISION

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 Groups1. Minority Recruitment Program

Deputy Chief John R. Harrison of this division, in conjunction with Fire Fighter Kenneth C. Bruynell of the Community Relations Office of this department, implemented a program in this department to recruit minorities and others interested in becoming fire fighters and in preparing them for the first fire fighter entrance examination since 1971 and the first under the new regulations.

This program, in cooperation with the Massachusetts Fire Fighting Academy, enlisted the aid of volunteers from this department, who actively participated in enrolling and recruiting interested persons in the program of preparatory courses held in both English and Spanish at approximately forty locations statewide. In addition, these volunteers monitored and instructed evenings in Boston.

Acknowledgement should also go to the Boston Public School Department, the Massachusetts Division of Civil Service, the City of Boston Law Department, the State Attorney General's Office, the news media (newspapers, radio, and television), and the various organizations, community groups, and minority groups which cooperated in this undertaking.

2. 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 include other Fire Departments, the military services, industrial establishments, insurance

TRAINING AND RESEARCH DIVISION

companies, security agencies, police departments, municipal organizations, hospitals, etc. In addition, members from the various surrounding fire departments have attended our fire college and probationers' drill school.

D. Surveys1. 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 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.

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

TRAINING AND RESEARCH DIVISION

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.

This division acknowledges the assistance and cooperation of District Fire Chief Paul W. Buchanan for his work in the research programs conducted by this division; Deputy Fire Chief Leo D. Stapleton for his time and effort in the field of respiratory protection and who, in his capacity on the NASA Advisory Committee on Breathing Equipment, attends meetings from time to time in various locations in the country; and Dr. Edward V. Clougherty, Department Chemist, who has provided technical service to this division in such areas as the development of specifications for protective clothing and equipment (coats, gloves, work clothing, helmets, and boots), material advisory services, and testing and evaluation of same. In cases where funds are available, the City of Boston is compensated for research work performed by this department in cooperation with private industry.

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

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 his assistants. This department also acknowledges the cooperation received from many sources, United States Government agencies, including NASA, the United States Bureau of Mines, the United States Bureau of Standards, the Department of Commerce, OSHA, NIOSH, and HEW; several mask manufacturing companies, including Mine

TRAINING AND RESEARCH DIVISION

Safety Appliances Company, BioMarine Industries, Inc., Scott Aviation Company, Koehler Manufacturing Company, AGA Corporation; International Association of Fire Fighters; National Fire Protection Association; Massachusetts Institute of Technology, and Legislators.

- b. Extensive fieldtesting and evaluation of various gas masks, experimental and otherwise, was continued.
- c. The School of Public Health of Harvard University is conducting several research programs as follows:
 1. The recording of temperatures at actual fires by placing a device on the helmets of fire fighters.
 2. A study utilizing new air sampling devices designed to determine the types of smoke exposure most harmful to fire fighters' lungs.
 3. A study utilizing EKG instruments worn by fire fighters to test hearts, actual working conditions at fires, and CO₂ concentrations.
- d. Follow-up tests on retired members of this department were made in connection with the respiratory study and gas mask program previously conducted by the Harvard School of Public Health.
2. Protective Clothing and Equipment
NASA Clothing and Equipment
 Fieldtesting and evaluation of protective clothing and equipment received from NASA in 1973 was continued.
Work Clothes and Uniforms
 The fieldtesting and evaluation program on the above was continued in an effort to obtain safer, suitable, non-hazardous, and flame retardant materials and products for fire fighters. Among the materials evaluated were Nomex, Dynel, and permapress. DuPont Company, J.P. Stevens Company, and Monsanto Chemical Company have been very cooperative in this regard.
Fire Coats
 Various types of fire coats (including Vinyl and Nomex) continued to be fieldtested and evaluated in service in the department. New specifications were formulated by this division in an ever

TRAINING AND RESEARCH DIVISION

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.

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 fieldtested in various fire companies in this department. Non-metallic and other new designs are being examined.

e. Fire Fighters' Work Gloves

After much fieldtesting and evaluation of samples of work gloves received from various manufacturers, work gloves were purchased and distributed to each member in the department as per specifications prepared by this division. Cooperation was received from Arthur D. Little Company which conducted research work on the above. It is anticipated that the wearing of these gloves at fires will decrease the number of injuries to the hands of fire fighters during fire fighting operations. An evaluation of a new set of specifications is being conducted.

f. Fire Boots

Fieldtesting and evaluation on various types of boots and related equipment was continued.

3. Miscellaneous Fire Fighting Equipment

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

F. Specifications - New Apparatus and Equipment

1. Specifications were prepared in cooperation with the Maintenance Division of this department for nine 100 foot aerial ladder trucks and six 1500

TRAINING AND RESEARCH DIVISION

GPM fire fighting pumper trucks.

2. A new hose wagon, as per specifications formulated by this division, was received.
3. Specifications for fire fighters' masks, fire coats, work clothes, and work 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. Among the above was an automated pumper demonstrated by the Grumman Aerospace Corporation.

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

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. 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.

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 neighborhood.

Inspections were conducted throughout the entire city to eliminate the selling of illegal gasoline siphons, and a close watch and supervision were maintained on the temporary closing of gasoline stations. Approximately ninety different locations pertaining to the above were inspected.

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

Inspections of approximately 218 lodging houses were made with regard to life safety before their annual licenses could be issued.

Licenses:

From July 1974 through June 1975, receipts from licenses

FIRE PREVENTION DIVISION

issued totaled \$81,697.

Permits:

Permit revenue from July 1974 through June 1975 amounted to \$107,994.33, including miscellaneous permits. Total revenue from all sources for the past twelve months was \$189,691.33.

Nursing Home Seminars:

The two seminars conducted were a huge success. Approximately 80% of the nursing homes in the City of Boston were represented at a meeting held in December. 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, in addition to two films relating to same. We look forward to more seminars in the future.

Plans Examiner:

The Plans Examiner has examined and approved a total of 470 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. 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:

Approximately 2000 samples of various materials were submitted for testing and/or evaluation of manufacturer's test data. Among other things, these samples included vinyl and cloth upholstery, synthetic drapery materials, inherently flameproofed synthetic and treated natural

FIRE PREVENTION DIVISION

fabrics, wall coverings, floor coverings, ceiling tiles, foamed cellular plastics and miscellaneous decorations. Approximately 100 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. In 1974 special attention was focused on fire problems of bedding in hospitals and nursing homes. A full scale fire test of bedding used in hospitals was performed and special hazards were identified and reported.

The responsibilities for the Training and Research Division include the development of specifications for protective clothing and equipment, including firefighter turnout coats and gloves. This is a continuing effort to improve the functional behavior of these items. Materials advisory services and testings are also extended in other aspects of this division regarding specifications and evaluations of work clothing, helmets and boots. Problems are being examined relating to the operational features of respiratory breathing apparatus in use. New non-metallic helmets and new helmet designs are being examined.

Several fires were investigated in which firefighters were injured from toxic and irritating fumes. Detailed reports of these investigations were prepared and submitted to the department. A special report was prepared on the subject of "Smoke and Toxicity".

Participation in the National Fire Protection Association was expanded to include an assignment in the Sectional Committee on Protective Equipment for Firefighters. 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. In April of 1974 the Department Chemist was elected Chairman of ASTM Committee E-39, Fire Hazard Standards.

FIRE DEPARTMENT

FIRE PREVENTION DIVISION

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. The results of these 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 are spent on these investigations. Undetermined, suspicious and incendiary fires totaled 1,193. Injuries reported and investigated totaled 159 with deaths attributed to fires totaling forty-five. Fifty-four arrests were made during the past twelve months and 238 Municipal and District Court appearances. There were sixty-nine appearances made before the Superior Court and twenty before the United States Court and Grand Jury. As a result of these appearances and arrests, we were able to get twenty-one convictions.

Inspection Force:

The Inspection Force 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 totaled 19,820. Places of assembly were also inspected by this force for a total of 3,601. Additional inspections were made by the officers in the sub-districts where the places of assembly are located. In locations requiring a specialized knowledge, the Inspectors 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 on the necessary forms to the department charged with this responsibility.

In-Service Inspections:

Routine in-service inspections were continued by company units of this department. Information and inspections

FIRE PREVENTION DIVISION

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. 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.

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 6,500 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 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 27,365. It must be noted that this program was conducted during the school desegregation turmoil and was a success.

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 Chief of the fire district concerned and the company officer in whose subdistrict the occupancy may be located.

In the 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 firefighting officers from the fire districts concerned.

FIRE PREVENTION DIVISION

The Lieutenant worked with the city officials of the School Department and the District Chiefs in the school desegregation program.

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 7,000 prints were made in the course of the past twelve months.

Large Loss Fires:

During the past twelve months the City of Boston experienced many spectacular fires involving various types of occupancies and particularly one large fire which attracted the attention of the country. That fire occurred in the South Boston section of the city and burned a very famous landmark, namely the Captain's Room (Old Dorgan's Cafe).

Other tragic fires occurred in the Dorchester section of the city in which four civilians died. At a separate location four young children perished.

During the past twelve months large loss fires encompassed all sections of the city. In addition, there were several other large fires 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 has "beefed up" their inspection program and their community relations and educational program 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 now in the hands of the Law Department being prepared for the

FIRE PREVENTION DIVISION

City Council.

At the present time the new Housing Court, under the direction of Judge Garrity, has been extremely helpful and we have had a very fruitful year.

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.

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 them abreast of current changes in inspection techniques, changes in rules and regulations and any changes in statute law. These seminars are also extended to members of the firefighting 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 firefighting 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

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FIRE PREVENTION DIVISION

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 which were incendiary, suspicious or undetermined, and those fires which were a violation of the law, resulted in the apprehension and conviction of twenty-one 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 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 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 has made the City of Boston a safer place in which to work, live and play.

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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 239 pieces of rolling stock, consisting of 138 pieces of apparatus, 43 trucks of varied description, 58 cars, 2 fireboats, and 42 buildings. In addition to meeting this heavy schedule, the division is also responsible for the compilation of specifications, procurement of new fire apparatus and all other vehicles, purchase and upkeep of fire fighters' uniforms and fire clothing, 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 fifty-eight civilian employees, proficient in various skills and crafts, twenty fire fighters, ten of which are assigned to the Emergency Motor Squad which responded to over 7,000 calls of varying exigencies throughout the city.

An upgraded program of rehabilitation and reassignment of apparatus continued with the cooperation of the Training and Research Division in the acquisition and renovation of equipment. Preventive maintenance was improved and made more comprehensive. Repowering of older apparatus continued with the acquisition of seven new Detroit 6 - 71 diesel engines. Among the equipment repowered were Ladder 2 Seagrave, Ladder 22 Seagrave, spare Mack Ladder 215T, spare Ward Pump 107P, Engine 3 Ward Pump 141P, spare Seagrave Ladder 279T, with Ladder 24 Seagrave in the process of being converted to diesel. A Seagrave diesel powered tractor was installed under a Pirsch aerial ladder as a spare truck.

A program to replace the traditional leather fire helmet has been started by replacement with the new type Polycarbonate firefighting helmets. Additional emergency medical spine boards were constructed by our carpenters and members of the hose shop and supplied to companies,

FIRE DEPARTMENT

MAINTENANCE DIVISION

bringing the total in service to thirty-six units.

A new fire station located at Dudley Street and Harrison Avenue, housing Engine Company 12, Engine Company 14, Ladder Company 4, and the Special Service Car, was opened and dedicated. This opening resulted in the closing of three firehouses, each about 100 years old, namely Engine Company 12 at 407 Dudley Street, Engine Company 14 at 27 Centre Street, and Ladder Company 4 at 198 Dudley Street. Extensive renovations were made at Engine Company 55's quarters to enlarge the building, providing quarters for Engine Company 55, District 10, and newly formed Ladder Company 5.

Capital improvements were made as follows:

New windows in Engine Companies 3, 5, 30, 37, 41, and 51
New roofs to Engine Companies 10, 34, 41, 43, and 51
Complete paint jobs to Engine Companies 3, 20, 40, 50, and Headquarters
Conversion from oil to gas heat to Engine Companies 30 and 42
Contract for new boiler for Engine Company 56
Contract for 24 hour heating and air conditioning service for Engine Companies 12, 33, 36, 48, 52, and 55
Extensive modifications to Fire Alarm Fenway to accommodate the Fire Alarm Construction work force and stockroom

New equipment was delivered and accepted as follows:

1 - High Pressure Hose Wagon
1 - 2 1/2 Ton Wrecker
1 - Radio Van
13 - District Station Wagons
3 - Sedans
4 - 1/2 Ton Pick-up Trucks
7 - Detroit 6 - 71 Diesel Engines
1 - Maxim Tractor
1 - Rebuilt Ward LaFrance Pumper

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MAINTENANCE DIVISION

Purchase Orders were issued for the following:

- 7 - 100' Seagrave Aerial Ladder Trucks
- 5 - 1500 GPM Ward LaFrance Pumpers
- 1 - Rescue Truck Providence Body
- 1 - 45' High Speed Fireboat

Hose purchased - 25,000 feet
Hose repaired - 52,700 feet
Hose condemned - 21,850 feet

The Maintenance Division took an active part in the government sponsored C. E. T. A. Program, utilizing men in the most efficient manner for the department.

The division has been able to acquire miscellaneous surplus materials and vehicles through the State Surplus Property Department and the Government Excess Surplus Programs. Materials with a total government cost of \$33,680. were purchased by the department for only \$552.80.

With the ever increasing number of alarms, the work load has been increased considerably. The division is making every effort to keep the equipment and buildings of the department in top notch condition, using any new methods or equipment available to do it.

FIRE DEPARTMENT

FIRE ALARM DIVISION

The Boston Fire Department responded to a total of 57,777 incidents for the period July 1, 1974 through June 30, 1975, involving more than 231,108 separate movements of apparatus. The Fire Alarm Office received and transmitted more than 650,000 separate radio messages in the dispatching of apparatus and incidental department operations. There were 19,540 false incidents, for a total of 33.8% false incidents from all sources.

During this period, there were 117 second alarms, 28 third alarms, 5 fourth alarms, and 11 fifth alarms. There were 219 working fires, requiring additional apparatus being dispatched to the fire but not considered multiple alarms.

On June 30, 1974 there were a total of 2,402 Fire Alarm Boxes in service in the City of Boston. There were 28 new Fire Alarm Boxes installed and 6 discontinued, for a net increase of 22 boxes. As of June 30, 1975, there were 2,424 Fire Alarm Boxes in the City of Boston Fire Department.

The Fire Alarm Construction Force installed 38,330 feet of underground cable for a total of 916,320 feet of conductors. A total of 5,200 feet of overhead wire and cable were installed for a total of 15,208 feet of conductors. A total of 5,200 feet of overhead wire and cable were removed. Cable removed was defective or damaged and in most instances was replaced with new cable.

First steps were taken to implement a voice dispatching system using radio. The system calls for individual signalling to each fire station for the purpose of alerting them to respond. As part of this program, the starting of the house timer to initiate the alert lighting, house alarm, and door opening sequences was begun as an adjunct to signaling.

A new twenty track tape recording machine was installed in the Fire Alarm Office.

The department joined the Greater Boston Hospital Radio Network as part of a plan to expand this department's communication capabilities in the event of a disaster. This system allows direct radio contact between the Fire Alarm

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FIRE ALARM DIVISION

Office and all major hospitals in the Greater Boston Area.

FIRE DEPARTMENT

COMMUNITY RELATIONS DIVISION

The Office of Community Relations continued its progress to solidify the position of the Boston Fire Department in the eyes of the public.

Perhaps the most significant role performed by this office during this period was its involvement in the minority recruitment campaign to encourage and assist in preparing minorities for the Civil Service Examination for the position of Fire Fighter.

Excellent relations were maintained with the news media and community groups with which we were privileged to work.