ANNUAL REPORT

OF THE

FIRE DEPARTMENT

FOR THE PERIOD

JULY 1, 1975 TO JUNE 30, 1976

BOSTON, July 1, 1976.

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, 1975 to June 30, 1976.

During this period, the department experienced the busiest year in its history and the manpower of the department was taxed to its utmost capacity. The members of the department are to be commended for their dedication during this trying period.

The department will continue to provide the best in protection against fire by keeping abreast of all newly developed technology and providing the necessary leadership to effect the desired results.

Respectfully submitted,

GEORGE H. PAUL Fire Commissioner.

1975 - 1976

Fire Commissioner, JAMES H. KELLY (retired July 11, 1975)

Fire Commissioner, GEORGE H. PAUL (from July 11, 1975)

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. $\label{eq:MURPHY} \mbox{MURPHY}$

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

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

1974-1975	1975-1976
 . \$28,989,740.00	\$36,063,842.00
 . 1,589,562.00	1,516,252.00
 \$30,579,302.00	\$37,580,094.00
	102,601.00
 . 288, 121. 17	322,884.00
 . 245,300.00	154,959.00
 . 270, 200. 28	276, 250.00
 2,000.00	2,155.00
 53,087.00	29, 257.00
 . \$ 951,895.07	\$ 888,106.00
20/ 202 22	255 020 00
	355,820.00
	164, 395.00
 . 14,720.00	23,584.00
 1,620.00	716.00
 29,103.00	25,883.00
 482, 220.00	750,858.00
 \$ 1,102,017.98	\$ 1,321,256.00
270 700 00	Carnol Market de
	235, 100.00
 . \$ 270,790.00	\$ 235,100.00
	Charles principle
	84,614.00
	5,089.00
	595, 528.00
 . \$ 185,235.00	\$ 685,231.00
 \$33.089.240.05	\$40,709,787.00
 φου, σου, επο. σο	φ20, 107, 101.00

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 Feb. 17-March 20)
	1905-1908	Benjamin W. Wells
	1908-1910	Samuel D. Parker
	1910	Francis M. Carroll (Acting May 27-Sept. 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 Nov. 8-April 1)
	1922	William J. Casey (Acting April 1-August 24)
	1922-1925	Theodore A. Glynn
	1926	Thomas F. Sullivan (Acting Jan. 26-July 6)
	1926-1930	Eugene C. Hultman
	1930-1933	Edward F. McLaughlin
	1933-1934	Eugene M. McSweeney (Oct. 16-Jan. 5)
	1934-1938	Edward F. McLaughlin
	1938-1945	
	1945-1946	John I. Fitzgerald (June 7, 1945-Jan. 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-Dec. 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
	1968-1975	
	1975	George H. Paul (From July 11)

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

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 Boutlier 1948-1950 John F. McDonough 1950-1956 John V. Stapleton 1956 Edward N. Montgomery 1956-1960 Leo C. Driscoll 1960-1963 John A. Martin 1963-1966 William A. Terrenzi 1966-1967 James J. Flanagan 1967-1969 John E. Clougherty 1969-1970 Joseph F. Kilduff

1970 George H. Paul (From April 1, 1970)

MEDAL OF HONOR MEN

BOSTON FIRE DEPARTMENT -- 1975

"John E. Fitzgerald Medal"

Awarded to Fire Fighter ALLAN B. LLEWELLYN of Ladder Company 15

"Walter Scott Medal for Valor"

Awarded to Fire Lieutenant DANIEL J. HURLEY of Engine Company 37

ROLL OF MERIT -- 1975

Fire Fighter ROBERT M. GREENE of Ladder Company 23

Fire Fighter WALTER T, MCGINN of Aerial Tower 2

Fire Fighter CHARLES A. SEABOYER of Engine Company 18

Fire Fighter ROBERT P. POST of Ladder Company 13

"Distinguished Service Award"

Awarded to District Fire Chief (Drillmaster) PAUL W.
BUCHANAN of Training and Research Division

Awarded to Fire Fighter ROBERT R. CUNIO of Ladder Company 20

FIRE DEPARTMENT

"Distinguished Service Award"

Awarded to Fire Fighter DAVID A. CUNIO of Engine Company 25

Awarded to Fire Fighter RICHARD L. STEDMAN of Engine Company $43\,$

Awarded to Fire Fighter KENNETH J. ROGERS of Engine Company $24\,$

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

Awarded to Fire Fighter PAUL J. MINTON of Ladder Company 17

Awarded to Fire Fighter JOHN D. EGGLETON of Engine Company 16

Awarded to Provisional Fire Fighter JOHN R_{\star} OLIVER of Engine Company 33

IN MEMORIAM

DEATHS OF ACTIVE MEMBERS DURING 1975

July 25 JULIUS C. SUTTON Fire Fighter, Engine Company 40

August 3 FRANCIS J. TROY Fire Fighter, Headquarters Division

September 13 JOSEPH P. CAWLEY Head Clerk, Headquarters Division

November 2
ARTHUR W. EICHWALD
Fire Apparatus Repairman, Maintenance Division

November 28 JOSEPH H. CORLISS Fire Fighter, Engine Company 4

DEATHS OF ACTIVE MEMBERS DURING 1976

February 20 PAUL W. BUCHANAN District Fire Chief (Drillmaster) Training and Research Division

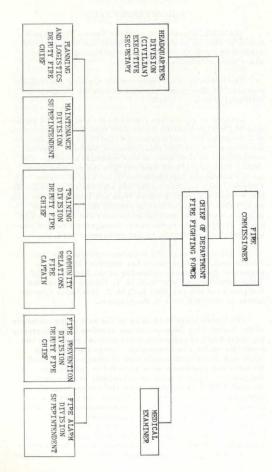
April 12 NICHOLAS P. FANANDAKIS Fire Fighter, Ladder Company 21

May 5

KENNETH J. TIERNEY

Maintenance Mechanic (Carpenter), Maintenance Division

June 21
EDWARD L. FITZPATRICK
Fire Fighter, Ladder Company 2



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CIVIL DEFENSE OFFICE

The Civil Defense section of the Boston Fire Department, in addition to its normal duties, has been given the responsibility of maintaining and supervising the Emergency Medical Assistance Program.

The following is a synopsis of the training accomplishments of the Emergency Medical Assistance Program for the fiscal period 1975-1976:

Greater emphasis was placed on the training and equipping of the Fire Fighting Force with regard to the provision of Emergency Medical Assistance (EMT), in order that the department may, in the most effective manner, meet its commitment as a provider of this essential service. The Boston Fire Department does not have the responsibility for the ambulance transportation in the City of Boston. However, with our thirty-nine fire stations all strategically located within a short distance from any location in the city, we are clearly in a position to provide fast response to calls for emergency medical assistance and therefore are nearly always at the scene of any emergency first and consequently in a position to render emergency care.

In addition to over 300 Registered Emergency Medical Technicians, the department has improved its training posture in the assured availability of the Department of Transportation - 81 hour R. E. M. T. Course through the designation of two certified R. E. M. T. Instructor Coordinators to work full time in the program.

The higher level of training on the part of the members of the Boston Fire Department has resulted in the necessity for upgrading and expansion of the medical equipment and materials on the fire companies. Large trauma boxes filled with every conceivable type of emergency medical material and equipment were provided to certain fire companies. Since it would be unrealistic to attempt to train all 1700 Fire Fighters in an 81-hour in-hospital Emergency Medical Technician Course, an additional and parallel approach to emergency care training was initiated by this department. This training consists of a 26 hour in-service course which is to be given to the entire department. This level of training is referred to as "The First Responder Course", and is also taught by our two Instructor Coordinators. The basic scope of this First Responder

FIRE DEPARTMENT

CIVIL DEFENSE OFFICE

Course consists of instructional and practical training in cardio-pulmonary resuscitation and all of the associated elements of emergency care training, such as, airway maintenance, breathing difficulties, control of bleeding, fractures, poisoning, drugs, burns, proper stabilization of the injured, extrication techniques, etc. Current progress in this program has resulted in 600 Fire Fighters being trained and certified as First Responders.

This is an on-going program that will result in all members of the department being trained and certified within the next sixteen months, as required under General Laws, Section 1 of Chapter 111. At this time retraining will continue so as to maintain a hold on this valuable emergency care resource. This in-service First Responder Course allows also for the recertification of those registered emergency medical technicians within the firefighting ranks as they automatically are included in the program along with their fellow Fire Fighters.

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

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

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 obliga-

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

FIRE DEPARTMENT

TRAINING AND RESEARCH DIVISION

Available Facilities

- 1. Training and Research Division Office, Headquarters Building
- 2. Fire Fighting Equipment Stockroom and Repair Facility, Headquarters Building
- Memorial Hall, Headquarters Building
 Pump Test Pit, Maintenance Division Yard
- John A. Martin Fire Academy, Moon Island
- 6. Compressed Air Tank and Fire Extinguisher Recharging Station, Moon Island
- Compressed Air Cylinder Recharging Station (5000 lb. capacity), Headquarters Building
- Drill Tower, Engine 2, South Boston
 Drill Tower, Engine 29, Brighton

Department Drilling and Training Program

This division develops, formulates, and conducts drilling and training procedures covering the wide range of subjects, both basic and newly developed, that must be taught and reviewed to insure 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. These procedures are revised as required. Forty-four engine, twenty-eight ladder, two rescue, two aerial tower, two fireboat, and two light 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
- Safety Driving Program

TRAINING AND RESEARCH DIVISION

- 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

Training Available to Outside Groups

Minority Recruitment Program

In conjunction with the Community Relations Office of this department, and with the cooperation of the Massachusetts Department of Education (State Fire Fighting Academy), the Division of Civil Service, the Boston Public Schools, the news media, and various community organizations, the program was continued to recruit minorities and others interested in becoming fire fighters and to prepare them for the fire fighter entrance examination. Volunteers from this department reported daily and evenings to this division and to their assigned locations to assist in the various aspects of this program. Classes were continued during this period and terminated in time for applicants to take the examination which was held on July 10, 11 and 12, 1975, both in English and Spanish. Over 30,000 participated in the examination.

Basic Fire Fighting

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

Surveys

Inspections and Tests

FIRE DEPARTMENT

TRAINING AND RESEARCH DIVISION

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

Servicing and Repair Programs

In order to 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.

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 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.

Grid Maps

A program of determining response routes, classifying streets for still alarm locations, hydrant locations, water main size, etc. on grid maps of the city was initiated.

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

TRAINING AND RESEARCH DIVISION

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 the late 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:

Protective Breathing Equipment

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

Fieldtesting of various gas masks, experimental and otherwise, was continued.

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

Special Order No. 9 was issued to the department on February 4, 1976 regarding the formation of a joint, nationwide committee by the National Fire Prevention and Control Administration (NFPCA) and the National

FIRE DEPARTMENT

TRAINING AND RESEARCH DIVISION

Aeronautics and Space Administration (NASA) to study equipment used by fire fighters and to make recommendations. Members of the department were encouraged to make suggestions for improving our protective equipment and clothing, including breathing equipment. Deputy Chief Stapleton and Dr. Clougherty, Department Chemist, of this department have been appointed to this committee.

Scott Aviation, manufacturer of Scott Air-Pak, has received government approval of a new type air mask. Fifty of these were purchased and will be placed in service judiciously throughout the department for evaluation on their arrival.

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

Fieldtesting and evaluation program 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 the department. New specifications were formulated by this division in an ever continuing effort to design and produce a coat suitable for fire fighting purposes which would be an improvement over the present type. Cooperation has been received from the Alb Rubber Company, the Globe Manufacturing Company, DuPont Company, the Bureau of Standards and NASA. In addition, the experience and knowledge of this department has been provided to assist other fire departments in this field.

TRAINING AND RESEARCH DIVISION

Fire Helmets

Fieldtesting was continued and will continue to be conducted on various models and various types of materials. Plastic fire helmets from MSA and Cairns Company are presently being fieldtested in various fire companies in the department. Non-metallic and other new designs are being examined.

Fire Fighters! Work Gloves

Fieldtesting of work gloves is being continued not only on original issue but also on a new type glove incorporating non-skid surface material for better handling of tools, etc.

Fire Boots

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

Miscellaneous Fire Fighting Equipment

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

Plexi-Glass

A problem plaguing fire departments since the incorporating of plexi-glass for windows has been solved with the expert knowledge and help of the Moore Saw Company. The radical concept is the use of a zero degree or negative angle to the cutting tooth of the saw blade, thereby enabling a plunge cut. This prevents the skipping of the saw blade over the surface of the plexi-glass on lexan windows.

Fibre Glass Handles

Fibre glass handles for axes are being utilized. Their success has prompted experimentation with such handles for rakes.

FIRE DEPARTMENT

TRAINING AND RESEARCH DIVISION

Specifications - New Apparatus and Equipment

Specifications for fire fighters' masks, fire coats, work clothes and work gloves were covered elsewhere in this report.

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.

Five new Ward LaFrance 1500 G.P.M. single stage pumpers were received and placed in service at Engine Company 16, 18, 24, 43 and 53.

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

Licenses

From July 1, 1975 through June 30, 1976, receipts from licenses issued totaled \$82,965.

Permits

Permit revenue from July 1, 1975 through June 30, 1976 amounted to \$109, 957.78, including miscellaneous permits. Total revenue from all sources was \$192, 922.78.

Plans Examiner

During the past twelve months, the Plans Examiner has examined and approved 410 sets of plans. He is also required to convey by telephone, information relative to applicable codes for specific occupancies. Review of plans are made for autonomous authorities, preliminary discussions are made relative to proposed structures with regards to requirements, and appearances are made at both state and local public hearings to voice opinions of the fire department. As a result of a complaint or request, on-site inspections are made of various projects, particularly in the area of self-service gasoline stations prior to their opening, to assure compliance with the fire prevention regulations of the state and the fire prevention orders of this department. Research work on existing and proposed code changes or additions are also part of the Plans Examiner's function. From time to time he is called on to read and comment on various items of interest to this department such as other city code requirements and proposed changes to accepted fire protection reference standards. In addition, clerical work is necessary to maintain microfilm files on projects approved by this department.

Chemist's Activity

During the past twelve months, 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 flame-proofed synthetic and treated natural fabrics, wall coverings, floor coverings, ceiling tiles, foamed cellular plastics and miscellaneous decorations. Approximately one

FIRE DEPARTMENT

FIRE PREVENTION DIVISION

hundred 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. The responsibilities for the Training and Research Division include the development of specifications for protective clothing and equipment, including fire fighter turnout coats, helmets, gloves, boots and work uniforms. Operational features of polycarbonate helmets currently in service are being examined. New standards for fire fighter helmets are being evaluated. Specifications are being developed for safety shoes for fire fighters to use in place of protective boots.

Professional activities included participation in the following: National Fire Protection Association; Sectional Committee on Protective Clothing and Equipment; American Society of Testing and Materials; Chairman, Committee on Fire Hazard Standards; Massachusetts Fire Prevention Association and Consumer Product Safety Commission; Member, National Advisory Committee for the Flammable Fabrics Act.

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 investigation are to help determine whether such fire was caused by carelessness, design or is a violation of the 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 facts and evidence in the course of their duties to the Office of the State Fire Marshal. Many hours are spent on these investigations. Undetermined, suspicious and incendiary fires totaled 953. Injuries reported and investigated totaled 141 with deaths attributed to fires totaling 44. Eighty-six arrests were made during the past twelve months and 226 Municipal and District Court appearances. Eighty-eight appearances were made before the Superior Court. As a

FIRE PREVENTION DIVISION

result of these appearances and arrests, we were able to get forty-five convictions. This work by the Inspection Squad in obtaining these convictions deserves a "well done" because in arson investigation and detection, they have succeeded in obtaining these convictions in one of the most difficult crimes there is to prosecute.

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 advance preparations to circumvent the honest viewing of any location. The total number of inspections made by the Inspection Force totaled 20, 892. Places of assembly were also inspected by this force for a total of 2, 794. 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 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.

In-Service Inspections

This department continued with its routine in-service inspections by company units of the 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. 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 sub-district the school building is located and fire exit drills are held. The Fire Prevention Division maintained a program

FIRE DEPARTMENT

FIRE PREVENTION DIVISION

called the "Boston Junior Fireman" based on the Fire Marshal Plan which claimed national recognition since its inception in Boston in 1948. This plan, supported by the Sears Roebuck and Company, 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 19,005.

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 10,440 prints were made in the course of the past twelve months.

Personnel

The Night Division of Inspection concentrated its efforts in the area of high populations wherein our citizenry may be assembled for shopping, amusement or entertainment with particular emphasis in regard to "rock show" performances in the City of Boston. A new night inspection team has been put into service under the direction of a Fire Captain. These night teams consist of all Fire Prevention day Inspectors who work in alternate night shifts. The main purpose of these teams is to inspect all places of assembly within the City of Boston.

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

The vacant building program of inspections is still being maintained at a high level. Approximately 1000 vacant buildings have been inspected at least once. This allows the Fire Prevention Division to keep a very close watch on demolitions and removal of all debris from their locations, thereby allowing for both the prevention of blight in the neighborhood and increasing the fire safety of the

FIRE PREVENTION DIVISION

neighborhoods.

The Fire Prevention Division also keeps a close watch and supervision on all temporary closing of gasoline stations. This is in addition to the installations of Phase I and Phase II vapor recovery systems.

Inspections were also conducted during the 1975-1976 year of all safety devices in relation to gasoline tank trucks and approximately 400 safety decals were affixed thereto.

Inspections of approximately 225 lodging houses were made with regard to life safety before their annual licenses could be issued.

Nursing Home Seminar

Seminars were conducted which were a huge success. At these meetings, approximately 80% of the nursing homes in the City of Boston were represented. 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.

Massachusetts Fire Prevention Association Seminar

This seminar was held at Florian Hall with Chief Officers from various parts of the Commonwealth in attendance. At this meeting a demonstration of gasoline tank trucks bottom loading was shown to the Chiefs. This meeting also proved very successful.

Target Hazards

In keeping with this program, the Fire Prevention Division is continuing on the inspections of large industrial complexes and warehouse a areas, along with the hospitals and school 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 sub-district 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.

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

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 Jamaica Plain section of the city and burned a very old landmark, namely, the Plant Shoe Manufacturing Company.

Other tragic fires occurred in the Brighton section of the city in which six children perished.

Another spectacular fire resulted in the loss of life of one civilian due to the collapse of a fire escape. As a result of this collapse, all fire escapes within the City of Boston were inspected within a ten day period. Many defects or malfunctions that were found were reported to the proper authorities or parties concerned.

During the past twelve months, large loss fires encompassed all sections of the city that taxed the capabilities of the Boston Fire Department. In view of these large loss fires both in material things and human life, the Fire Prevention Division 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

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being reviewed by the Law Department in preparation for the 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 inservice training of all members assigned to this division. A weekly seminar is held for all members assigned to this division to keep them abreast of current changes in inspection techniques, changes in rules and regulations and any changes in statute law. This includes the explanation, use and implementation of the new State Building Code with regards to changes as it affects the department. 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. These men usually have a background know-

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ledge 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 forty-five persons. This work by the Arson Squad will prove to be a deterrent to others who for any reason hope to avoid punishment for the crime of arson or the violation of law which jeopardizes public safety in this city.

The constant supervision by the Night Club Inspectors and Theatre Inspectors 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, through their efforts have made the City of Boston a safer place in which to work, live and play.

PLANNING AND LOGISTICS DIVISION

The activities of the Planning and Logistics Division have continued to be dedicated to those areas that are essential to the efficient operation of the department during times of emergencies. The division has kept up interest in exploring new ideas and instituting new programs that acquaint the members of the department with unusual features of the city.

The in-service hydrant inspection program was reevaluated during the past year. It is felt that a better system of hydrant inspections can be done in the latter part of September and into October. Therefore, the hydrant program this year will come after the pre-planning and inspection programs and it is our hope that we can alleviate some of the problems with frozen hydrants.

This division attends numerous meetings with city, state and federal agencies throughout the year. A few of these include the following:

 $\underline{\text{Environmental Agency}}$ - relative to handling of oil spills that could pollute water supplies.

M.B.T.A. - so as to continue our fire safety programs and the development of instructional programs on M.B.T.A. property relative to safe operations, knowledge of the third rail, understanding of new markings at street levels relative to emergency exits and standpipe locations.

With the extension of the standpipe between stations in the subway, it has become necessary for additional drills in the early morning hours when trains are not in service. These drills concentrated on the development of the best way to use the standpipe in those areas where there are unusual long runs as under the harbor and Fort Point Channel. In these areas the standpipe is in the vicinity of one mile in length and it can be a problem in filling the line unless personnel becomes familiar with the best means of utilizing it.

Members of the department are being trained in the need of taking advantage of fire safety features in the subway during emergencies. It is impossible to use them efficiently if drills are not scheduled. These programs have been accepted by the department as worthwhile.

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PLANNING AND LOGISTICS DIVISION

During the past year new improvements have developed in the subway that can benefit our operations. An outstanding improvement is the improvements in radio communication. At the present time the department can use its Channel 2 radios in all portions of the Orange and Blue Lines and work on the Green and Red Lines is proceeding with an anticipated completion of all lines by 1977.

Public Works and Traffic Departments

Numerous meetings relative to problems of the development of new traffic patterns in the city brought about by construction sites and neighborhood groups desirous of traffic changes, etc., were held. At these meetings we attempt to bring out the fire department's point of view.

Several meetings were held last winter relative to the problem of parking during the winter months.

M.D.C.

During this year contact was made with the M.D.C. and a program was established to inspect M.D.C. rinks. As a result of this program several existing hazards were discovered, resulting in corrections being made and new regulations adopted by the M.D.C. for all of their skating rinks.

Response Cards

Response assignments are being realigned to provide to the greatest extent the response of apparatus, as indicated on the assignment card, in an automatic manner. This will relieve the necessity for the Fire Alarm Office to make numerous phone calls.

We anticipate in the future that progress will be made in our response cards for the development of a nine alarm response. The issuance of new assignment cards will follow and this is a long overdue improvement in the department.

Pre-Planning Program

These programs are continuing and are being expanded to

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include companies from outlying districts.

The construction of new buildings in the city requires constant attention from this division. The fire companies are kept informed as to the progress being made and the freedom of access for fire fighters to the structure in case of fire. The extension of the standpipes as the building progresses and the provision of temporary siamese connections for supplying same are important.

The establishment of contact with the construction superintendent enables us to bring to his attention any shortcomings that could hinder fire department operations.

Relative to the above mentioned subjects, programs are developed to acquaint the first alarm companies.

A program is now in operation that brings outlying companies into the downtown area for instructions on high-rise buildings and the M. B. T. A. The intent is to acquaint these companies with essential information relative to their operations at emergencies involving these structures. Prior to their involvement in these programs, companies were required to review the S. O. P. relative to operations in high-rise buildings.

Relative to the M.B.T.A. members are acquainted with the new improvements in the fire safety improvements in the subway. This includes an explanation of the street signs that indicate an emergency exit or a standpipe location. Also, the method of opening the exit from the street level, the proper use of the standpipe system and a familarization for procedures to follow in case of an emergency in the subway. In many cases this is the first time these members have actually been acquainted with these features of the subway system or involved in anything related to high-rise buildings.

For the rest of this year it is hoped to get as many companies as possible involved in these out-of-district programs because it is our intention to acquaint all members of the department with all features of our city.

This division conducts an elevator instruction program that is of tremendous value to our department. In many

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cases faulty installations have been found and brought to the attention of the proper authorities. In many cases during the construction stages, the temporary elevator is the only access to the upper floor. Programs are developed to bring first alarm companies to the site for instruction on their use.

An understanding of the fire fighters keyed switch is essential to the fire department's operations in high-rise buildings. This is especially stressed in our instructions to companies relative to operations in buildings equipped with this device.

Programs such as these are very beneficial to the fire department.

MAINTENANCE DIVISION

The Maintenance Division is responsible for all testing, repair, maintenance and preventive maintenance of all fire apparatus and automotive equipment, and for repair and maintenance of all buildings and grounds. The foregoing includes 239 pieces of rolling stock, consisting of 138 pieces of fire apparatus, 43 trucks of various description, 58 automobiles, 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 firefighters' uniforms and fire clothing, supplies and materials necessary for efficient operations, and care of over 350,000 feet of fire hose.

The Maintenance Division consists of the main apparatus repair shop, small vehicle shop, machine shop, welding and metal shop, carpenter shop, hose and canvas shop, paint shop, plumbing shop, battery and ignition rooms, and the 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 8000 calls of varying emergencies throughout the city.

An extensive program to upgrade the efficiency of the various departments within the fire service was initiated and carried on during the 1975-1976 period by the division as follows:

Relocating of the Clothing Department to the Training Division stockroom.

Building and setting up a new chemical and testing laboratory for the Department Chemist. This was accomplished by renovating part of the vacated Fire Alarm section on the first floor of the Headquarters Building.

Installation of an air filtration system for the filling of the new type air bottles to be used with the very latest type of breathing apparatus.

Moving of the air bottle delivery truck and related air equipment to the Headquarters Building to cut travel time and mileage and improve efficiency.

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Relocating of the Medical Examiner from the second floor of the Headquarters Building to larger facilities on the first floor.

Relocating of the Planning and Logistics Division to larger offices in the vacated Fire Alarm Office in the Headquarters Building.

Relocation of the Public Relations Office to the vacated Medical Examiner's waiting room.

Extensive renovations and complete painting of the Headquarters Building.

Work has been started to construct a new photographic studio and work shop in the Headquarters complex.

The Maintenance Division again took advantage of the various government programs including C.E.T.A., in which the department utilized men in the most efficient manner possible. The division acquired a great deal of miscellaneous materials and vehicles through the various government surplus programs.

Purchase orders were issued for the following:

- 3 100' Seagrave Aerial Ladder Trucks (4 door cab)
- 8 1976 Ford Sedans received and put into service 5 1976 Ford Station Wagons received and put into service
- 2 1976 Chevrolet Van Trucks received and put into service
- 1 1976 Chevrolet One Ton Air Bottle Delivery Truck received and put into service
- 1 Surplus International Van received and renovated for department plumbers
- 1 Surplus International Van received and renovated for Scuba Divers
- 5 1976 Ward LaFrance 1500 Gallon Pumpers received and put into service

The upgrading of the 1963 Ward LaFrance Pumpers to provide better reserve apparatus was started by replacing booster tanks, making extensive body repairs and by repowering Engine 49 and 107P spare with 6-71 Detroit Diesels.

MAINTENANCE DIVISION

New Programs

An emergency program to manufacture and install both straight and curved windshields using plexiglass to provide protection against missiles being thrown was started.

Carpenter Shop constructed thirty new reinforced cases to carry the new Marion Ventilator Resuscitator now being put into service.

The division took an active part in the Bicentennial Program by designing and constructing sixty large signs to commemorate this great occasion. These signs were installed on fire apparatus and fire houses.

Every 1968 Ward LaFrance Pumper has had a major engine tune up including new fuel injectors.

All Allison H. T. 70 automatic transmissions have had a major preventive maintenance check and adjustments to assure continued reliability and good performance.

27,000 feet of new hose of various sizes was issued, in addition to 4200 feet of new special high pressure hose to be used on high rise buildings. 53,800 feet of hose had to be repaired and 29,250 feet of hose was condemned.

The department is eagerly awaiting the delivery to ten new Seagrave 100' tractor drawn aerial ladders with four door totally enclosed cabs. These trucks are under construction and the department will soon make inspection trips to assure these trucks comply with our specifications before delivery. The new rescue truck also under construction should be ready for inspection in the very near future.

The Maintenance Division in the past year has made every effort to continue the dependable service that the fire service demands and has made extensive efforts to upgrade the various programs of preventive maintenance of the fire apparatus and the buildings.

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FIRE ALARM DIVISION

The Boston Fire Department responded to a total of 60,878 incidents for the period July 1, 1975 through June 30, 1976, involving more than 243,112 separate movements of apparatus. The Fire Alarm Office received and transmitted more than 674,000 separate radio messages in the dispatching of apparatus and for incidental department operations. There were 16,261 false incidents, for a total of 26,71% false incidents from all sources.

During this period, there were 145 second alarms, 37 third alarms, 4 fourth alarms and 8 fifth alarms. There were 212 working fires requiring additional apparatus being dispatched to the fire but not considered multiple alarms.

On June 30, 1975 there were a total of 2424 fire alarm boxes in service in the City of Boston. There were 17 new fire alarm boxes installed and 12 fire alarm boxes discontinued, for a net increase in boxes of 5. As of June 30, 1976, there were 2429 fire alarm boxes in the City of Boston.

The Fire Alarm Construction Force installed a total of 35,557 feet of underground cable for a total of 632, 188 feet of conductors. A total of 625 feet of overhead wire and cable was installed for a total of 1250 feet of conductors. A total of 1200 feet of overhead wire and cable were removed. Wire and cable removed was defective or damaged and in most instances was replaced.

A new radio console for the Fire Department Channel 2 (153, 89 mhz) system was installed in the M, B, T, A, subways for better communications between our portable radios and the Fire Alarm Office. This installation consists of a seventy watt transmitter in the various stations of the subway. It allows us to communicate with the portable radios in the subways by using various transmitters in the subways as needed through our console in the Fire Alarm Office. At present there are only five transmitting and receiving units in service. They are installed in the North Station, Essex Station of the Orange Line, Maverick Station, Aquarium Station and Bowdoin Station of the Blue Line. In the near future there will be five more installations on the Green Line and four more on the Red Line.

PUBLIC INFORMATION OFFICE

Formerly the Office of Community Relations, the Public Information Office is a consolidation of the personnel of the Public Relations and Community Relations Offices.

Fundamentally they cover all the same areas and duties as were previously their individual responsibilities.

During the past year this office was deeply involved in the minority recuitment program. Participation in this program taxed the resources of the Public Information Office as it was still responsible for the performance of its normal duties.

All Public Information Office duties were performed in a professional and competent manner. Close liaison was maintained with the news media and the public was kept informed on all matters in which they were concerned.