

FIVE-ALARM FIRE, UNION WHARF, BOX 1242, NOVEMBER 2, 1952.

ANALYSIS OF FIRES
IN BUILDINGS
AND CAUSES OF FIRES

ANALYSIS OF FIRES IN BUILDINGS — 1952

Construction of Buildings

Fire-resistive	305
Second class	2,223
Frame	1,879
Other types	16
Total	4,423

Point of Origin

Basement	1,171
First floor	1,333
Second floor	637
Third floor	450
Above third floor	230
Roof	112
Outside	490
Total	4,423

Extent of Fire

Confined to point of origin	3,072
Confined to buildings	1,277
Spread to other buildings	74
Total	4,423

Causes of Fires in Buildings — 1952

Fireworks	3
Careless smoking	1,488
Chimneys: defective, soot and sparks	307
Fuel oil burners	770
Electrical appliances and motors	378
Children and matches	311
Unknown	130
Miscellaneous known causes	158
Spontaneous ignition	89
Defective heaters and rubbish	126
Grease and food on stove	129
Other careless use of matches	35
Hot ashes	25
Defective wiring	208

FIRE DEPARTMENT.

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Incendiary or suspicious	65
Clothes too near fire	17
Flammable liquids	22
City gas and appliances	21
Sparks from machines	38
Thawing water pipes	1
Malicious mischief	102
Kerosene lamps, stoves	0
Home dry cleaning	0
1952 Total	4,423

Causes of Outdoor Fires — 1952

Brush	2,997
Automobile	1,069
Other outdoor fires	1,409
Rubbish (vacant lot)	1,183
Rubbish (near building)	776
Dump	89
Marine	22
1952 Total	7,545
Rescues (emergency calls)	2,231
Out of city calls	99



COMMISSIONER KELLEHER PINS FIRE DEPARTMENT BADGE ON JOSEPH MCCARTHY, WHO SAVED THE LIFE OF HIS BROTHER DURING A FIRE APRIL 16, 1952.

DIVISION OF CIVIL DEFENSE
PUBLIC RELATIONS
PUBLIC INFORMATION
1952



FIRE OFFICIAL SPEAKS ON DEFENSE.

Deputy Chief Franklin B. Sanborn of the Boston Fire Department was recently the guest speaker at a joint safety meeting of the North and South Metropolitan Divisions of the New England Telephone & Telegraph Company. His subject, "Civilian Defense," is one of vital interest to all. He pointed out the danger from "Atomic Bombing" and what part civilians would have in case of an attack and outlined the activities of both state and civic authorities. Two films, "Disaster Control" and "Cities Must Fight," shown clearly demonstrated the points Deputy Chief Sanborn brought out in his discourse.

DIVISION OF CIVIL DEFENSE, PUBLIC RELATIONS, AND PUBLIC INFORMATION

The principal functions of this division are threefold, namely, liaison between the local and state agencies for civil defense and the Boston Fire Department, the maintenance of good relations between the public and the Fire Department, and last, but not least, the dissemination of departmental information to the press and general public which reflects credit to the department.

Civil Defense

In connection with the civil defense program, the deputy chief in charge of this division has attended a total of 37 meetings held at various times throughout the year, representing the Fire Commissioner and Chief of Department at the state and regional levels and the department at the local level, formulating plans and their disposition.

With the active cooperation of the Superintendent and members of the Fire Alarm Division, who manned the portable transmitter setup, the personnel of this division operated Fire Department post at Civil Defense Control Center, George White Stadium, Franklin Park, during the several practice alerts held by the Boston Civil Defense Department, compiling and distributing token messages to the mobile units of the Fire Department for transmission and reception during these tests.

At the request of Miss Pauline Fenno, Director of Women's Activities of the State Civil Defense Agency, the deputy chief in charge delivered lectures at the meetings of the Civil Defense Workshops in Sudbury and Falmouth, Mass.

The administering of the Civil Defense Loyalty Oath has continued throughout the year, so that, at the present time, all members of the department have subscribed to this oath.

The processing of civil defense automobile stickers has also continued, with the result that all members who own automobiles and desired said sticker have received one.

Public Relations

In the very important matter of creating good will between the general public and the Fire Department, this division has at all times extended itself to achieve this goal. No request from any organization, large or small, was ignored or left unattended. During the year approximately thirty (30) lectures were delivered by the deputy chief, and moving pictures of civil defense activities and the Fire Department in action were presented by the division's personnel. That these programs were a success and enjoyed by such organizations as requested them can be attested by the many letters of appreciation received.

The division presented eleven exhibits at the various exhibition halls and hotel lobbies in Boston for conventions, which were very well received. Eight groups were taken on conducted tours of the various points of interest in the department (Fire Alarm Division offices, Bowdoin Square Station, fireboats, Headquarters, etc.), which tours afforded great interest and enjoyment to these civic-minded groups who learned at close range the efficiency of the Fire Department operations.

Among other activities was the representation of the Fire Department by the deputy chief in charge for the Fire Commissioner at such functions as launching of Navy vessels and recommissioning exercises; presentation of plaques, etc., to industrial fire brigades and others; meetings of the Armed Forces Disciplinary Board at the Fargo Building.

As representative of the Boston Fire Department the deputy chief in charge of this division was designated by the Fire Commissioner as member of the Civil Defense, Clothes for Korea, and Clean-up, Paint-up, Fix-up Committees of the Greater Boston Chamber of Commerce; the Mayor's City of Boston 1952 Christmas Festival Committee; the Massachusetts Safety Council; the Boston Port Protective Committee (Fire Protection Committee); also cochairman for department collections for the American Red Cross Fund Drive and the March of Dimes.

Public Information

During the past year the division's activities concerning public information have been many. Beyond

the fact of approving and releasing departmental information to the press and various members of the department requested to speak before outside organizations, we have compiled, had printed, and distributed the *Annual Report for the Fire Department for 1951*, also articles and photographs for release to the *American City* and *Clues* magazines and the *Boston Post*, from which very excellent and colorful stories of the department were published, with the result that very fine publicity and commendation was afforded to the department from all over the United States of America.

**CITATION AND
LETTERS OF APPRECIATION**



City of Boston Department of Civil Defense Citation

Whereas, the President of the United States on December 8, 1950, did issue a proclamation stating the existence of a national emergency, which requires that the military, naval, air and civilian defenses of the nation be strengthened as quickly as possible, to the end that we may be able to repel the threats now imminent against our lives, liberties, peace, security, and the fulfillment of our solemn obligations to the United Nations; and

Whereas, the General Court by enacting Chapter 639 of the Laws of the Commonwealth did legalize the establishment of Civil Defense organizations at state and local levels in the interest of public safety; and

Whereas, the Governor of the Commonwealth on December 16, 1950, declared by proclamation that a state of emergency did exist by reason of the fact that the peace and security of the Commonwealth are endangered by the imminent threat of belligerent acts of the enemies of the United States; and

Whereas, business, industrial, and patriotic organizations in response to these declarations have pledged their cooperation to provide the additional manpower and manpower necessary for Civil Defense during this period of national emergency; and

Whereas, the Boston Fire Department promptly responded to the request of local authorities for assistance in Civil Defense by pledging its membership as a group and as individuals to serve in Civil Defense in the City of Boston and organized its facilities in a manner worthy of commendation and high praise;

Now, Therefore, the City of Boston Department of Civil Defense hereby awards this citation of merit in the hope that it will inspire continued effort and active participation in the interest of Civil Defense in Boston.

John H. McCreary
Mayor of Boston
Regional Director of Civil Defense

Samuel J. Pope
Chairman
Mayor's Advisory Council

James E. Dineen
Director
Boston Civil Defense Department

Address reply to
Commandant,
First Naval District
and refer to:

HEADQUARTERS
FIRST NAVAL DISTRICT
NAVY BUILDING
495 SUMMER STREET, BOSTON 10, MASS.



My dear Mr. Kelleher:

This is in appreciation for the support given by your department in the celebration of ARMED FORCES Week.

Your cooperation in inspecting our installations for fire safety precautions and the kind use of your band, aided materially in making this year's celebration an outstanding success.

Please accept my personal thanks for your own and your department's help.

With best wishes, I remain

Sincerely yours,

J. L. McCrea

John L. McCrea
Rear Admiral, USN
Commandant First Naval District

Honorable Michael T. Kelleher
Fire Commissioner
City of Boston
115 Southampton Street
Boston, Massachusetts

THE AMERICAN NATIONAL RED CROSS
BOSTON METROPOLITAN CHAPTER
17 GLOUCESTER STREET
BOSTON 15, MASSACHUSETTS

Telephone KEmore 6-6226

May 8, 1952

Michael T. Kelleher, Fire Commissioner
City of Boston
115 Southampton Street
Boston, Massachusetts

Dear Mike:

This is a brief note to commend members of your Department for the many courtesies and the assistance they have given to our volunteer Motor Service drivers.

As you know, our drivers go on many calls where help from the nearest fire station is sought in carrying patients from their upper-storey apartments to our ambulance that we may convey them to a hospital or clinic. The latest occasion was this morning when two members of Engine 14 at Center Street, Roxbury, very obligingly carried a patient from our ambulance into a hospital in that vicinity.

You can be sure that we are very grateful for the fine spirit demonstrated by your men.

Very truly yours,



William E. Chamberlain
Executive Director

WEC:MB

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NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

41 Belvidere Street,
Boston 15, Massachusetts,
December 18, 1952.

Mr. Michael T. Kelleher,
Fire Commissioner,
City of Boston,
115 Southampton Street,
Boston, Massachusetts.

Dear Sir:

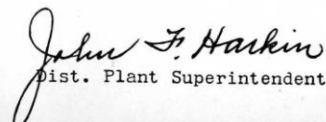
Through your generous co-operation a group of one hundred management employees of the New England Tel. & Tel. Company were present at a Civil Defense and Safety Meeting held at our headquarters building, 185 Franklin Street, Boston, on the sixteenth of December.

Your very able Deputy Chief Franklin B. Sanborn assisted by Lt. John Creedon brought to the gathering a story on Civilian Defense that was new and thought provoking.

It would be a great service to all our employees if the Deputy Chief were able to present his thoughts on Civilian Defense to them, perhaps at some later date this will be possible.

May I on behalf of all those who were present at the meeting express our appreciation to you for your co-operation and ask that you extend our sincere thanks to Deputy Chief Sanborn and Lt. Creedon for the excellent presentation of a very serious and timely subject.

Respectfully yours,


Dist. Plant Superintendent

JFH:avb

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A DAY IN NOVEMBER

An account of how the Boston Fire Department rallied its forces to avert disaster on November 2, 1952.

By

ROBERTSON PAGE

Volunteer Member of the Public Relations Division of the
Boston Fire Department



FIVE-ALARM FIRE, UNION WHARF, BOX 1242, NOVEMBER 2, 1952.

FOREWORD

The original intent of this report was to provide a detailed account of the five-alarm fire which swept Union Wharf on November 2, 1952. Subsequently, its scope has been enlarged. The wharf fire, although one of the most spectacular in recent years, is part of an even bigger story — the series of events on Sunday, November 2, which taxed the Boston Fire Department to the limit and created a situation fraught with danger for the entire city. The resourcefulness and ingenuity with which the department met and overcame the difficulties of this crucial day provide an inspiring chapter in the annals of department accomplishment.

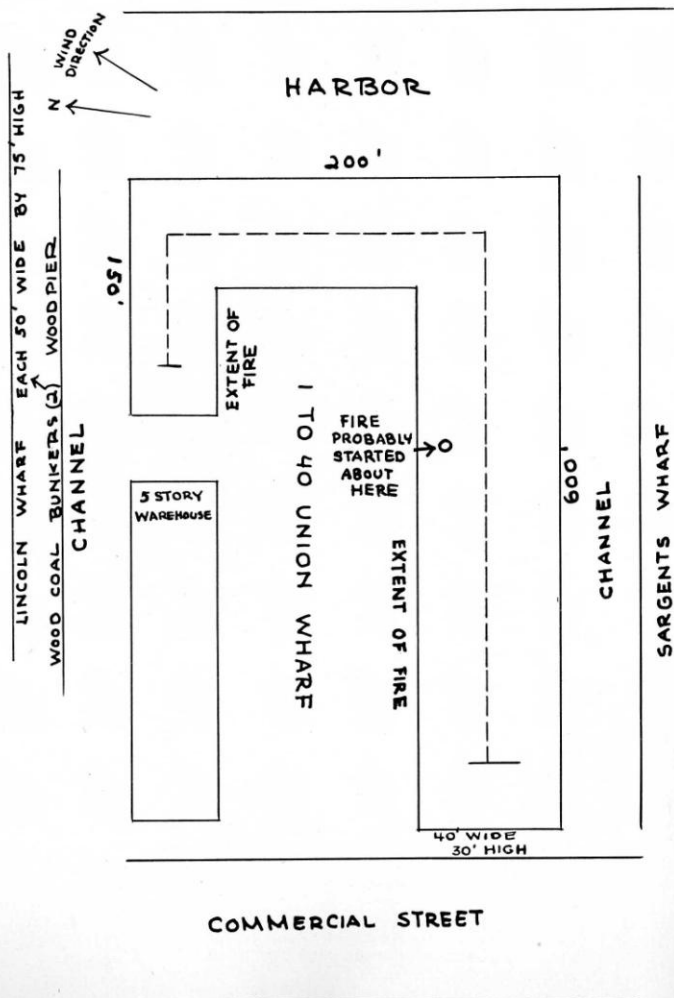
Although millions of gallons of water were poured on fires during the day, one step which may have done more than anything else to prevent further untold disaster lay outside the realm of fire fighting. Shortly after the fifth alarm was struck, a message was carried by Boston radio stations at the request of the department warning citizens that fire apparatus was depleted due to the large number of simultaneous fires and urging every precaution to avoid grass and brush fires. The results of this unique appeal were immediately apparent. Alarms for grass and brush fires, which had continued unabated for days, dropped sharply. The sudden decrease is reflected in the graph of fire alarms shown in the appendix of this report. In the light of such favorable experience, the use of commercial radio may be well worth considering for similar emergency situations in the future.

Also deemed worthy of special note in this foreword is the response of off-duty firemen who performed yeoman service at the Union Wharf fire, many of them staying throughout the night. Splendid cooperation was manifested by the Boston Police Department, Red Cross, Salvation Army, United States Navy, United States Coast Guard, Boston City Hospital, and all similar emergency services.

Finally, the attack on the Union Wharf fire was conducted without an equipment breakdown of any kind. The water supply was excellent, the fire alarm and radio operated perfectly, hose lines did not burst, equipment was first-class, and a sufficient force was mobilized with efficiency and dispatch. These facts are believed worthy of special mention because, as Chief Stapleton has pointed out, good performance is frequently taken for granted by the general public.

Respectfully submitted,

ROBERTSON PAGE.



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A DAY IN NOVEMBER

At 6.19 A.M. on Sunday, November 2, 1952, the sun rose at Boston, Massachusetts.

Beyond having some value as a routine statistic, this information would hardly be worth recording except for one thing — it concerned a sunrise that hardly anyone could see. It is significant, from the standpoint of fire fighting, that the sun's rays vainly sought to find their way through an impenetrable murk caused by an accumulation of forest fire smoke, some of which had drifted all the way from Virginia.

Official records of the United States Weather Bureau at Logan International Airport reveal that visibility at 8 A.M. was only one and one-quarter miles. As the sun rose higher during the course of the morning, visibility increased to three miles at 10 A.M. and to five miles at 12 noon. At 2 P.M., however, visibility had decreased to three miles and to two and one-half miles at 4 P.M. as the sun sank lower in the west.

Three-quarters of an hour after the outbreak of the Union Wharf fire at 12.43 P.M., the Weather Bureau made the following entry in its official log: "Heavy smoke layer west of airport, drifting north."

One of the most significant figures to come out of the Weather Bureau on November 2 was the "burning index," computed at 60. The "burning index," which is compiled by the Weather Bureau from information forwarded by the various forest fire lookouts, may range from 0 to 100. The figure 60 is considered by forest fire authorities to be dangerous. In fact, the woodlands in Massachusetts had been closed for several days by special proclamation of the governor.

The high burning index of November 2 was the result of a gradual drying up of underbrush and trees due to an extended period marked by infinitesimal rainfall. During the whole month of October rain had totaled only a few one-hundredths of an inch. Even this rainfall had come in widely spaced showers, each of which was quickly absorbed by the parched woodlands.

Contributing to the over-all hazard was an exceptionally low humidity throughout the period. At 6.30 A.M. on November 2 the humidity was a high 70 per cent. By 12 noon, however, it had dropped to 29 per cent, and to 26 per cent by 1.30 P.M.

The temperature at Boston on November 2 ranged from a low of 47 to a high of 71. Winds were light southerly early in the morning and shifted to south-southwest at noontime with a force of 12 miles per hour.

It was against this backdrop of unusual weather conditions that the drama of fire fighting was enacted on this memorable Sunday. The sunrise that was not a sunrise, the high burning index, the low humidity — all these gave an aura of foreboding as the day shift reported for duty on November 2. The very fact that it was a Sunday and citizens would be burning leaves was in itself enough to cause concern. But, as if further proof were needed, the department had the record of the past two days to go on. A total of 253 alarms had been recorded on Friday, October 31. Only 38 of these were false, despite the fact that it was Halloween. On Saturday, alarms totaled 215 and included a three-alarm blaze in a Dudley Street paper warehouse and a two-alarm fire on Blue Hill avenue, Roxbury. At the risk of getting ahead of the story, it may be noted that there were 127 alarms on Sunday, bringing the total for the three-day week end to 595. Of these alarms 309 were box alarms and 286 were stills.

Further reflecting the severe drought conditions which had prevailed for weeks was the record of alarms for the month of October. During this 31-day period, the Boston Fire Department answered a total of 2,246 alarms of fire, the largest number for any single month since March, 1946, when a total of 2,606 was recorded.

In the light of these conditions, it can be seen that the Fire Department was justifiably concerned over what Sunday might bring. Not only was there the ever-present danger of simultaneous fires, but, to make matters worse, many of the alarms were for peat bog fires which tied up engine companies for eight or ten hours, thus depleting available apparatus. (The chart in the appendix shows the number of still alarms which kept companies busy for extended periods of time.)

Action was taken to meet this threatening condition early in the day. At 8.55 A.M. the Fire Alarm Office in the Fenway transmitted the reduced assignment signal. At the same time, Engine 14 was sent to cover Engine 45 and Engine 6 was sent to cover Engine 14. For the next two hours the city was relatively quiet. Between 9 and 11 A.M. a total of five boxes and four stills was transmitted, perhaps a little more than usual for a Sunday morning, but not enough to cause any great problem. It was almost like the calm before the storm.

At 11.09 A.M. the action began, and it is safe to say that the fire alarm operators at the Fenway had little chance to relax for the next several hours. An alarm of fire was received from Box 2355, which calls for a normal first alarm response of the following companies: Engine 37, Engine 14 (in this case, Engine 6, which was covering), Engine 13, Engine 33, Ladder 26, Ladder 12, Rescue 2, and District Chief 8.

One minute after the receipt of the first alarm, the chief of District 8 ordered a second alarm by radio, since the fire was roaring through a three-story wooden tenement building upon arrival of the first companies. Responding to the second alarm

at 11.10 were Engines 42, 23, 41, 10, 3, Ladders 15 and 30, Lighting Plant 2, Tower 2, and the Deputy Chief of Division 2.

Under the automatic covering system of the Boston Fire Department, the following companies immediately changed location: Engine 19 to Engine 24; Engine 20 to Engine 23; Engine 24 to Engine 14; Engine 32 to Engine 10; Engine 43 to Engine 37; Ladder 3 to Ladder 15; Ladder 20 to Ladder 26; Ladder 23 to Ladder 30.

At 11.18 a third alarm was ordered, and the following companies responded: Engine 43 from Engine 37; Engine 24 from Engine 14; Engine 20 from Engine 23; Engine 26 from its own quarters; Engine 21 from its own quarters; Ladder 20 from Ladder 26. Engine 19, covering Engine 24, was scheduled to respond but was absent at a still alarm.

Covering on the third alarm on Box 2355 were the following companies: Engine 2 to Engine 43; Engine 5 to Engine 26; Engine 8 to Engine 33; Engine 15 to Engine 23; Engine 16 to Engine 24; Engine 34 to Engine 41; Engine 53 to Engine 37; Engine 55 to Engine 53; Ladder 13 to Ladder 26; Ladder 18 to Ladder 13.

During the course of the three-alarm fire on Box 2355, activity started to increase in the West Roxbury and Hyde Park districts. A study of the covering assignments shown above will indicate the problem raised as companies from outlying areas moved in town to fill in at vacated fire houses. Between 11 A.M. and 12 noon, four other box alarms were received and three stills, one of the latter tying up an engine company for nearly three hours. Accordingly, at 11.30 A.M., Engine 15, which had been covering Engine 23 on the third alarm, was sent to Engine 55 in West Roxbury. Shortly after 12 noon two more boxes and five still alarms were received. At 12.25 P.M. Fire Alarm Headquarters sent Engine 21, no longer needed at the third alarm, to cover Engine 30; Engine 39, which had been covering Engine 15, was sent to the quarters of Engine 53; Engine 9 was brought over from East Boston to cover at Engine 15.

A glance at the chart in the appendix will show that between 11 A.M. and 12.30 P.M., while the three-alarm fire was in progress, six boxes and nine still alarms were transmitted — a total of 15 fire alarms. The box alarms transmitted during this period were from the following boxes: 2853; 7437; 3656; 3212; 2555; 3646.

But all this was a prelude to what was to come. At 12.43 P.M. Box 1242 was received and transmitted. Several things happened in quick succession. The Police Department called to report a fire on Union Wharf. Engine 47 pulled out from its berth nearby and radioed Fire Alarm Headquarters that it could see the fire and that it looked serious.

In view of these reports, a full first alarm assignment was sent into Box 1242, and the District and Deputy Chiefs were apprised by radio of the apparent seriousness of the fire while they were en route.

Upon his arrival from Engine 8's quarters a few blocks away, Deputy Chief Gaughan found the one-story, J-shaped building on Union Wharf wrapped in flames at the harbor end, with fire extending about half way back towards Commercial street on the lengthier side of the building. Upon stepping out of the car, the deputy asked his driver to get a second alarm, and, after the second was struck, ordered a third. The second alarm was recorded at 12.44 and the third at 12.46. The third alarm would have been struck even earlier had it not been for the receipt of Box 1677 in between. One minute after the third alarm was struck, Chief Gaughan ordered a fourth alarm, and at 12.56 p.m. Chief of Department Stapleton ordered the fifth alarm.

The structure was "built to burn" and gave every appearance of living up to this description upon the arrival of apparatus. The superstructure above the pier itself was two stories in height at the end toward Commercial street and extended out to the end of the 600-foot pier as a one-story, metal-sheathed building with 9-foot cockloft, and thence to the left for 200 feet along the harbor front and back for 150 feet on the other side of the pier. (See MAP IN APPENDIX.) All interior offices and partitions were of wood construction. There were no fire walls in the building, no fire stops under the pier, no sprinklers, and no automatic alarms. The roof was made of wood, covered with tar and gravel.

Even had it been empty, the building would have posed a serious hazard. As it happened, it was heavily stocked with thousands of empty wooden boxes and crates, heavy piles of scrap rubber in 800-pound bales, and general freight storage. The cause of the fire is undetermined, but there was no question that it must have burned for a long time before discovery.

The combustible material described above created a raging inferno of rolling flames and heavy black smoke which posed a threat to the entire water front. The plan of attack became apparent at the outset of the fire — the exposures to the north must be protected at all costs. Heavy-duty streams were immediately placed in action on the north, or lee, side of the blazing structure to protect the five-story separate warehouse on the same pier and to break up the heat waves billowing out toward Lincoln Wharf with the help of a 12-mile-an-hour wind. Companies arriving on the first alarm took positions in the alley extending out through the middle of Union Wharf and put several deck guns into operation, some of them with two 2½-inch lines which were supplemented with third lines by apparatus arriving on subsequent alarms. One of the companies operated a high-pressure fog nozzle to create a water curtain between the blazing building on the south side of the pier and the five-story warehouse on the north side. Lines were also put into position on the roof of the adjacent warehouse itself, a position which was maintained with the utmost difficulty due to the tremendous volume of heat, smoke, and gases raging upward from the burning structure below.

Heavy deluge streams from fireboats were also used to prevent the spread of the fire to the wooden coal bunkers on Lincoln Wharf. Despite this coordinated attack, three blazes had started on Lincoln Wharf, and were extinguished by companies from Cambridge and Chelsea under the direction of a district chief who was off duty at the time.

To the south of the pier, hose wagons drove out on Sargent's Wharf and played streams from their deck guns across the water separating the two piers. Deck guns also were operated from Commercial street, playing at an angle into second-floor windows on the south side of the building.

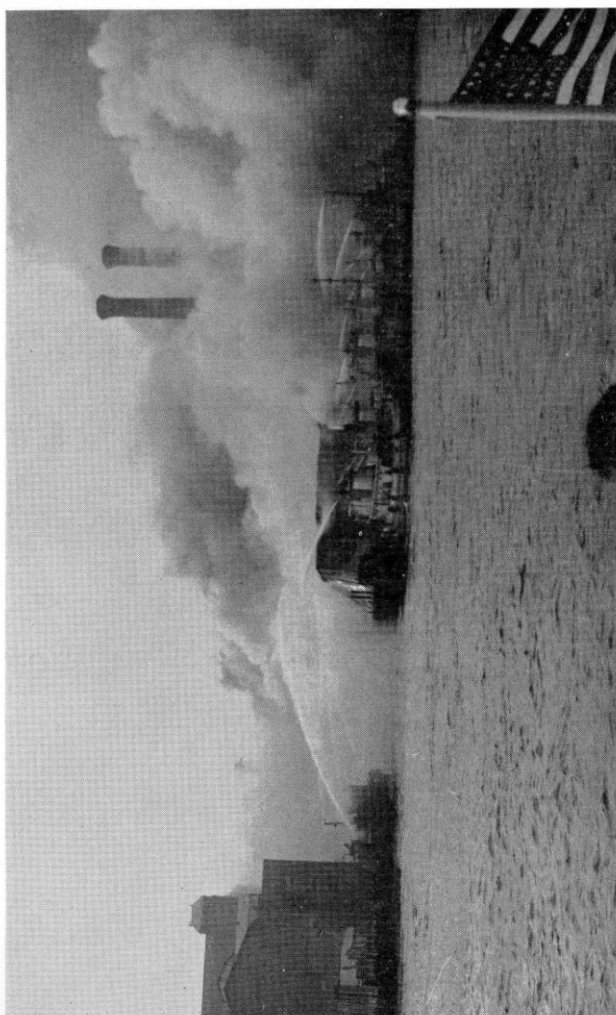
In addition to the Boston fireboats (Engines 31 and 47), four Navy tugs and two Coast Guard tugs responded to the blaze and operated for several hours. Figures are not available on Coast Guard operations, but the following official Navy statistics will indicate the tremendous volume of water which was poured on the blazing pier. The first Navy tug arrived at the fire at 12.48 p.m., the second at 1.15 p.m. and the other two at 1.50 p.m. From the time of their arrival until 5 p.m. all four of the Navy tugs used three streams of water each. From 5 p.m. to 6 p.m. each of the boats used one stream of water. At this time the tugs were temporarily secured but were re-employed at 6.45 p.m., using one stream of water apiece until 9.15 p.m. Two of the tugs were released at this time, but the other two remained on duty until 4.15 a.m., November 3, using their under-the-pier monitors.

Despite this heavy concentration of fire-fighting equipment, the fire continued to burn furiously under the collapsed portions of walls and roofs for many hours after the threat to nearby structures had ceased. The bales of scrap rubber in particular smoldered throughout the night, creating great volumes of sickening black smoke. These had to be removed the next day by a crane from the Navy Yard before the burning rubber could be extinguished. Meanwhile, the fire communicated to the floor of the wharf itself and ate away at the underside throughout the night.

Marshaled against this roaring inferno were 24 deck guns, 27 hand lines, and a water tower. A total of 29,650 feet of hose was used in the operation. The five alarms brought 28 Boston engine companies, five out-of-town engine companies, four ladder trucks, two water towers, one rescue squad, four Navy tugs, two Coast Guard tugs, and two police boats.

Fortunately, no serious injuries were sustained at the fire, but there were numerous minor injuries of varying degrees. Three City Hospital ambulances stood by with doctors who treated the men at the scene, mostly for eyes inflamed by heat, smoke, and gases. A total of 80 injury reports were forwarded, and, although no one was hospitalized for any length of time, about 15 members went off duty on injured leave, most of them for a few days.

Aiding the fire fighters at the water-front blaze was a detachment of 54 patrolmen from Police Division 1 under the com-



"FIREBOATS IN ACTION," FIVE-ALARM FIRE, UNION WHARF, BOX 1242, NOVEMBER 2, 1952.

FIRE DEPARTMENT.

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mand of Capt. Francis Murphy, a lieutenant, and three sergeants. There were also three police detectives on the scene. At one point the police cleared Commercial street of all civilians when it was feared that a tank of heavy fuel oil on Lincoln Wharf was endangered. This tank, about 20,000 capacity, was not a factor, however, since the Fire Department was protecting it with a water curtain. The police maintained fire lines and rerouted traffic, many of the patrolmen staying on beyond their regular hours of duty.

Great assistance was rendered by the Red Cross and Salvation Army, which remained on duty throughout the night, supplying the fire fighters with coffee and sandwiches.

In one sense, and one sense only, the fire occurred at a fortunate time. It was a Sunday afternoon, and the problem of rerouting traffic was not as great as it would have been on a weekday. About five o'clock, the Chief of Department ordered the 10-21 signal struck, providing that all men should remain on duty. This created a double force at 6 P.M. Fresh men were important at the fire, and as the men who had been fighting the blaze in the daytime were relieved, they reported to their respective stations and stayed on duty until Signal 10-25 was sounded at 9.30 P.M., releasing them from further extra duty. Many off-duty firemen responded to the wharf blaze and did outstanding work, a tribute to the esprit de corps of the department.

Although traffic had not been a factor Sunday afternoon, it became one Monday morning. Accordingly, all land lines were relocated. Heavy streams were shut down as conditions warranted. Eighteen land lines were stretched from Engine 31 (fireboat) during Monday to be used for mop-up operations on smoldering fires throughout and underneath the structure.

Enabling mop-up details to get at the fire on Monday were a huge crane obtained from the Navy Yard and a smaller crane from the Fire Department Maintenance Division. Cutting torches were also used. Large sections of the metal covering had to be removed from the walls of the superstructure to get at the smoldering bales beneath. As the debris was pulled away it was revealed that the unprotected steel frame of the building had buckled from the intense heat, in turn causing the collapse of the structure in many places.

The fire at Union Wharf furnished no new lessons. On the contrary, it seemed to combine in one roaring, five-alarm demonstration many of the lessons of the past. To begin with, the physical make-up of the pier was totally inadequate from the standpoint of fire protection. As has been mentioned already, there was a complete absence of fire stops, sprinklers, or automatic alarms. Add to this a delayed discovery — and a delayed alarm — and you have all the factors which made possible a fire of such intensity.

It is the intent of this report to be factual — not editorial — but if the writer permitted himself to make one editorial obser-

vation it would be that in stopping this incipient conflagration the Fire Department performed an outstanding job. Only the highest degree of efficiency on the part of all services, wise leadership by the chief officers, and devotion to duty by the men kept the fire from spreading far beyond its point of origin. The fact that departmental equipment was in the soundest of condition is something which should not be overlooked. Despite the fact that 29,650 feet of hose was in use for long hours, not a section burst. Apparatus pumped without a breakdown, and some pumps were in service long after the all-out was sounded early Tuesday morning, November 4.

In view of the emergency which existed throughout the city at the time the first alarm was received, a vital link in the attack against the fire was provided by Fire Alarm Headquarters. Some engine companies were still in service at the third alarm on Box 2355. Some were on the way back to quarters with rolls of wet hose piled on the wagons. Certain outlying companies had been covering intown houses, while some of the intown companies had been dispatched to cover West Roxbury fire houses at 12.25 p.m., as noted earlier. Several fires were in progress at the time, tying up apparatus for long stretches in woods and peat bogs.

Consequently, with four alarms striking within four minutes on Box 1242, the Fire Alarm Office had to improvise. The conventional response of apparatus via the running card had to be modified rapidly. The situation called for ingenuity and quick decisions in filling out the response of apparatus. Following is the record of alarms and the engine and truck companies which responded on each. It will be noted that, due to the above-mentioned conditions, the actual response was substantially different from that of the running cards.

First Alarm: Engine 4; Engine 25; Engine 32 from Engine 10; Engine 50; Engine 47 (fireboat); Ladder 1; Ladder 8; District Chief 4; Deputy Chief, Division 1.

Second Alarm: Engine 3; Engine 8 from Engine 33; Engine 7; Engine 43 from Engine 37; Engine 10 (returning from Box 2355); Engine 9 from Engine 15; Ladder 24; Ladder 3 from Ladder 15.

Third Alarm: Engine 40; Engine 41; Engine 33 (by radio); Engine 26 (by radio); Engine 2 from Engine 43; Engine 12 from Engine 7; Engine 31 (fireboat); Lighting Plant 2.

Fourth Alarm: Engine 11; Engine 23; Engine 53 from Engine 37; Engine 42; Engine 22; Tower 1 and Tower 2.

Due to the number of other alarms that were being received at about the same time, it was felt that the outlying districts should not be stripped any further and that mutual aid should be requested from adjoining cities. Accordingly, the chief fire alarm operator called Cambridge, Somerville, Chelsea, and Brookline, requesting them to send engine companies direct to the fire. Each of these cities sent one engine company to the fire, except for Brookline, which sent two.

Fifth Alarm: Engine 20 (by radio); Engine 51; Engine 36; Engine 39 from Engine 23*; Cambridge Engine 7; Somerville Engine 2; Chelsea Engine 1; Brookline Engines 1 and 7.

Lighting Plants 1 and 3 were also dispatched to the fire, and all three lighting plants operated throughout the night.

The all-out signal was sounded at 12.30 A.M., November 4. Other mutual aid response was as follows:

Winthrop to Engine 56
Everett to Engine 32
Cambridge to Engine 4
Cambridge to Engine 41
Newton to Engine 51
Milton to Engine 16
Quincy to Engine 20
Dedham to Engine 49

An inspection of the chart in the Appendix will show that between 1 and 3 p.m. a large number of alarms was recorded throughout the city. It was while this crushing burden taxed the facilities of the department that Superintendent O'Banion requested Boston radio stations to carry a special emergency appeal to the citizenry. This message explained that apparatus was depleted due to the unusual set of conditions and warned that citizens might have to fight grass and rubbish fires with garden hose and wait for apparatus to arrive. It urged that every precaution be taken to avoid such fires. The results of the appeal are apparent on the Appendix Chart. At 3 p.m. there was a sharp drop in the number of alarms received. This quiet spell continued until 5 p.m., when there was a sudden increase in alarms. Such an uptrend was not unexpected, since it is normal to receive a good many alarms during the supper hour. Of greater significance is the relatively few alarms received at a time when a much larger number could have been reasonably expected. A considerable number of still alarms was received between 5 and 7 p.m., after which they dropped off, with only desultory action the rest of the evening.

It is customary to end a report with a list of conclusions. The writer believes that the conclusions of this report are self-evident. The efficiency with which all branches of the department operated is a matter of record. The odds stacked against the department are also a matter of record. The results speak for themselves, and any attempt to embellish these results would amount to gilding the lily. Suffice it to say that the extreme fire hazard was ended the next day by a drenching rain. The woodlands were reopened during the coming week, and at last the pressure was off.

* Engine 39, which had covered Engine 53 at 12.25 p.m., had relocated in Engine 23's quarters after the Union Wharf fire started.

Those who saw duty during this period will remember it well. Those who looked in from the outside will also remember it. In particular, they will recall it as a time when men were asked to meet certain tests — and met them well. And, finally, they will remember having witnessed an inspiring demonstration of teamwork, that quality without which no human endeavor can succeed.

* * * * *

APPENDIX

The following tabulation gives the fire apparatus available in each of the Districts during the afternoon of November 2, 1952:

District 1. Engine 56 at Engine 5, Winthrop at Engine 56, Ladder 2, Ladder 21, Ladder 31.

District 2. Engine 27 at Engine 50, Everett at Engine 32, Ladder 9, Ladder 22.

District 4. Cambridge at Engine 4, Engine 5 at Engine 8, Engine 34 at Engine 10, Ladder 15 at Ladder 24.

District 5. Engine 6 at Engine 26, Rescue 1, Ladder 17.

District 6. Engine 1, Engine 18 at Engine 39, Engine 16 at Engine 43, Ladder 5, Ladder 19, Ladder 20 at Ladder 8.

District 7. Engine 24 at Engine 3, Engine 21 at Engine 33, Ladder 18 at Ladder 13, Ladder 13 at Ladder 3.

District 8. Engine 55 at Engine 13 (later relieved by Engine 37 and Engine 55 ordered to quarters), Ladder 12.

District 9. Rescue 2 at Engine 23, Engine 19 at Engine 12, Engine 15 at Engine 24, Ladder 4, Ladder 23.

District 10. Engine 17, Engine 52 at Engine 18, Ladder 7.

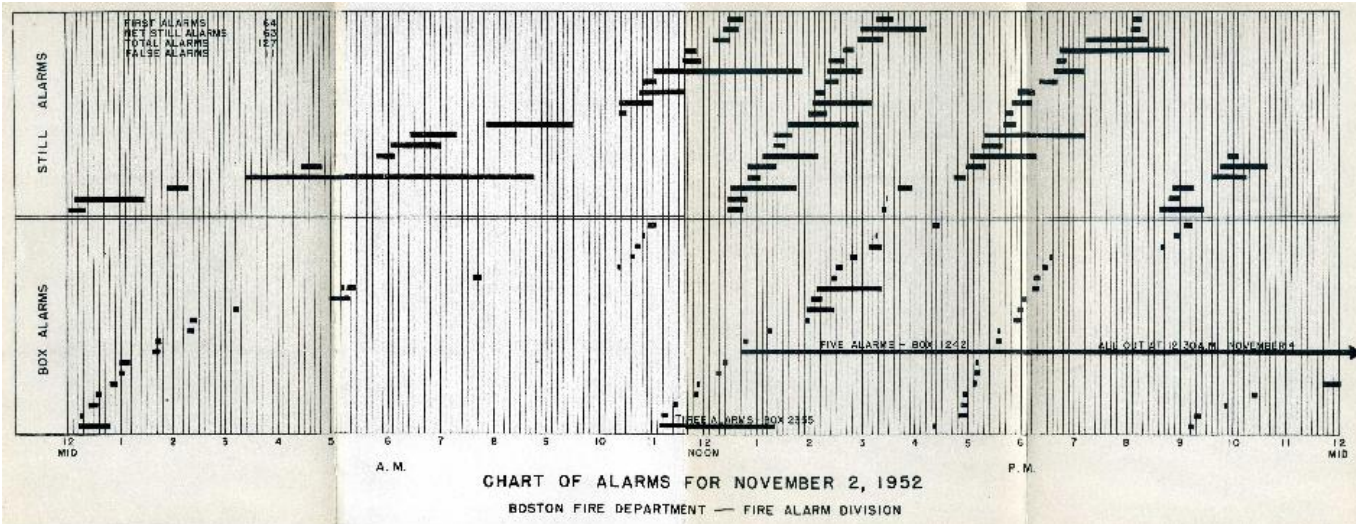
District 11. Cambridge at Engine 41, Engine 29, Newton at Engine 51, Ladder 11, Ladder 14, Ladder 34.

District 12. Engine 28, Ladder 10, Ladder 30.

District 13. Engine 30, Engine 45 (later Engine 55), Ladder 16, Ladder 25, Engine 14 (out all day to a bog fire).

District 14. Milton at Engine 16, Quincy at Engine 20, Engine 46, Ladder 6, Ladder 27, Ladder 29, Engine 54, Ladder 33 (Long Island).

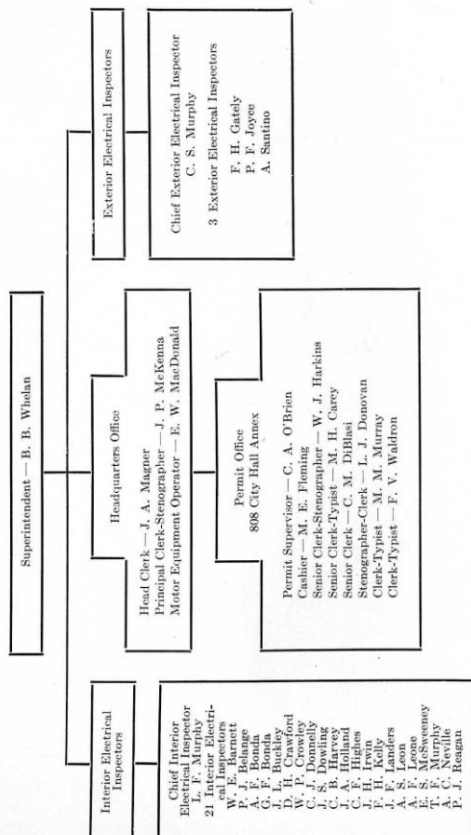
District 15. Engine 48, Dedham at Engine 49, Engine 49 at Engine 19, Ladder 28, Ladder 32.



**ELECTRICAL
INSPECTION DIVISION
1952**

(81)

THE ELECTRICAL INSPECTION DIVISION



ELECTRICAL INSPECTION DIVISION — 1952

The Underground District for the year 1952 was prescribed and public notice given in accordance with Chapter 100 of the Acts of 1946.

Plans for the installation of underground conduit were approved and grants of location for same issued and sent to the City Clerk for recording. Plans for proposed locations of poles were filed and recorded and permission granted to open and occupy the public streets to install same. Locations for the accommodation of wires, cables and conductors other than that known as conduit were approved and permission given to obtain permits to open and occupy the public streets to install same.

Rest homes, homes for the aged, agencies for the day care of children, nursing homes and hospitals (particular attention being given to operating rooms) were inspected and reports of same forwarded to the proper parties.

All places of amusement were inspected monthly and where necessary repairs and changes made.

Permits for the installation of electric wiring within buildings were issued, the electrical work inspected, reports made of same and where electrical meters were wanted certificates of approval were issued to the proper Utilities Companies.

Thousands of existing electrical installations were inspected and where defects were found the same were promptly called to the attention of interested parties and corrections were made.

EXPENSES AND INCOME OF THE DIVISION FOR 1951-1952

	1951	1952
Expenses.....	\$144,618 45	\$157,282 73
Income.....	60,275 73	64,088 83

FIRES AND MISCELLANEOUS TROUBLES

Fires and miscellaneous troubles reported as due to electrical causes were investigated and reports of the same are on file in the records of this division.

Causes of Fires and Miscellaneous Troubles Investigated by the Electrical Inspection Division in 1952

Fixtures and fixture outlets	43
Armored cable	8
Flexible cord	37
Bell wire used for light wiring	1
Wall switches and receptacles	23
BX cable across knob and tube wiring	1
Junction boxes	3
Television receivers	11
Radio receivers	3
Bell wiring	2
Electric hot plate	1
Control panel (elevator)	2
Control panel (miscellaneous)	2
Electric range	2
Telephone terminal box	1
Insulation breakdown	10
Electric flat iron left on	4
Combustible material on electrical appliances	9
Fuse tampering	1
Cable break by accident	1
Neon transformer	3
Fluorescent ballast	6
Delayed ignition — oil burner	2
Water leak	10
Fuse panel	3
Grounded table lamp	1
Total	190
Motors	
Fan	2
Refrigerator	56
Miscellaneous	19
Washing machine	10
Elevator	4
110-volt motor connected to 220-volt	1
Oil burner	1
Total	93

UTILITIES

Edison Company terminal box	2
Edison Company manhole	21
Edison Company pole transformer	1
Edison Company overhead	3
Boston & Maine Railroad primary cable break	1
Total	28
Electrocution	1
Grand Total	312

EXTERIOR DIVISION.

The following streets were prescribed and public notice thereof given by the Fire Commissioner for the 1952 Underground District in accordance with Chapter 100, Acts of 1946:

Boston Proper

Newbury Street, from Brookline Avenue to Charlesgate West.
 Carleton Street, from West Newton Street to Yarmouth Street.

Brighton

Malvern Street, from Commonwealth Avenue to Ashford Street.

Dorchester

Mt. Vernon Street, from Dorchester Avenue to Old Colony Parkway.

East Boston

Bremen Street, from Sumner Street to Porter Street.

Roxbury

Mall Street, from Eustis Street to beyond Douglass Avenue.
 Homestead Street, from Humboldt Avenue to Walnut Avenue.

South Boston

Damrell Street, from Dorchester Avenue to Old Colony Avenue.

West Roxbury

Boylston Street, from Washington Street to Centre Street.
 Amory Street, from School Street to Green Street.

Charlestown

Arlington Avenue, from Beacham Street to Somerville line.
 Concord Street, Bunker Hill Street to Monument Square.
 Monument Street, from Bunker Hill Street to Monument Square.
 Prescott Street, from Devens Street to Washington Street.
 Being not more than four miles as prescribed by law.

The ducts used for the underground conduits of the drawing-in system are of the following:

1. Vitrified clay (laid in concrete).
2. Fiber (laid in concrete).
3. Iron.
4. Wood.
5. Transite.

In side or residential streets special underground construction for light and power purposes (115-230 volts), of a type known as "Split Fiber Solid Main System," has been installed.

EXPENDITURES

CODE No.	1. PERSONAL SERVICES	1951	1952
100	Permanent employees	\$137,783 73	\$150,441 62
2. CONTRACTUAL SERVICES			
210	Communications		
213	Telephone service	\$810 68	—
270	Repairs and servicing of equipment		
275	Office machines and appliances	37 54	\$3 25
279	Equipment not otherwise classified	—	—
280	Transportation of persons		
281	Travel expenses—outside the state	121 27	128 63
282	Travel expenses—inside the state	2,749 65	2,784 60

FIRE DEPARTMENT.

CODE No.	1951	1952
290	Miscellaneous contractual services	
291	Advertising and posting	\$97 40
297	Printing, binding, and ruling	*163 20
		\$3,816 54
		\$3,379 68
3. SUPPLIES AND MATERIALS		
360	Office supplies and materials	
361	Postage, 362 Forms and cards, 363 Letterheads and envelopes, 364 Stationery supplies, 369 Supplies and materials not otherwise classified	\$2,817 54
390	Miscellaneous supplies and materials	
393	General operating supplies and materials	20 64
399	Miscellaneous supplies and materials not otherwise classified	—
		\$2,838 18
		\$3,233 93
4. CURRENT CHARGES AND OBLIGATIONS		
420	Dues and subscriptions	
421	Associations and societies	\$50 00
422	Newspapers and periodicals	5 00
430	Insurance	
433	Fidelity, surety and forgery	40 00
		\$95 00
		\$95 00
5. EQUIPMENT		
560	Office furniture and equipment	
564	Typewriters	—
569	Furniture and equipment not otherwise classified	\$85 00
		\$85 00
		\$132 50
		\$132 50
Grand total		
		\$144,618 45
		\$157,282 73

TABLE SHOWING WORK OF EXTERIOR DIVISION — 1952

Number of poles set in new locations	420
Number of poles removed	181
Number of poles reset, replaced, straightened	358
Number of poles standing in public streets	19,495
Number of inspections	9,848
Number of notices of overhead construction	3,451
Number of overhead reports	6,472
Number of notices of underground construction	1,700

* Carried forward.

Number of underground reports	1,724
Number of accidents reported and investigated	225
Number of street lamp locations investigated	725
Feet of wire removed by the various companies	1,075,457

SUMMARY OF WORK OF INTERIOR DIVISION—1952

Permits issued to perform work	16,427
Permits issued to turn on current	13,874
Number of inspections made	33,327
Number of inspections of theaters and places of amusement	1,169

CHARACTER OF CABLES USED BY THE VARIOUS COMPANIES—1952

COMPANY	Type of Insulation	Size
Boston Edison Company	Rubber, varnished cambric, lead	No. 6 to 1,500 M.C.M.
New England Telephone and Telegraph Company	Paper, lead	No. 13 to 26 2-2121 pairs.
Boston Consolidated Gas Company	Rubber, varnished cambric, lead, paper	No. 6 to 1,000 M.C.M.
Boston Fire Department	Rubber, polyethylene, lead	No. 14, 4 to 37 conductors.
Boston Police Department	Rubber, loom, lead	No. 14 to 19, 11 and 12 pairs.
Metropolitan Transit Authority	Rubber, neoprene, lead	No. 6 to 1,000 M.C.M.
Western Union Telegraph Company	Paper, lead	No. 19 to 26.
Boston Traffic Commission	Rubber, lead	No. 6.

UNDERGROUND WORK FOR THE YEAR—1952

COMPANY	LENGTH IN FEET			NUMBER OF	
	Conduit	Duct	Cable	Manholes	Services
Boston Edison Company	38,564	72,749	531,501	49	835
New England Telephone and Telegraph Company	11,128	20,816	200,296	8	68
Boston Consolidated Gas Company	2,114	8,923	55,526	7	7
Boston Fire Department	3,814	3,814	28,254	6	10
Boston Police Department	0	0	13,919	0	0
Metropolitan Transit Authority	0	0	19,226	0	0
Western Union Telegraph Company	0	0	1,407	0	0
Boston Traffic Commission	2,258	2,258	0	0	0

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