

National Board of Fire Underwriters

COMMITTEE ON

FIRE PREVENTION AND ENGINEERING STANDARDS

85 John Street, New York 38, N. Y.

June 25, 1951

HOBOKEN, NEW JERSEY

Mayor.—Hon. Frederick M. De Sapio.

Population according to the U. S. 1950 census is 50,510. This represents a substantial decrease from that at the time of our last complete survey in 1932. However, the city remains as having one of the densest populations per square mile within the United States.

A request by the chief of the fire department to review a proposed consolidation of six of the existing fire stations prompted a brief survey of the fire defense facilities of the city on June 6 and 13, 1951. The following are the more important changes which have been made in the fire fighting facilities since our last complete report dated March, 1933 and our bulletin dated January 30, 1946.

WATER SUPPLY

The municipal water system remains under the general supervision of the Commissioner of Revenue and Finance who is also the water registrar. The present incumbent is Thomas A. Gallo who was elected for a 4-year term in May, 1951. There are 35 employees in the water department including 7 in the office and 28 in the field maintenance force. Thomas J. Muir, in the department since 1943, is chief clerk and in charge of administration and Lawrence Waddington, with many years service, is senior foreman in charge of maintenance and construction. All employees are under civil service regulations. The city engineer is responsible for technical supervision of extensions and improvements.

There has only been slight improvement of records that relate to the maintenance and operation of the system.

Supply continues to be furnished by Jersey City under an agreement expiring November 1, 1951 which stipulates that the supply line be capable of delivering at a rate of 20 million gallons a day, at a pressure of 45 pounds at elevation 20, Hoboken datum. Supply is delivered through a 36-inch main which extends from a 60-inch branch from the two conduits from Boonton; pressures are controlled by regulators

under jurisdiction of Jersey City water department and are located near the city line at Newark Avenue and Harrison Street, Hoboken. Up to 70 pounds may be placed on the Hoboken distribution system at the present time. In addition there is emergency supply available through a 20-inch main with normally closed valve from the Jersey City reduced high service and on which are located pressure regulating valves at Hoboken Avenue and Hill Street in Jersey City. There are also two normally closed emergency connections at Grove and Henderson Streets at the city limits with the Jersey City low service and a normally closed connection of limited value with the Hackensack Water Company located on Park Avenue at the northern city limits.

Average daily consumption for 1950 was 7,610,000 gallons, a substantial decrease from that of the last several years. The maximum daily consumption occurred on August 8, 1950 amounting to 9,300,000 gallons. A recording gage at the water office in city hall, elevation 32, shows pressures for the month of May, 1951 averaging 41 pounds during the day and 45 pounds at night. The average pressure for the principal mercantile district is 45 pounds.

As previously reported the distribution system is supplied through 3 main arteries, a 24-inch, 16-inch and a 12-inch extending from the pressure regulators to and through the principal mercantile district. Some strengthening of the system has resulted from making 16 out of the 23 cross-connections recommended in our 1933 report. In recent years a small amount of 6-, 8-, 12- and 16-inch pipe has been laid mostly as a replacement and as minor extensions to develop industrial areas. The recommended 8-inch connection on 9th Street between Grand and Clinton Streets has been installed.

As of June 1, 1951, 416 public hydrants are in service; with the exception of a few all are of Smith or Darling make and all are on 6-inch or larger gated branch. Within the last three years 15 hydrants have been totally replaced because of severe damage by heavy trucks.

There has been some improvement in the regular inspection and repair of gate valves and hydrants. However, the remainder of those recommendations contained in the 1933 report as well as those contained in the memorandum of October 1947 of the National Board of Fire Underwriters to the city officials pertaining to the distribution system should be carried out especially in those areas where previous fire flow tests have indicated that the water supply is very inadequate.

FIRE DEPARTMENT

The fire department remains on a full paid platform basis under the supervision of Director of Public Safety, Michael M. Borelli. The total membership is 153; the fire force of 148 includes 4 chief officers, 25 captains, 6 chiefs' drivers, 113 firemen. In addition there are 3 uniformed fire alarm operators, 1 clerk and 1 fire prevention inspector. Chief George F. Bonin, in the department since 1916, was appointed to his present position on September 15, 1949 after serving nearly 2 years as acting chief. Suitable height, weight and age requirements for appointments are maintained; all appointments and promotions including that of chief are under civil service. Over one-third of the present department qualified for their positions under civil service examination. Good pension benefits are provided and retirement is still compulsory at 65 years of age.

Six engine and three ladder companies are in service in seven stations as previously reported. Pumps with the exception of the engine at number 4 station are furnished with a hose wagon. All pumps are of Ahrens-Fox make and of 1,000-gallon capacity; hose wagons are also Ahrens-Fox. Ladder equipment still consists of two Severyn 85-foot hydraulically raised aerials purchased in 1943 and 1944 and an Ahrens-Fox 85-foot spring raised aerial ladder purchased in 1932. Ladder 3 now carries a complete complement of emergency and auxiliary equipment. The 75-foot spring raised aerial ladder remains in reserve.

Pumps and hose wagons carry 1,000 feet of 2½-inch hose. In addition, 3 engine companies carry 400 feet of 1½-inch hose. There is within the department a total of 17,350 feet of 2½ inch, 200 feet of 2 inch, 1,200 feet of 1½ inch and 2,200 feet of 1-inch hose. The larger hose is still tested annually at 200 pounds pressure. Hose wagons remain equipped with turret pipe, two have booster tanks and all are fairly complete with both heavy and special stream appliances and emergency equipment.

Two sedans are provided for the chief officers and both are equipped for 2-way radio communication. The department improvement program calls for equipping all apparatus with 2-way radio.

Fire station number 5 is now equipped with an overhead door bringing to four of the total number of stations so equipped. A total of 3,100 gallons of gasoline is stored in underground tanks with 1,500 gallons stored at headquarters.

The printed rules and regulations governing the department as published in 1924 remain in effect; in addition there are 12 general orders plus civil service regulations covering the administration and discipline of the department. Records as well as this survey show that discipline is still well enforced.

Captain Alphonse N. Berardi, a graduate of the New York City fire college, is in charge of all training activities. Drills and schools are conducted by the drillmaster on a company basis and men are instructed in the houses on the use of equipment. However, there is no school for training of company officers.

Response to box alarms consists of 3 pumpers, 2 ladders and three hose wagons in all districts except when Engine 4 is included when only two hose wagons respond; a second alarm calls all apparatus. Response to telephone alarms is now the same as that for box alarms.

Fireman James Halloran is fire prevention inspector and devotes his entire time to hazard inspections. Company officers still inspect buildings in their respective districts; a system of records initiated in 1949 is well maintained.

A mutual aid plan for civil defense is being developed in cooperation with Jersey City, Bayonne, Union City and Weehawken. Ten 500-gallon per minute trailer mounted QCD pumps powered with Ford V-8 engines are being reconditioned and placed in service for use in the newly organized fire department auxiliary. These trailer pumps will be provided with 400 feet of 2½-inch hose and two lengths of suction hose.

Since the last brief report of 1946 the fire force has been increased by six men and Ladder 3 has been provided with complete auxiliary and emergency equipment. It is planned in the near future to add eleven men to the department as well as to construct three modern fire stations, including one with a training building, at suitable locations to house apparatus now distributed among six obsolete stations. The department shows some improvement since the last report and could be further improved by providing a school for officers as well as a suitable training building properly equipped for training a modern fire department.

FIRE ALARM SYSTEM

The fire alarm system still remains the responsibility of Superintendent of Municipal Signalling Systems, George W. Baumann who is also charged with maintaining police signals, traffic signals and fire and police department radios; he is well qualified and is assisted by four civilian linemen. Fire Captain, Herbert

Cloud is detailed as technical supervisor for the fire alarm system. A new maintenance truck complete with servicing equipment has been recently placed in service.

Fire alarm headquarters remains on the third floor of fire headquarters building which is seriously exposed and of ordinary construction. Plans have been made and leases completed for constructing a new fireproof fire alarm building on the Stevens Institute of Technology campus. The new location has been approved by the staff of the National Board of Fire Underwriters and will be free from any exposure.

Ninety-seven boxes, all of the succession type, are in service which is a decrease of two from the previous report. All boxes are grounded and all have just been repaired.

Six all-metallic, normally closed box circuits, each usable as an alarm circuit connecting all fire stations, are in use. A total of about 20 miles of circuits, of which 32 per cent is underground, carries all boxes, alarm instruments in fire stations and, in addition, 10 gongs and a punch register at residences of fire department members, police headquarters and the water and newspaper offices.

A 10-circuit telephone switchboard, owned and maintained by the telephone company, is in the fire alarm room. Each fire station has an instrument on an individual line to this switchboard; four lines from the public exchange are provided in addition to a direct line to police headquarters. Two are reserved for fire calls.

The telephone lines leading to the telephone operator's board have been installed with an automatic thermostatic controlled alarm device which, in the event a fire call is not answered for any reason by the operator within 25 seconds, will cause phones to ring on the apparatus floor, eliminating the possibility of telephoned fire alarms not being received and fire companies not being dispatched.

Survey and report made by Engineer Willard H. Johnson, June 1951.

A fire alarm operator is on duty at all times in the fire alarm apparatus room. Two linemen respond to all multiple fire alarms. Circuits are tested twice daily for current, voltage and grounds; test taps are sent over the system daily. Circuits are inspected monthly and after severe storms. Boxes are given a silent test monthly, including the succession feature. A separate testing circuit is installed at headquarters and is utilized for testing boxes after repairs. Fairly good records are kept.

Four rounds of box alarms are automatically transmitted over the system. Telephone and ADT alarms are received at headquarters and the nearest pumper and ladder companies notified. On verbal alarms, the company notified responds after notifying headquarters. Telephone alarms are not confirmed over the fire alarm system. During 1950, 936 alarms were received of which 795 were by telephone including 26 ADT calls; 141 box alarms were received of which 25 were false.

No other improvements have been made in line with the recommendations contained in our previous report.

OTHER DEPARTMENTS

Patrick Caulfield, City Engineer, is responsible for control of building construction and enforcement of the zoning ordinance; he has three assistants including a clerk. The 1949 National Building Code was adopted on November 15, 1949. The police sometimes report unauthorized construction. Fair records are kept.

There has been no change in the fire prevention ordinance which is inadequate, or in fire prevention inspections other than stated above. However, there is close coordination between the city engineer and chief of the fire department in the matter of oil burner installation and in issuing certificates of occupancy of buildings maintaining hazardous materials and processes.