# **THE ALERTER**

OFFICIAL NEWSLETTER OF THE SEATTLE FIRE BUFF SOCIETY INC. PROUDLY SPONSORED BY THE SFD CHIEFS ASSOCIATION



VOLUME# 55 ISSUE# 3	MARCH 2019
Due to the possible exposure to the COVID- 19 virus, all meetings are canceled till further notice.	SOCIETY OFFICERS PRESIDENT BYRON HARDINGE: <u>HARDINGCO@CABLESPEED.COM</u> V.PRESIDENT JOHN ODEGARD: <u>JOC093@MSN.COM</u> SECRETARY MARC LORRAIN: <u>M_LORRAIN@YAHOO.COM</u> TREASURER STEPHEN FICKENSCHER: <u>SKfick1@AOL.COM</u> COMMUNICATIONS MIKE CLARK: mclk@centurylink.net

#### **Minutes from the February meeting**

Meeting called to order at: 1950hrs

Minutes from last month's meeting. Approved as read.

President's Report: No report.

Vice-President's Report: No report.

Secretary' Report: No report.

Treasurer's Report: Good to Go pass is not in effect for Marc's rig. All bills have been paid and the society is in good standing on our cash flow.

Buff' Report: No report.

Communications Report: No report.

New Business: Lew B has donated \$1000.00 to the society for the purchase of a new rig. Signage for vehicles that stick on the side of your vehicle has been voted on and approved.

Old Business: No Old Business.

Meeting adjourned: 2017 hrs.

#### Rehab Response Log For February

SDF RED		SHOP	RELINE BLUE N.SF	IORE GREEN	M.A. BROWN
Date	Time Out	Dept	Address	Туре	Responders
02-02-20	11:02	SFD	2862 S. OTHELLO ST.	FIB	Buff-Com,SPRT5,6,8
02-06-20	15:25	SFD	7555 24 <sup>th</sup> AVE. S.W.	FIB	Buff-Com,SPRT6,7
02-06-20	18:49	SFD	1806 19 <sup>th</sup> AVE. S.	FIB	Buff-Com,SPRT6
02-07-20	17:37	SFD	8821 39 <sup>th</sup> AVE. S.	FIB	Buff-Com,SPRT6
02-08-20	02:43	SFD	832 S. CLOVERDALE ST.	FIB	SPRT7
02-09-20	23:07	SFD	14306 MIDVALE AVE. N.	FIB	Buff-Com,SPRT4,9
02-10-20	06:02	SFD	2046 WESTLAKE AVE. N.	MARSERV	SPRT9
02-10-20	13:15	SFD	2257 14 <sup>th</sup> AVE. W.	FIB	SPRT4,9
02-11-20	12:35	N. SHORE	17007 72 <sup>nd</sup> AVE. N.E.	FIBRES	SPRT4
02-13-20	23:06	SFD	6285 AIRPORT WAY S.	FIB	Buff-Com,SPRT4,9,
02-14-20	15:04	SFD	5737 25 <sup>th</sup> AVE. N.E.	FIB	Buff-Com,SPRT4,8
02-14-20	15:44	SFD	6815 46 <sup>th</sup> AVE. S.	FIB	Buff-Com,SPRT6
02-20-20	13:18	SFD	1942 WESTLAKE AVE.	FIBHI	SPRT7
02-23-20	00:49	SFD	8625 17 <sup>th</sup> AVE.S.W.	FIB	Buff-Com,SPRT6,7
02-25-20	15:33	SFD	3551 N.E. 88 <sup>th</sup> ST.	FIB	SPRT4,8
02-26-20	12:55	SFD	6717 ROOSEVELT WAY N.E	. FIB	Buff-Com,SPRT4
02-27-20	13:27	SFD	1020 BELMONT AVE. E.	FIB	SPRT4,9
02-29-20	00:17	SFD	4711 S.W. GRAHAM ST.	FIB	Buff-Com,SPRT6,7

#### A Special Request: FDNY Tower Ladders Bob Lukas



A 1980's Mack CF Baker 75 foot Tower Ladder operating in Staten Island Photog Unk



Operating near Lincoln Center a 1990's era SG 75 foot Tower Ladder Eli Gill Photo



A 1960's era Mack C 75 foot Brooklyn Tower Ladder Photographer Unknown

<u>The Final Days</u> Storm clouds gather above Fisherman's Terminal and the former FB Alki 02-08-2020 Bob Lukas Photos





Brought to you by: 1 & Only Photography

#### NEW YORK TELEPHONE EXCHANGE BUILDING FIRE 1975

The **New York Telephone exchange fire** occurred on February 27, 1975 at the <u>New York Telephone</u> Company switching center at 204 Second Avenue and Thirteenth Street in lower Manhattan. At this time, the building contained <u>central offices</u> for connecting local customer <u>telephone lines</u>, as well as toll switching systems. The fire disrupted service for 175,000 customers, connected within the building through 105,000 service loops. It was the worst single service disaster suffered by any single Bell operating company in the 20th century. The events relating to the fire make it notable for several reasons, including the extent of the disruption, the large scale and speed of the recovery efforts, which were completed in 23 days,<sup>[11]</sup> and the succeeding influence on adoption of <u>fire safety</u> rules for installation of low-voltage wiring inside buildings, especially in areas that can spread fire or toxic fumes. Decades later the <u>polyvinyl chloride</u> (PVC) combustion products produced by the fire were identified as a reason for elevated rates of cancer in the firefighters at the scene.<sup>[2][3]</sup>

# 975 New York Telephone exchange fire

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New York Telephone (now Verizon) 204 Second Avenue building in January 2008.

The 204 Second Avenue building was erected in two stages: The first three floors were completed in 1923 and an additional eight stories were added in 1929-1930.<sup>[4]</sup> At that time telephone companies were using electromechanical <u>panel switches</u> and later <u>crossbar switches</u>. As demand for telephone service increased the older equipment remained in service and worked alongside any new equipment installed for expanded service.<sup>[5]</sup> The building housed the <u>main distribution frame</u> and contained twelve exchanges and five <u>toll switching machines</u>. All of this equipment took up enormous space and by the time of the 1975 fire it was interconnected with tons of PVC sheathed cable. The burning cables emitted hydrochloric acid, benzene, and vinyl chloride. During the blaze accumulated gases caused an explosion powerful enough to knock down firefighters outside the building.<sup>[2]</sup>

By the mid-1970s, the <u>Bell System</u> was converting to newer electronic technology that required only a fraction of the former space and had a greater capacity than the electromechanical switches. Newer exchanges usually were equipped with the latest technology.<sup>[5]</sup> In replacing the destroyed equipment at Second Avenue, AT&T was able to divert equipment and supplies intended for other locations to the rebuilding of the Second Avenue central offices.

## Fire progression[

Just after midnight on February 27, 1975 a short circuit in the basement cable vault started a fire. Fifteen employees were working in the building at the time. An internal alarm was sounded at 12:15 am when smoke was discovered in the third

floor subscriber distribution frame. All

employees safely evacuated the building but one reported that smoke was already filling the stairways. The maintenance man on duty was alerted to the fire and attempted to call the fire department, but the internal telephone lines were already disrupted. He had to use a street call box to alert the fire department, where the first alarm was sounded at 12:25 am.<sup>[6]</sup> Upon arrival, firefighters found that the entire building was filled with smoke with the heaviest on the lower floors. It was difficult to pinpoint the source of the fire due to the smoke and difficulty in getting into the cable vault.<sup>[7]</sup> Windows were constructed with <u>wire mesh glass</u> and further shielded with plastic or metal screens to protect switching equipment. Dust shields of steel and wired glass presented obstacles.<sup>[6]</sup> The fire had spread to the first floor through a narrow slot that passed cable up to the distribution frame. The fire then progressed vertically through cable chases. Firefighters attempted to spray foam into the cable vault only to have the foam drain down into a sub-basement.<sup>[7]</sup> The incident escalated to five alarms.<sup>[6]</sup>

Fumes from the burning cables awakened and sickened residents on East 13th street. Some dressed hastily and left their apartments to get further away from the fire. The nearby <u>New York Eye and Ear Infirmary</u> sent patients home or transferred them to other hospitals. Smoke poured from a fissure in the building and an adjacent structure was evacuated in fear that the telephone building might collapse. The fire was at first declared under control at 3:40 pm, but shortly after that flared up again. It was officially declared under control at 4:46 pm.<sup>[8]</sup> The fire burned for over 19 hours before being completely extinguished.

### Disruption and restoration of telephone service

The fire had destroyed 488 vault cables<sup>[6]</sup> and all equipment on the first and second floors. Smoke and corrosion damaged switching equipment all the way up to the top floor.<sup>[7]</sup> The fire cut off telephone service to a 300 block area of Manhattan that included three hospitals, three police stations, two universities and the main headquarters of <u>ConEdison</u>.<sup>[9]</sup>

The response to the emergency was quick with New York Telephone, parent company <u>AT&T</u>, research division <u>Bell Laboratories</u> and the equipment manufacturing arm <u>Western Electric</u> coordinating the restoration effort. Radio telephones and coin telephone trailers were brought in from three states and positioned throughout the affected area. A recently retired panel switch at the West 18th Street exchange was reactivated. A main distribution frame normally took six

months to manufacture and install but one ready for shipment to another office was located at Western Electric and diverted to New York.<sup>[1]</sup> Remarkably, it only took them four days to install. Damaged switching equipment contacts were manually cleaned and millions of individual wires hand spliced.<sup>[10]</sup> Five thousand employees collaborated to restore service. Twenty three days later service was restored entirely.<sup>[11]</sup> AT&T commissioned a documentary film maker to record the recovery work which was released under the title *Miracle on Second Avenue*.<sup>[1]</sup>

## Health risks

No firefighters were killed at the telephone building site during the fire, but many later developed cancer attributed to the chemical toxins that were released during the fire.<sup>[12]</sup> The burning toxins from the PVC insulated wiring that burned has shown heightened risks of cancer

years after exposure. Approximately forty cases of <u>cancer</u> can be linked back to the fire. Dr. Steven Lin, a doctor at the <u>Mt. Sinai School of Medicine</u>, investigated the relationship between the toxins and the cancers developed by firefighters. He concluded that <u>polyvinyl chloride</u>, a chemical present during the fire, leads to various types of cancer. However, these cancers are developed twenty years after exposure.

During the fire, the Fire Department of New York did not document the medical records of the firefighters, making it nearly impossible to track their health progress. Instead, they put a red stamp on the firefighters' documents that said "Telephone Exchange Fire" to simply show they were there. In 1997, The Fire Department interviewed two hundred and thirty nine fire fighters involved in the fire and found eighteen had died. Seven of these eighteen deaths were from cancer and six of those deaths were from first responders. The average age of those deaths was fifty. By the 1990s the City of New York considered cancer in firefighters to be job-related and compensated by paying then a 75% pension rather than the standard 50% pension. However, if the cancer was diagnosed after retirement, there was no additional compensation.<sup>[2]</sup>

## Impact on fire safety and building code regulations

The fire originated from sparks in equipment in the basement cable vault igniting the plastic insulation of nearby cables that ran to all of the floors above. The combination of the flammable insulation and the method of penetrating each floor allowed the fire to spread rapidly, and emit toxic fumes that are alleged to have caused later deaths of over a dozen fire fighters. Chief of Department James Leonard, whose father worked as a switch operator, said "I've never seen smoke like that, conditions were brutal. It tested the skills, training and ability of all members responding that day.

A special thanks to our own Bob Lukas, a New York native, who was living in New York at the time of the fire and working for the Telephone Company. After the fire he was called in to work at the burned out site to help clean switching posts. He later worked in the field to help restore the downed telephone service for the city.

### Photos by John Odegard 5737 25th Ave. N.E.



5737 25th Ave. N.E.





#### 2505 Aurora Ave. N.





