

NIST NCSTAR 1-4A

**Federal Building and Fire Safety Investigation of the
World Trade Center Disaster**

Post-Construction Fires Prior to September 11, 2001

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U.S. Department of Commerce
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Technology Administration
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In addition, a substantial portion of the evidence collected by NIST in the course of the Investigation has been provided to NIST under nondisclosure agreements.

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ABSTRACT

Fires occurred in World Trade Center (WTC) 1, 2, and 7 prior to September 11, 2001. This report documents the facts of significant fires in the buildings after first occupancy as they relate to the performance of the automatic sprinkler, manual suppression, fire detection, and smoke purge systems. The ultimate goal of this review was to identify from New York City Fire Department (FDNY) records significant but not well-known fires for further study.

From the information contained in FDNY fire reports and fire investigation records provided to the National Institute of Standards and Technology (NIST), 47 fires occurred in WTC 1, 2, and 7 that were of sufficient size and duration to activate multiple sprinklers or were estimated by NIST to be capable of doing so, over the time period the buildings were occupied. This total does not include the major 1975 office fire in WTC 1 or the 1993 bombing.

The records indicate that in areas protected by automatic sprinklers, no fire activated more than three sprinklers. Three sprinklers would provide coverage for a floor area of approximately 675 ft² (63 m²). This area is much smaller than the 9,000 ft² (800 m²) damaged by the 1975 fire in an office space unprotected with automatic sprinklers.

Many of the fires that occurred were recorded as suspicious or unknown in cause, occurred during off peak work hours, and involved materials such as trash or paper-based supplies. In cases where sprinklers were activated, the FDNY records indicated that the sprinklers either extinguished the fire completely or aided in controlling the spread.

Keywords: Fire, fire detection, manual fire suppression, smoke purge systems, sprinklers, World Trade Center.

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronyms

DTAP	dissemination and technical assistance program
FDNY	New York City Fire Department
FEMA	Federal Emergency Management Agency
HVAC	heating, ventilating, and air conditioning
NIST	National Institute of Standards and Technology
PANYNJ	Port Authority of New York and New Jersey
R&D	research and development
WTC	World Trade Center
WTC 1	World Trade Center 1 (North Tower)
WTC 2	World Trade Center 2 (South Tower)
WTC 7	World Trade Center 7

Abbreviations

ft ²	square foot
m ²	square meter

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PREFACE

Genesis of This Investigation

Immediately following the terrorist attack on the World Trade Center (WTC) on September 11, 2001, the Federal Emergency Management Agency (FEMA) and the American Society of Civil Engineers began planning a building performance study of the disaster. The week of October 7, as soon as the rescue and search efforts ceased, the Building Performance Study Team went to the site and began its assessment. This was to be a brief effort, as the study team consisted of experts who largely volunteered their time away from their other professional commitments. The Building Performance Study Team issued its report in May 2002, fulfilling its goal “to determine probable failure mechanisms and to identify areas of future investigation that could lead to practical measures for improving the damage resistance of buildings against such unforeseen events.”

On August 21, 2002, with funding from the U.S. Congress through FEMA, the National Institute of Standards and Technology (NIST) announced its building and fire safety investigation of the WTC disaster. On October 1, 2002, the National Construction Safety Team Act (Public Law 107-231), was signed into law. The NIST WTC Investigation was conducted under the authority of the National Construction Safety Team Act.

The goals of the investigation of the WTC disaster were:

- To investigate the building construction, the materials used, and the technical conditions that contributed to the outcome of the WTC disaster.
- To serve as the basis for:
 - Improvements in the way buildings are designed, constructed, maintained, and used;
 - Improved tools and guidance for industry and safety officials;
 - Recommended revisions to current codes, standards, and practices; and
 - Improved public safety.

The specific objectives were:

1. Determine why and how WTC 1 and WTC 2 collapsed following the initial impacts of the aircraft and why and how WTC 7 collapsed;
2. Determine why the injuries and fatalities were so high or low depending on location, including all technical aspects of fire protection, occupant behavior, evacuation, and emergency response;
3. Determine what procedures and practices were used in the design, construction, operation, and maintenance of WTC 1, 2, and 7; and
4. Identify, as specifically as possible, areas in current building and fire codes, standards, and practices that warrant revision.

NIST is a nonregulatory agency of the U.S. Department of Commerce’s Technology Administration. The purpose of NIST investigations is to improve the safety and structural integrity of buildings in the United States, and the focus is on fact finding. NIST investigative teams are authorized to assess building performance and emergency response and evacuation procedures in the wake of any building failure that has resulted in substantial loss of life or that posed significant potential of substantial loss of life. NIST does not have the statutory authority to make findings of fault nor negligence by individuals or organizations. Further, no part of any report resulting from a NIST investigation into a building failure or from an investigation under the National Construction Safety Team Act may be used in any suit or action for damages arising out of any matter mentioned in such report (15 USC 281a, as amended by Public Law 107-231).

Organization of the Investigation

The National Construction Safety Team for this Investigation, appointed by the then NIST Director, Dr. Arden L. Bement, Jr., was led by Dr. S. Shyam Sunder. Dr. William L. Grosshandler served as Associate Lead Investigator, Mr. Stephen A. Cauffman served as Program Manager for Administration, and Mr. Harold E. Nelson served on the team as a private sector expert. The Investigation included eight interdependent projects whose leaders comprised the remainder of the team. A detailed description of each of these eight projects is available at <http://wtc.nist.gov>. The purpose of each project is summarized in Table P–1, and the key interdependencies among the projects are illustrated in Fig. P–1.

Table P–1. Federal building and fire safety investigation of the WTC disaster.

Technical Area and Project Leader	Project Purpose
Analysis of Building and Fire Codes and Practices; Project Leaders: Dr. H. S. Lew and Mr. Richard W. Bukowski	Document and analyze the code provisions, procedures, and practices used in the design, construction, operation, and maintenance of the structural, passive fire protection, and emergency access and evacuation systems of WTC 1, 2, and 7.
Baseline Structural Performance and Aircraft Impact Damage Analysis; Project Leader: Dr. Fahim H. Sadek	Analyze the baseline performance of WTC 1 and WTC 2 under design, service, and abnormal loads, and aircraft impact damage on the structural, fire protection, and egress systems.
Mechanical and Metallurgical Analysis of Structural Steel; Project Leader: Dr. Frank W. Gayle	Determine and analyze the mechanical and metallurgical properties and quality of steel, weldments, and connections from steel recovered from WTC 1, 2, and 7.
Investigation of Active Fire Protection Systems; Project Leader: Dr. David D. Evans; Dr. William Grosshandler	Investigate the performance of the active fire protection systems in WTC 1, 2, and 7 and their role in fire control, emergency response, and fate of occupants and responders.
Reconstruction of Thermal and Tenability Environment; Project Leader: Dr. Richard G. Gann	Reconstruct the time-evolving temperature, thermal environment, and smoke movement in WTC 1, 2, and 7 for use in evaluating the structural performance of the buildings and behavior and fate of occupants and responders.
Structural Fire Response and Collapse Analysis; Project Leaders: Dr. John L. Gross and Dr. Therese P. McAllister	Analyze the response of the WTC towers to fires with and without aircraft damage, the response of WTC 7 in fires, the performance of composite steel-trussed floor systems, and determine the most probable structural collapse sequence for WTC 1, 2, and 7.
Occupant Behavior, Egress, and Emergency Communications; Project Leader: Mr. Jason D. Averill	Analyze the behavior and fate of occupants and responders, both those who survived and those who did not, and the performance of the evacuation system.
Emergency Response Technologies and Guidelines; Project Leader: Mr. J. Randall Lawson	Document the activities of the emergency responders from the time of the terrorist attacks on WTC 1 and WTC 2 until the collapse of WTC 7, including practices followed and technologies used.

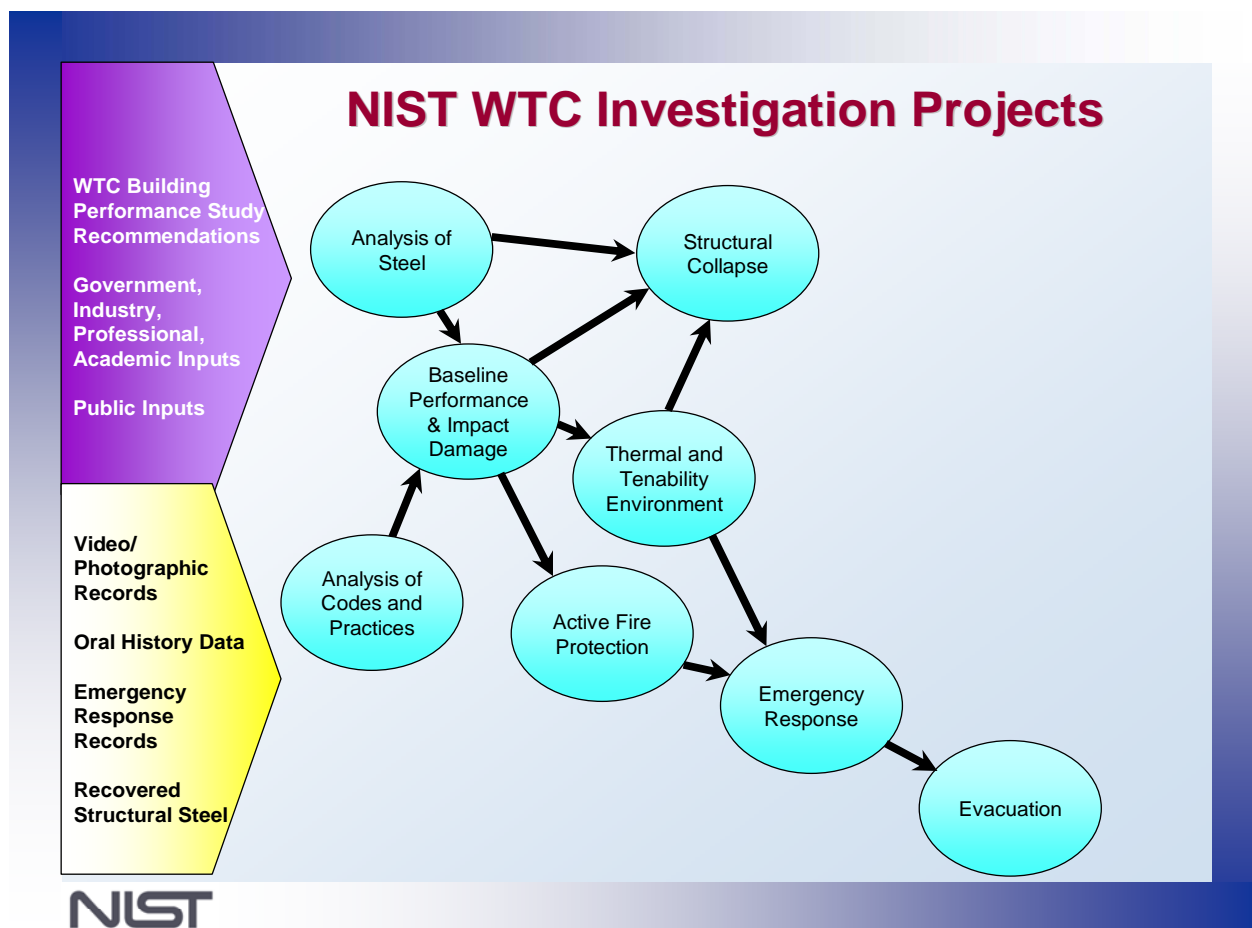


Figure P-1. The eight projects in the federal building and fire safety investigation of the WTC disaster.

National Construction Safety Team Advisory Committee

The NIST Director also established an advisory committee as mandated under the National Construction Safety Team Act. The initial members of the committee were appointed following a public solicitation. These were:

- Paul Fitzgerald, Executive Vice President (retired) FM Global, National Construction Safety Team Advisory Committee Chair
- John Barsom, President, Barsom Consulting, Ltd.
- John Bryan, Professor Emeritus, University of Maryland
- David Collins, President, The Preview Group, Inc.
- Glenn Corbett, Professor, John Jay College of Criminal Justice
- Philip DiNunno, President, Hughes Associates, Inc.

- Robert Hanson, Professor Emeritus, University of Michigan
- Charles Thornton, Co-Chairman and Managing Principal, The Thornton-Tomasetti Group, Inc.
- Kathleen Tierney, Director, Natural Hazards Research and Applications Information Center, University of Colorado at Boulder
- Forman Williams, Director, Center for Energy Research, University of California at San Diego

This National Construction Safety Team Advisory Committee provided technical advice during the Investigation and commentary on drafts of the Investigation reports prior to their public release. NIST has benefited from the work of many people in the preparation of these reports, including the National Construction Safety Team Advisory Committee. The content of the reports and recommendations, however, are solely the responsibility of NIST.

Public Outreach

During the course of this Investigation, NIST held public briefings and meetings (listed in Table P-2) to solicit input from the public, present preliminary findings, and obtain comments on the direction and progress of the Investigation from the public and the Advisory Committee.

NIST maintained a publicly accessible Web site during this Investigation at <http://wtc.nist.gov>. The site contained extensive information on the background and progress of the Investigation.

NIST's WTC Public-Private Response Plan

The collapse of the WTC buildings has led to broad reexamination of how tall buildings are designed, constructed, maintained, and used, especially with regard to major events such as fires, natural disasters, and terrorist attacks. Reflecting the enhanced interest in effecting necessary change, NIST, with support from Congress and the Administration, has put in place a program, the goal of which is to develop and implement the standards, technology, and practices needed for cost-effective improvements to the safety and security of buildings and building occupants, including evacuation, emergency response procedures, and threat mitigation.

The strategy to meet this goal is a three-part NIST-led public-private response program that includes:

- A federal building and fire safety investigation to study the most probable factors that contributed to post-aircraft impact collapse of the WTC towers and the 47-story WTC 7 building, and the associated evacuation and emergency response experience.
- A research and development (R&D) program to (a) facilitate the implementation of recommendations resulting from the WTC Investigation, and (b) provide the technical basis for cost-effective improvements to national building and fire codes, standards, and practices that enhance the safety of buildings, their occupants, and emergency responders.

Table P–2. Public meetings and briefings of the WTC Investigation.

Date	Location	Principal Agenda
June 24, 2002	New York City, NY	Public meeting: Public comments on the <i>Draft Plan</i> for the pending WTC Investigation.
August 21, 2002	Gaithersburg, MD	Media briefing announcing the formal start of the Investigation.
December 9, 2002	Washington, DC	Media briefing on release of the <i>Public Update</i> and NIST request for photographs and videos.
April 8, 2003	New York City, NY	Joint public forum with Columbia University on first-person interviews.
April 29–30, 2003	Gaithersburg, MD	NCST Advisory Committee meeting on plan for and progress on WTC Investigation with a public comment session.
May 7, 2003	New York City, NY	Media briefing on release of <i>May 2003 Progress Report</i> .
August 26–27, 2003	Gaithersburg, MD	NCST Advisory Committee meeting on status of the WTC investigation with a public comment session.
September 17, 2003	New York City, NY	Media and public briefing on initiation of first-person data collection projects.
December 2–3, 2003	Gaithersburg, MD	NCST Advisory Committee meeting on status and initial results and release of the <i>Public Update</i> with a public comment session.
February 12, 2004	New York City, NY	Public meeting on progress and preliminary findings with public comments on issues to be considered in formulating final recommendations.
June 18, 2004	New York City, NY	Media/public briefing on release of <i>June 2004 Progress Report</i> .
June 22–23, 2004	Gaithersburg, MD	NCST Advisory Committee meeting on the status of and preliminary findings from the WTC Investigation with a public comment session.
August 24, 2004	Northbrook, IL	Public viewing of standard fire resistance test of WTC floor system at Underwriters Laboratories, Inc.
October 19–20, 2004	Gaithersburg, MD	NCST Advisory Committee meeting on status and near complete set of preliminary findings with a public comment session.
November 22, 2004	Gaithersburg, MD	NCST Advisory Committee discussion on draft annual report to Congress, a public comment session, and a closed session to discuss pre-draft recommendations for WTC Investigation.
April 5, 2005	New York City, NY	Media and public briefing on release of the probable collapse sequence for the WTC towers and draft reports for the projects on codes and practices, evacuation, and emergency response.
June 23, 2005	New York City, NY	Media and public briefing on release of all draft reports for the WTC towers and draft recommendations for public comment.
September 12–13, 2005	Gaithersburg, MD	NCST Advisory Committee meeting on disposition of public comments and update to draft reports for the WTC towers.
September 13–15, 2005	Gaithersburg, MD	WTC Technical Conference for stakeholders and technical community for dissemination of findings and recommendations and opportunity for public to make technical comments.

- A dissemination and technical assistance program (DTAP) to (a) engage leaders of the construction and building community in ensuring timely adoption and widespread use of proposed changes to practices, standards, and codes resulting from the WTC Investigation and the R&D program, and (b) provide practical guidance and tools to better prepare facility owners, contractors, architects, engineers, emergency responders, and regulatory authorities to respond to future disasters.

The desired outcomes are to make buildings, occupants, and first responders safer in future disaster events.

National Construction Safety Team Reports on the WTC Investigation

A final report on the collapse of the WTC towers is being issued as NIST NCSTAR 1. A companion report on the collapse of WTC 7 is being issued as NIST NCSTAR 1A. The present report is one of a set that provides more detailed documentation of the Investigation findings and the means by which these technical results were achieved. As such, it is part of the archival record of this Investigation. The titles of the full set of Investigation publications are:

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Chapter 1

NEW YORK CITY FIRE DEPARTMENT RECORDS

Fires occurred in World Trade Center (WTC) 1, 2, and 7 prior to September 11, 2001. This report documents the facts of significant fires in the buildings after first occupancy as they relate to the performance of the automatic sprinkler, manual suppression, fire detection, and smoke purge systems. The ultimate goal of this review was to identify from New York City Fire Department (FDNY) records significant but not well known fires for further study.

1.1 BACKGROUND

The fire protection engineering department of the Port Authority of New York and New Jersey (PANYNJ) maintained records of all significant fire events in the WTC buildings. These records were lost in the collapse of the towers.

Two significant fire events involving WTC 1 are well known. On February 14, 1975, a fire started on floor 11 of WTC 1. Workers reported the fire to WTC police headquarters. When police reached the fire floor, they reported a serious fire and ordered the heating, ventilating, and air conditioning (HVAC) system be placed into the smoke purge mode. Fire spread through unprotected floor openings in utility closets. Fire damage occurred on floor 10 through floor 19. Approximately 9,000 ft² (800 m²) of the floor 11 contents were destroyed or damaged. At that time, sprinklers had not been installed in the office spaces. However, fire barriers divided the floor into quadrants. The fire on floor 11 was confined to the southeast quadrant. Fire damage on other floors was confined to the utility closets. The fire was extinguished by the FDNY. More details about this fire incident can be found in Powers (1975) and Lathrop (1975).

At 12:18 p.m. on February 26, 1993, a bomb exploded in an underground parking garage of the WTC complex. The explosion occurred on the B2 level in the area of the garage under WTC 3 and adjacent to WTC 1. The explosion resulted in a loss of normal electric power in WTC 1 and WTC 2. HVAC systems shut down. Smoke spread throughout WTC 1 and to a lesser extent in WTC 2. More details about this fire can be found in Isner and Klein (1993a, 1993b). The only historic record of smaller fire incidents in WTC 1, 2, and 7 known to this investigation are the fire reports and fire investigation reports prepared by the FDNY. These reports were provided to NIST by the FDNY for use in this Investigation.

1.2 FDNY FIRE REPORTS AND FIRE INVESTIGATION REPORTS

The FDNY released 397 Bureau of Operations Fire Reports and 112 Bureau of Fire Investigation Records (Fire Marshals' Reports), which served as the basis for a summary of the fire history in WTC 1, 2, and 7. The National Institute of Standards and Technology (NIST) obtained reports of fires for the period of 1970–2001 and fire investigation records between 1977 and 2001 for WTC 1, 2, and 7, which in total, consisted of over 500 documents on which to report. These records included all responses to fires in WTC 1, 2, and 7 by the FDNY. All of these records consist of standardized forms that may be

supplemented with other materials. Many were for minor fire events, such as fires that were extinguished by occupants before FDNY arrival. These were not of interest for this investigation. The records of significant fires were identified.

Significant fire incidents were those that exercised the fire suppression systems, specifically multiple sprinklers or multiple standpipes (with or without the activation of at least one sprinkler). These fires will be discussed individually, organized by the building in which they occurred. In addition to these fires, generalized facts relating to those fires involving the use of one standpipe line and one sprinkler and the use of one standpipe line will be provided throughout this report. Appendixes A through H of this report are explanation of numeric codes and reproductions of relevant fire reports. As an aside, the majority of fire records for significant fires documented the performance of the detectors and sprinkler systems, but almost all reports lacked information about the performance of the smoke purge system.

1.2.1 Fire Record Forms

Depending upon the type and date of the incident, a specific fire report form was used by the FDNY to document the incident. For each type of emergency responded to by the FDNY, responders either completed a form that would describe a structural fire (BF-24) or a form that would describe any other type of emergency (BF-25), such as a nonstructural fire, transportation fire, and/or any other nonfire emergency. For this historical summary, only those events logged and organized under the structural fire form, 345 documents total, were of interest and used. A structural fire form is a one-page document (unless additional information is recorded on separate sheets) that gives valuable information about the fire event on various subjects, including:

- Alarm—the date and time of the received alarm
- Injuries and casualties—the numbers of each for the incident
- Extinguishment—details of the sprinkler and standpipe performance
- Ignition—information on the equipment involved in ignition, the form of the ignition source, the material type and form that was ignited, and the ignition factor (cause)
- Structure—information on the class of construction, the use of the building, and its status (vacant, occupied, under construction, etc.)
- Fire origin—the fire location and classification
- Fire extension—the means of fire extension and number of buildings/vehicles involved
- Damage—information on the damage done by flame, smoke, and water
- Detectors—the type, power source, and performance of the detectors in the fire area

Each subject of the incident is given a set of codes or numbers that correspond to any incident, and in order to read the fire records successfully, an understanding of the codes is necessary (see Appendixes A,

B, and C). For the nonstructural B-25 record forms, the only fire-related subjects included are the injury and casualty numbers, ignition, and structure information.

Depending upon the date of the fire incident, certain information is lacking from the structural fire form. Before 1980, a different record form for structural fire incidents was used that left out the following subjects: fire extension, damage, detectors, and portions of the ignition data. Because of this, detection data are not available for the majority of the fires occurring before 1980.

1.2.2 Overview of Fire Incidents 1970–2001 from FDNY Records

Table 1–1 contains the categorization of all structural fire incidents contained in the FDNY records for WTC 1, 2, and 7 available to this investigation. The table contains information on the category of fire incident (whether or not the detection and/or sprinkler systems activated), the time period over which the fires occurred, the numbers of records in that category, and a descriptive statement about the category.

Table 1–1. Categorization of WTC 1, 2, and 7 fires from FDNY records.

Category	Dates	Number	Generalization of Incidents
WTC 1			
No detection, no sprinkler	1980–2001	66	Unattended food/appliances, overheated elevator equipment, discarded material, welding operations, electrical failure and suspicious fires
No detection information and no sprinklers	1970–1979	79	Trash can fires, discarded material, food on stove, electrical failure, overheated equipment
Detection, no sprinklers	1980–2000	57	Unattended food/appliances, overheated elevator equipment, discarded material, welding operations, electrical failure
Detection and sprinklers	1977–1999	18	Suspicious, electrical failure, discarded material
WTC 2			
No detection, no sprinkler	1980–1999	37	Discarded material, welding too close, overheated equipment, suspicious, elevator motor
No detection information and no sprinklers	1975–1979	40	Discarded material, fire in office furniture, trash can fires
Detection, no sprinklers	1981–1999	40	Food on stove, small elevator fire, electrical failure, suspicious, overheated equipment
Detection and sprinklers	1977–2000	5	Mechanical failure, suspicious
WTC 7			
No detection, no sprinkler	2000	1	Trash can fire/discarded material
Detection, no sprinklers	1990	1	Electrical switch on floor — explosion
Detection and sprinklers	1988	1	Suspicious

All FDNY records provided to NIST, unless the records were not readable, contained relevant information about the type and performance of the suppression system. Because of this, reports of incidents in which the sprinkler system activated can range from 1970 to 2001. When the table lists “[detection]” in brackets, this is meant to symbolize that either detection was present or no information on detector performance was included on the form (as is the case with the older records). An attempt was made to compare all investigation records with the fire reports, especially those which activated the suppression system. Looking at the records in Table 1–1, it is clear that only 24 fires activated the sprinkler system from 1970–2001 from all three buildings. Many of the other structural fires without sprinkler activation were labeled as suspicious, trash can fires, electrical failures, unattended food/appliances, or overheated equipment.

In order to report on significant structural fires occurring in WTC 1, 2, and 7, the FDNY records had to be reviewed for those incidents that activated sprinklers, detectors, or were extinguished by hose line and those smaller fires that self-extinguished or could be extinguished using a fire extinguisher. The structural fire incidents without detection information (before 1980), had to be reviewed to locate any fires that activated the sprinkler system.

The retrofit installation of sprinklers into WTC buildings 1 and 2 was accomplished in two phases. During the first phase in 1976, sprinkler risers/mains were installed throughout WTC 1 and WTC 2. Sprinklers were installed to protect corridors, storage rooms, lobbies, and certain tenant/PANYNJ spaces. In the second phase of the retrofit from 1983 to 2001, sprinklers were installed in all remaining places in the complex (PACO 2002; shown in Appendix I). Prior to the retrofit, only the sub-grade areas and selected hazard areas were protected by automatic sprinklers. This retrofit, proceeded throughout the buildings as much as practical when other renovations of the office spaces were under way, such as when change of tenants occurred.

After the installation of the sprinkler risers in 1976, tenants had the option of providing sprinklers or compartmentation for fire protection in compliance with Local Law 5. It was therefore possible that during the period of time when retrofit installation of sprinklers was under way, a fire that occurred may or may not have been in an area protected by automatic sprinklers.

The forms used by the FDNY after 1987 give a detailed description of the event and whether or not a system was present at the time of the fire; however, a fire recorded before 1987 will give data only on the number of sprinklers opened. Because of this, an effort was made to look through all reports, especially those that mentioned detection performance, in order to identify fires involving the use of standpipe lines by the FDNY as an alternate indication of a significant fire.

The next section of the report will highlight significant fires occurring in WTC 1, 2, and 7. The significant fires will be described individually by WTC building, and organized by the date on which they occurred in the building. In addition to these significant fires, (1) the fires that activated one sprinkler head and involved the use of one standpipe and (2) the fires that involved the use of only one standpipe, due to the number of incidents, will be generalized as to the nature of the incidents and the procedures followed by the FDNY.

1.3 REFERENCES

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Chapter 2

SIGNIFICANT FIRES IN WTC 1, 2, AND 7

2.1 FIRE INCIDENTS OCCURRING IN WTC 1

After reviewing all the New York City Fire Department (FDNY) records of fire incidents in World Trade Center 1 (WTC 1) since 1970, the significant fires were selected. There were 12 significant fires found for WTC 1, and the fire reports are included in Appendix D. Table 2–1 provides a summary of the fire incident information from the FDNY records, which is followed by individual paragraphs about each incident.

Table 2–1. Significant fires in WTC 1 extinguished by sprinklers and/or multiple standpipe lines.

Significant Fire	Incident Date	Fire Location	No. of Sprinklers Activated	No. of Standpipes Used	Cause of Fire	Material Ignited
1	9/9/77	B-6 level storage room	2	0	None listed	Not listed
2	9/23/77	Dumpster on B-4 level	2	0	Not classified	Trash/waste
3	10/16/81	Floor 19 office area	–	2	Discarded material	Furniture
4	12/23/83	2 dumpsters on B-4 level	2	1	Suspicious	Trash/waste
5	1/27/85	Office space on mezzanine level (floor 2)	2	1	Incendiary	Trash/waste
6	9/10/85	Garbage dumpster in service elevator lobby on floor 43	2	1	Suspicious	Trash/waste
7	11/1/85	Storage closet on B-4 level	3	1	Suspicious	Supplies/stock
8	6/7/86	Dumpster fire on floor 106, compactor room on floor 107	2	1	None listed	Trash/waste
9	9/30/91	Office on B-4 level	≥1	2	Discarded material	Trash/waste
10	11/19/91	Electrical closet on floor 93	0	2	Short circuit	Electrical wire or cable insulation
11	7/23/92	Level B-5 at the power distribution panel	0	2	Electrical failure	Electrical wire or cable insulation
12	11/10/99	Computer room on floor 104	3	≥1	None listed	Plastics, electronic equip

Key: ≥ symbol denotes that at least one of the units of the suppression system was used (and not specifically identified by the fire report); – indicates that the report acknowledges 0 sprinklers open; however, due to the date of the fire, the space may not have had a sprinkler system installed.

Significant Fire #1

On September 9, 1977, at 11:04 p.m., the FDNY received an alarm for a fire in the B-6 level storage room at the address of WTC 1. The fire activated two sprinklers, and was noted to be extinguished before the FDNY's arrival.

Significant Fire #2

Another fire occurred on September 23, 1977, at 11:48 p.m., in a dumpster on the B-4 level of WTC 1. This fire also activated two sprinklers, and the FDNY noted that the fire had been extinguished prior to their arrival.

In both cases, no injuries or casualties resulted from these fires, and the damage was confined to the area of origin.

Significant Fire #3

Six years later, on October 16, 1981, at 7:12 p.m., a fire occurred on floor 19 of WTC 1. The FDNY noted that they used two standpipe lines to extinguish the fire and that one person was evacuated from the scene. Again, the fire report notes that no sprinklers opened, but does not note whether or not sprinklers were present at the time of the fire. Given the date of the incident, sprinklers are not expected to be located on floor 19. The fire was caused by discarded material and involved furniture in an office area of the floor.

Significant Fire #4

Six years later on December 23, 1983, at 2:50 a.m., the FDNY responded to an alarm of fire and heavy smoke conditions on the B-4 level of WTC 1. The FDNY found two dumpsters fully involved in separate locations on the same floor and noted that the two activated sprinklers extinguished a major portion of the fire. The FDNY extinguished the rest of the flames by stretching hose from the standpipe system. Again, no injuries or casualties resulted from this fire. The cause noted on the report was suspicious and the damage was confined to the origin of the fire.

Significant Fire #5

On January 27, 1985, at 8:53 p.m., the FDNY was called for a fire located in an unoccupied office on the mezzanine level of WTC 1. Two sprinklers contained the incendiary (involving arson) fire consuming trash paper/waste. When the FDNY arrived, they extinguished the remaining fire with one standpipe line. Building and content damage was confined to less than 15 percent of the space. Also, no injuries or casualties were reported.

Significant Fire #6

Eight months later on September 10, 1985, at 4:05 p.m., the Port Authority Police informed the FDNY on arrival of a sprinkler flow and smoke condition on floor 43. A medium smoke condition was report by the FDNY on floor 43, where a fire was extinguished by two sprinklers. The fire report notes the use of one standpipe line; however, this was used during the overhaul process. This fire originated suspiciously in a garbage dumpster in a service elevator lobby. There was no building or content damage as well as no injuries or casualties reported.

Significant Fire #7

On November 1, 1985, at 4:05 a.m., the FDNY was called for another suspicious fire producing heavy smoke on the B-4 level under WTC 1 and WTC 2. This fire occurred in a storage closet of the men's bathroom, and the FDNY noted that three sprinklers activated to keep the fire under control until their arrival. Upon arrival, the FDNY extinguished the remaining fire in the closet area with one standpipe line. Again, the damage was noted to be confined to the area of origin.

Significant Fire #8

Less than a year later, on June 7, 1986, at 9:49 a.m., the FDNY received an alarm for a heavy smoke condition on floor 110. For this call, fires were burning in two separate places: a garbage dumpster on floor 106 and the compactor room on floor 107. Sprinklers were noted in operation in both locations and seemed to control the fires, until the FDNY could complete extinguishment with one standpipe line on floor 106. There was no report of injuries or casualties for the previous two fires.

Significant Fire #9

An additional fire occurred in WTC 1 where multiple standpipe lines were used along with the activation of the sprinkler system. This fire occurred on September 30, 1991, at 6:32 p.m., in an office on the B-4 level. The fire report noted that the sprinkler system operated; however, there is no mention of how many sprinklers or even their activation in the Operations/Comments section of the report. Two 1 3/4 in. or larger hose lines were used by the FDNY to extinguish this fire. The cause of the fire was abandoned material (cigarette) igniting boxes/carton material in an office. The fire damage was confined to the area of origin and smoke damage was confined to the floor. There was one uniformed officer injured and no civilian injuries or casualties.

Significant Fire #10

A fire occurred on November 19, 1991, at 6:27 p.m., and two 2 1/2 in. standpipe hose lines were used by the FDNY. The FDNY responded to WTC 1 for this fire due to a report of fire and smoke condition in electrical closets on possibly four floors (floors 93–96) and an alarm transmitted from floors 93 through 98. According to the fire report, the sprinklers were in service, but did not operate for this fire. The noted cause of this fire was a short circuit and the material that was ignited was electrical wire or cable insulation. The fire and smoke damage was confined to its area of origin (electrical closet). Two occupants were removed from stalled elevators during this incident, and occupants were evacuated from the scene, although an exact number is not given. Also, two occupants were injured and required first aid.

Significant Fire #11

The FDNY responded to WTC 1 on July 23, 1992, at 10:02 p.m., due to a transformer fire on the 5th subbasement level. Firefighters found a fire situation in a large power distribution panel, where a firefighter was knocked unconscious by a shock blast from the panel. Similar to the fire in November 1991, two 2 1/2 in. standpipe hose lines were used by the FDNY on this fire. The cause of the fire was an electrical failure and the material ignited was electrical wire or cable insulation. No appreciable damage is noted. As mentioned earlier, one firefighter was injured as well as three civilians.

Significant Fire #12

The final fire associated with WTC 1 was one that occurred on November 10, 1999, at 11:01 p.m., in a computer room on floor 104. The FDNY noted that the fire was “knocked down” by three sprinklers

when they arrived and they completed extinguishment with a line extended from the standpipe. The flame damage was confined to the area of origin and computer equipment was involved in fueling the fire. There was one injury and no casualties reported in the FDNY record for this fire.

Table 2–1 presents the 12 significant fires in WTC 1. Five of the 12 fires occurred on the basement levels and two occurred on the upper levels (above floor 100). The causes of these significant fires include suspicious, discarded materials, and electrical failures.

2.2 FIRE INCIDENTS OCCURRING IN WTC 2

Table 2–2 presents the significant fire occurring in WTC 2. There were three significant fires found for WTC 2, and the fire reports are included in Appendix E. Table 2–2 provides a summary of the fire incident information from FDNY records, which is followed by individual paragraphs about each incident.

Table 2–2. Significant fires in WTC 2 extinguished by sprinklers and/or multiple standpipe lines.

Significant Fire	Incident Date	Fire Location	Number of Sprinklers Activated	Number of Standpipes Used	Cause of Fire	Material Ignited
1	5/19/75	Floor 32	–	3	Incendiary	Trash/waste
2	4/12/77	Ductwork over grill in restaurant on floor 107	2	0	None listed	Ductwork
3	3/22/93	Fan motor room on floor 108	2	0	Mechanical failure	Not classified

Key: – Indicates that the report acknowledges 0 sprinklers open; however, due the date of the fire, the space may not have had a sprinkler system installed.

Significant Fire #1

A fire occurred on May 19, 1975, at 9:38 p.m., on floor 32 of WTC 2. The FDNY noted that they used three standpipe lines to extinguish the fire and that the Port Authority reported occupants trapped on floors 31 and 32. The fire report notes that no sprinklers opened, but does not note whether or not sprinklers were present at the time of the fire. Given the date of the incident, sprinklers are not expected to be located on floors 31 and 32. The fire was labeled as incendiary and involved trash/waste. The FDNY stated that the fire involved the core area of the floor and was confined to that area. More than 20 people (civilians and uniformed personnel) were injured by this incident.

Significant Fire #2

On April 4, 1977, at 1:15 p.m., the FDNY was called to WTC 2 for a fire in the ductwork over the grills in a restaurant on floor 107. The FDNY record on this fire noted that the fire was extinguished prior to its arrival. The damage was confined to the area of origin, and the fire caused no injuries or casualties.

Significant Fire #3

The second fire occurred on March 22, 1993, at 8:39 a.m., and caused a smoke condition on floor 108. The fire activated two sprinklers due to an overheated bearing in a fan motor room on floor 108. The

damage to the area did not exceed 15 percent of the space, and there were no injuries or casualties reported.

Table 2–2 presents the three significant fires in WTC 2. No fires were discovered in WTC 2 where multiple sprinklers or standpipes were used with another suppression system. Two of the three fires occurred on the upper levels (above floor 100) and the other occurred on floor 32. The causes of these significant fires included incendiary and mechanical failures.

2.3 ADDITIONAL FIRES INVOLVING DEPLOYMENT OF STANDPIPE LINES IN WTC 1 AND WTC 2

The fires described in this section (31 in total) involve the use of one standpipe, with and without the activation of one sprinkler for WTC 1 and WTC 2. Four of the 31 reports describe fires that were extinguished with one sprinkler and one standpipe line (see Appendix F). Three of these fires were located in WTC 1 between the years of 1986–1991 and the other in WTC 2 in 1981. Two of these fires occurred in basement levels, one occurred on floor 106 of WTC 1, and the last on floor 5 in WTC 1. In some of the fire reports, the FDNY noted that the sprinkler controlled the fire, and the standpipe was used to actually extinguish the remaining fire. Half of the fires were labeled as incendiary/suspicious, one was an electrical failure, and the last was unknown.

In addition, 27 of the 31 fire reports describe fires that were extinguished using one standpipe line (see Appendix G). Twenty of these fires occurred in WTC 1 and the other seven occurred in WTC 2. A majority of these fires (19) are labeled as incendiary/suspicious or unknown, while the other causes of the fires are attributed to short circuits, abandoned material/cigarette, welding close to combustibles, and a mechanical failure. The dates of occurrence for these fires range from 1973–1999, with a majority (23) occurring between the years of 1973–1985. These fire incidents did not result in any casualties, but five civilians and one uniformed officer were injured.

Two of the 27 fires involved a 300-person (April 19, 1980) and a 1,500-person (April 17, 1981) evacuation. These will be described in further detail. On April 19, 1980, at 2:06 p.m., the FDNY received reports of an activated smoke detector in the return air duct on floor 106 of WTC 1. The FDNY also received reports of heavy smoke on floor 106, light smoke on floor 109, and heavy odor of smoke in stairways A and B. The report notes that while only one standpipe was used, approximately 300 people were evacuated from the Windows on the World restaurant on floor 107 via stairway C (which was clear of smoke). The fire cause was labeled as abandoned or discarded material and involved plastic material. This fire did not cause any injuries or casualties.

On April 17, 1981, at 9:18 a.m., the FDNY was informed of a fire on floor 7 and a smoke condition on floors 7 through 11 of WTC 1. The FDNY hooked up one standpipe and extinguished the fire located in an air conditioning unit in the “MER” room on floor 7. The cause of this fire was labeled as a mechanical failure. The fire report notes that the Port Authority personnel reported an evacuation of approximately 1,500 people from floors 9 through 23. However, no injuries or casualties were reported from this fire.

2.4 FIRE INCIDENTS OCCURRING IN WTC 7

Table 2–3 presents the significant fire occurring in WTC 7. There was one significant fire found for WTC 7, and the fire report is included in Appendix H. Table 2–3 provides a summary of the fire incident information from FDNY records, which is followed by an individual paragraph on the incident.

Table 2–3. Significant fires in WTC 7 extinguished by sprinklers and/or multiple standpipe lines.

Significant Fire	Incident Date	Fire Location	Number of Sprinklers Activated	Number of Standpipes Used	Cause of Fire	Material Ignited
1	5/20/88	Construction shanties on floor 3	Multiple, number not listed	1	Suspicious	Shanties

Significant Fire #1

In WTC 7, a fire occurred on May 20, 1988, at 12:38 a.m., in the construction shanties on floor 3. Although the fire report does not specifically note the number of sprinklers that activated, the operations notes state that Ladder Truck 10 found the sprinklers (noting more than one) in operation and shut them down. The FDNY had to complete the extinguishment by stretching a line from the standpipe to the fire source. This fire is noted by the report as being suspicious in nature and the flame damage was confined to the area of origin.

It is possible that the fire incidents that were not specifically highlighted, especially those in the areas without sprinklers, involved other methods of extinguishment before FDNY arrival, such as a WTC houseline (pre-connected standpipe hose), hand extinguisher, or bucket of water, as noted on some of the FDNY reports. All other fires, the majority, included in other categories were either self-extinguished, extinguished prior to FDNY arrival (by staff, etc.), or a hand extinguisher was used by the FDNY.

2.5 SUMMARY

In summary, 16 significant fires occurred in WTC 1, 2, and 7, with 12 occurring in WTC 1, three in WTC 2, and one in WTC 7. In addition to these, 31 fires occurred in WTC 1 and WTC 2, which involved the use of one standpipe (with or without the activation of one sprinkler). Of these additional 31 fires, 23 occurred in WTC 1 and eight occurred in WTC 2. The following paragraphs will summarize findings from the 16 significant fires that occurred in all three buildings.

After reviewing the 16 significant fires, trends developed relating to the time of day that the fires occurred. Overall, 12 of the 16 fires occurred between the hours of 6 p.m. and 4 a.m. The fires that occurred during office hours (between 7 a.m. and 6 p.m.) included a dumpster fire in the floor 43 elevator lobby (WTC 1), a dumpster fire on floor 106 (WTC 1), a kitchen fire on floor 107 (WTC 2), and a bearing overheating in the fan motor room on floor 108 (WTC 2). Almost all of the incendiary (arson) and suspicious fires (5 out of 6 fires) and unclassified or unlisted fires (4 out of 5 fires) occurred after business hours (before 7 a.m. and after 6 p.m.).

In addition to the time of day of the fire, trends in the cause of the fire and the materials involved in the fire can be highlighted. Of the 16 fires and their causes, five were labeled as unlisted or unclassified, six as suspicious or incendiary, two as discarded material, and three as an electrical failure or mechanical failure. For the material involved in the fire, eight reports noted trash, waste, and supplies; two reported not listed or not classified; one reported furniture; three reported electrical equipment; one reported duct work; and one reported shanties were the material involved in the fire.

Lastly, the location of the fires throughout the buildings was of interest. Of the 16 fires, 4 fires were concentrated above floor 100 and 6 fires were located in the basement. The others (six fires) were spread throughout the rest of the building.

2.6 ATTACHMENTS TO THIS FIRE HISTORY

Appendixes A through H are included as supplements to this report. The first three sections, Appendixes A through C, are explanations of the numeric codes used in the fire reports by the FDNY. Appendix A is included to explain the codes for the fire reports produced prior to and including 1980, Appendix B is included to explain the fire reports produced from 1981 to May 31, 1987, and Appendix C is included to explain the fire reports produced from June 1, 1987, to the present. The report code explanations are divided into the same sections as the fire report and give short descriptions for the numbers used in the fire report under each section. For example, if the ignition factor for a fire occurring in 1990 was given a number code of 54, the reader can find that the cause of the fire was a “short circuit, ground fault.”

Appendixes D through H are reproductions of the actual fire reports produced by the FDNY on the significant fires highlighted in the sections above. The reader can use Appendixes A through C (depending upon the date of the fire) to read the fire reports in more detail than what is provided in this fire history report.

2.7 CONCLUSIONS

From the information contained in FDNY fire reports and fire investigation records provided to NIST, 47 fires occurred in WTC 1, 2, and 7 that were of sufficient size and duration to activate multiple sprinklers or were estimated by NIST to be capable of doing so, over the time period the buildings were occupied. This total does not include the major 1975 office fire in WTC 1 or the 1993 bombing.

The records indicate that in areas protected by automatic sprinklers, no fire activated more than three sprinklers. Three sprinklers would provide coverage for a floor area of approximately 675 ft² (63 m²). This area is much smaller than the 9,000 ft² (800 m²) damaged by the 1975 fire in an office space unprotected with automatic sprinklers.

Many of the fires that occurred were recorded as suspicious or unknown in cause, occurred during off-peak work hours, and involved materials such as trash or paper-based supplies. In cases where sprinklers were activated, the FDNY records indicated that the sprinklers either extinguished the fire completely or aided in controlling the spread.

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Appendix A
EXPLANATION OF NUMERIC CODES PRIOR TO 1980

Explanation of Numeric Codes Used on Fire and Emergency Reports -

Prior to 1980

CLASSIFICATION OF BUILDING BY USE

COMMERCIAL

- 01 Bank
- 02 Brewery
- 03 Coal Pocket
- 04 Department Store
- 05 Electric Power Plant
- 06 Factory: Multi occupancy
- 07 Factory: Single Occupancy
- 08 Foundry
- 09 Freight Depot
- 10 Garage: Non-Storage
- 11 " Storage
- 12 Gas Works
- 13 Lumber Yard
- 14 Motor Vehicle Repair Shop
- 15 Office Building
- 16 Oil Selling Station
- 17 Oil Storage Plant
- 18 Pier, Wharve, Dock, Bulkhead Building
- 19 Restaurant, Diner
- 20 Shed, Newsstand, Shanty
- 21 Shipyard, Drydock
- 22 Stable
- 23 Steam Generating plant
- 24 Store Building, Taxpayer
- 25 Warehouse, Storehouse
- 26 Store Building & Private Dwelling
- 39 Other Commercial

PUBLIC

- 40 Airport Building
- 41 Azyium
- 42 Bridge
- 43 Bus Terminal
- 44 Church, Synagogue
- 45 Dance Hall, Banquet Hall
- 46 Dispensary, Clinic
- 47 Ferry Terminal
- Government Building (Not otherwise classified);
- 48 City
- 49 Intersate
- 50 Federal
- 51 Foreign
- 52 State
- 53 Hospital, Infirmary
- 54 Nursing Home
- 55 Railroad Station
- 56 School; College, University
 - " Private High
 - " Public High
 - " Public Junior High
 - " Private Elementary
- 61 School: Public Elementary
 - " Children's
 - " Nursery
 - " Other
- 64 Television Studio
- 65 Theatre, Legitimate
- 66 Theatre, Motion Picture
- 67 Transit System - Station Structure
- 68 Tunnel
- 69 Other Public

RESIDENTIAL

- 80 Apartment Hotel "A"
- 81 Apartment House "A"
- 82 Boarding House, Rooming House "B"
- 83 Convent, Rectory, Monastery, etc.
- 84 Dormitory-School Club, Lodge
- 85 Hotel "B"
- 86 Lodging House "B"
- 87 Motel
- 88 Pvt. Dwelling: 1 Family
- 89 " Two Family
- 90 Tenement: New Law "A"
- 91 " Old Law "A"
- 92 Converted Dwelling "A"
- 99- Other Residential

BUILDING STATUS

- 1 Occupied
- 2 Partly Occupied, Good Condition
- 3 Partly Occupied, Deteriorating
- 4 Vacant
- 5 Under Demolition
- 6 Under Construction

DAMAGE (to Building or Contents)

- 0 None-No Appreciable
- 1 Light 0-15%
- 2 Medium 16%-49%
- 3 Heavy 50% & Greater

AREA FIRE ORIGIN -FLOOR

- 00 Outside Building
- 01 1st Floor
- to
- 94 94th and Higher
- 95 Attic
- 96 Roof
- 97 Basement
- 98 Cellar
- 99 Sub-cellar

AREA FIRE ORIGIN-ROOM OR AREA

- 10 Area Not in Building
- 11 Attic
- 12 Awning
- 13 Balcony
- 14 Basement
- 15 Bathroom Toilet
- 16 Bedroom, Sleeping Area
- 17 Ceiling
- 18 Cellar
- 19 Chimney
- 20 Classroom Lecture Area
- 21 Closet
- 22 Cockloft
- 23 Court-Exterior
- 24 Court-Interior
- 25 Dining Room, Dining Area
- 26 Duct-Air Conditioning
- 27 Duct-Exhaust
- 28 Flooring
- 29 Furnace Room
- 30 Hallway-Private
- 31 Hallway-Public
- 32 Incinerator Cl set or, Room
- 33 Kitchen, Cooking Area

- 34 Living Room
- 35 Lobby
- 36 Machinery Room
- 37 Office Area
- 38 Operating Laboratory Area
- 39 Partition
- 40 Porch
- 41 Projection Booth
- 42 Recreation Area
- 43 Roof
- 44 Sales Showroom Display Area
- 45 Shaft-Duct, Pipe
- 46 Shaft-Dumbwaiter
- 47 Shaft-Elevator
- 48 Shaft-Exterior Light
- 49 Shaft-Interior Light
- 50 Shaft-Vent
- 51 Shipping Receiving Loading Area
- 52 Stage
- 53 Stairway
- 54 Storage Room Area
- 55 Vacant-Room, Apartment or area
- 56 Work Area Workroom
- 57 Other Areas, Not Classified (State area)

AREA FIRE ORIGIN-OCCUPANCY CLASSIFICATION

COMMERCIAL

- 00 Factory: Chemicals
- 01 Clothing: Dresses
- 02 Undergarment
- 03 Other (State Type)
- 04 Dry Cleaning Laundry
- 05 Electrical Products
- 06 Food & Drink Products
- 07 Furniture
- 08 Furs, Fur Goods
- Hats:
- 09 Men's
- 10 Women's
- 11 Leather, Leather Products
- 12 Machine Shop Metal works
- 13 Paints
- 14 Paper Products
- 15 Petroleum Products
- 16 Plastics, Rubber
- 17 Printing & Allied Industries
- 18 Shoes
- 19 Textiles
- 20 Toy or Doll
- 21 Woodworking
- 22 Other Factories not classified (state type)
- Store:
- 23 Auto Accessories
- 24 Bakery
- 25 Butcher
- 26 Candy, Cigar, Stationery
- 27 Clothing
- 28 Department, large
- 29 Department, small (5x10)
- 30 Dry Cleaner & Tailor
- 31 Drug
- 32 Electrical Appliances
- 33 Fruit & Vegetables
- 34 Furniture
- 35 Grocery, Dairy, Delicatessen
- 36 Haberdashery
- 37 Ladies Accessories
- 38 Laundry
- 39 Paint Hardware

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Appendix B
EXPLANATION OF NUMERIC CODES FROM 1981 TO 1987

Explanation of Numeric Codes Used on Fire and Emergency Reports -

From 1981 to May 31, 1987

Type of Report

- 1 Structural.
- 2 Transportation Fire.
- 3 Non-Structural Fire.
- 4 Emergency Response.
- 5 False Alarm.
- 6 Additional data (for BF 2.4A).

How Reported

- 1 Street Box Manual.
- 2 Telephone.
- 3 Verbal.
- 4 Class 3—Manual, PFA.
- 5 Class 3—Value, PFA.
- 6 Class 3—Other Automatic, PFA.
- 7 Class 3—ERS.
- 8 Street Box—ERS.
- 9 Class 3—Manual, FONY.
- 10 Pre-recorded Alarm.

Initial Alarm

- 0 Special Call Other Than Engine Only—No Chief.
- 1 Box (Street or Class 3).
- 5 Special Call Engine Only—No Chief.
- 8 Special Call (Chief Operated).
- 9 Still.

Highest Alarm

- 0 Initial Alarm.
- 1 More than the Initial Alarm & less than 3 Engine & 2 Ladder Co. at work.
- 2 2nd Alarm.
- 3 3rd Alarm.
- 4 4th Alarm.
- 5 5th Alarm.
- 6 Simultaneous.
- 7 Signal 7-5.

How Extinguished

- 0 Before Arrival.
- 1 Hand Extinguishers.
- 2 Sprinkler Heads (State Number).
- 3 Booster Stream.
- 4 Low Pressure Hydrant Stream.
- 5 One-1½" or larger hoseline from a pumping unit or a standpipe outlet, regardless of line termination (Controlling Nozzle, Decking, Stang Multi Versal, Ladder Pipe, T/L, Foam Nozzle, etc.).
- 6 Two-1½" or larger hoselines as above.
- 7 Three-1½" or larger hoselines as above.
- 8 Four or more 1½" or larger hoselines as above.
- 9 Other (State How).

Ignition Stage—Termination Stage

- 2 Smolder Stage, before any flame.
- 3 Flame Stage.
- 0 Undetermined or not reported.

EQUIPMENT INVOLVED IN IGNITION**Heating Systems**

- 11 Central heating unit.
- 12 Water heater.
- 13 Fixed, stationary local heating unit.
- 14 Indoor fireplace.
- 15 Portable local heating unit.
- 16 Chimney, gas vent flue.
- 17 Chimney connector, vent connector.
- 18 Heat transfer system.
- 19 Heating systems not classified above.
- 20 Heating system, undetermined.

Cooking Equipment

- 21 Fixed, stationary surface unit.
- 22 Fixed, stationary oven.
- 23 Fixed, stationary food warming appliance.
- 24 Deep fat fryer.
- 25 Portable cooking, warming unit.
- 26 Open fire grill.
- 27 Grease hood, duct.
- 28 Cooking equipment not classified above.
- 29 Cooking equipment, undetermined.

Air Conditioning, Refrigeration Equipment

- 31 Central air conditioning, refrigeration equipment.
- 32 Water cooling device, tower.
- 33 Fixed, stationary local air conditioning unit.
- 34 Fixed, stationary local air conditioning unit.
- 35 Portable air conditioning, refrigeration unit.
- 39 Air conditioning, refrigeration equipment not classified above.
- 30 Air conditioning, refrigeration equipment, undetermined.

Electrical Distribution Equipment

- 41 Fixed wiring.
- 42 Transformer, associated overcurrent or disconnect equipment.
- 43 Meter, meter box.
- 44 Power switch gear, overcurrent protection devices.
- 45 Switch, receptacle, outlet.
- 46 Lighting fixture, lampholder, ballast, sign.
- 47 Cord, plug.
- 48 Lamp, light bulb.
- 49 Electrical distribution equipment, not classified above.
- 40 Electrical distribution equipment, undetermined.

Appliances, Equipment

- 51 Television, radio, phonograph.
- 52 Dryer.
- 53 Washing machine.
- 54 Floor care equipment.
- 55 Separate motor, generator.
- 56 Hand tools.
- 57 Portable appliance designed to produce controlled heat.
- 58 Portable appliance designed not to produce heat.
- 59 Appliances, equipment not classified in 51 through 58.
- 50 Appliances, equipment, undetermined.

Special Equipment

- 61 Electronic equipment.
- 62 Vending machine, drinking fountain.
- 63 Office machine.
- 64 Biomedical equipment device.
- 65 Separate pump, compressor.
- 66 Combustion engine.
- 67 Conveyor.
- 68 Printing press.
- 69 Special equipment, not classified above.
- 60 Special equipment, undetermined.

Processing equipment

- 71 Furnace, oven, kiln.
- 72 Casting, molding, forging equipment.
- 73 Heat treating equipment.
- 74 Working, shaping machine.
- 75 Coating machine.
- 76 Painting equipment.
- 77 Chemical process equipment.
- 78 Waste recovery equipment.
- 79 Processing equipment, not classified above.
- 70 Processing equipment, undetermined.

Service, Maintenance Equipment

- 81 Incinerator.
- 82 Boring, brake.
- 83 Rectifier, charger.
- 84 Tarpot, tar kettle.
- 85 Arc, oil lamp.
- 86 Elevator.
- 87 Torches.
- 89 Service, maintenance equipment, not classified above.
- 80 Service, maintenance equipment, undetermined.

Other Object, Exposure Fire

- 91 Separate, removed exposure.
- 92 Separate, detached exposure.
- 93 Separate, adjoining exposure.
- 94 Attached, protected exposure.

95 Attached, unprotected exposure.

- 96 Vehicle.
- 98 No equipment involved—
- 99 Other object, exposure fire not classified above.
- 90 Other object, exposure fire.
- 00 Equipment involved in ignition undetermined or not reported.

FORM OF HEAT OF IGNITION**Heat from Fuel-Fired, Fuel-Powered Object**

- 11 Spark, ember, flame escaping from gas fueled equipment.
- 12 Heat from gas fueled equipment.
- 13 Spark, ember, flame escaping from liquid fueled equipment.
- 14 Heat from liquid fueled equipment.
- 15 Spark, ember, flame escaping from solid fueled equipment.
- 16 Heat from solid fueled equipment.
- 17 Spark, ember, flame escaping from equipment: fuel not known.
- 18 Heat from equipment; fuel not known.
- 19 Heat from fuel-fired, fuel-powered object, not classified above.
- 10 Heat from fuel-fired, fuel-powered object, undetermined.

Heat from Electrical Equipment Arcing, Overloaded

- 21 Water caused short circuit arc.
- 22 Short circuit arc from mechanical damage.
- 23 Short circuit arc from defective, worn insulation.
- 24 Unspecified short circuit arc.
- 25 Arc from faulty contact, loose connection, broken conductor.
- 26 Arc, spark from operating equipment or switch.
- 27 Heat from overloaded equipment.
- 28 Fluorescent light ballast.
- 29 Heat from electrical equipment arcing overloaded, not classified above.
- 20 Heat from electrical equipment arcing, overloaded undetermined.

Heat from Smoking Material

- 31 Cigarette.
- 32 Cigar.
- 33 Pipe.
- 39 Heat from smoking material, not classified above.
- 30 Heat from smoking material, undetermined.

Heat from Open Flame, Spark

- 41 Cutting torch operation.
- 42 Welding torch operation.
- 43 Torch operation, other than cutting and welding.
- 44 Candle, taper.
- 45 Match.
- 46 Lighter.
- 47 Open fire.
- 48 Backfire from internal combustion engine.
- 49 Heat from open flame, spark, not classified above.
- 40 Heat from open flame, spark, undetermined.

Heat from Hot Object

- 51 Heat, spark from friction.
- 52 Molten, hot material.
- 53 Hot ember, ash.
- 54 Electric lamp.
- 55 Rekindle, reignition.
- 56 Heat from properly operating electrical equipment.
- 57 Heat from improperly operating electrical equipment.
- 59 Heat from hot object, not classified above.
- 50 Heat from hot object, undetermined.

Heat from Explosive, Fireworks

- 61 Explosive.
- 62 Blasting agent.
- 63 Fireworks.
- 64 Paper cap, party popper.
- 65 Model rocket, not amateur rocketry.
- 66 Incendiary device.
- 69 Heat from explosive, fireworks, not classified above.
- 60 Heat from explosive, fireworks, undetermined.

Heat from Natural Source

- 71 Sun's heat.
- 72 Spontaneous ignition chemical reaction.
- 73 Lightning discharge.
- 74 Static discharge.
- 79 Heat from natural source, not classified above.
- 70 Heat from natural source, undetermined.

Heat Spreading from Another Hostile Fire (Exposure)

- 81 Heat from direct flame, convection currents.
- 82 Radiated heat.
- 83 Heat from flying brand, ember, spark.
- 84 Conducted heat.
- 89 Heat spreading from another hostile fire, not classified above.
- 80 Heat spreading from another hostile fire, undetermined.

Other Form of Heat of Ignition

- 87 Multiple forms of heat of ignition.
- 88 Other form of heat of ignition.
- 00 Form of heat of ignition undetermined.

TYPE OF MATERIAL IGNITED

Gas

- 11 Natural gas.
- 12 LP city gas (LP and air mix).
- 13 Manufactured gas.
- 14 LP gas.
- 15 Anesthetic gas.
- 16 Acetylene.
- 17 Specialty gas other than anesthetic.
- 18 Gas not classified above.
- 10 Gas.

Flammable, Combustible Liquid

- 21 Class IA flammable liquid.
- 22 Class IB flammable liquid.
- 23 Gasoline.
- 24 Class IC flammable liquid.
- 25 Class II combustible liquid.
- 26 Class IIIA combustible liquid.
- 27 Class IIIB combustible liquid.
- 28 Flammable, combustible liquid, not classified above.
- 20 Flammable, combustible liquid, undetermined.

Volatile Solid, Chemical

- 31 Fat, grease (food).
- 32 Grease (nonfood).
- 33 Polish.
- 34 Adhesive, resin, tar.
- 35 Applied paint, varnish.
- 36 Combustible metal.
- 37 Solid chemical (specify type).
- 38 Radioactive material.
- 39 Volatile solid, chemical, not classified above.
- 30 Volatile solid, chemical, undetermined.

Plastic

- 41 Polyurethane.
- 42 Polystyrene.
- 43 Polyvinyl.
- 44 Polyacrylic.
- 45 Polyester.
- 46 Polyolefin.
- 49 Plastic, not classified above.
- 40 Plastic, undetermined.

Natural Product

- 51 Rubber.
- 52 Cork.
- 53 Leather.
- 54 Grass, leaves, hay, straw.
- 55 Graft, natural fiber.
- 56 Coal coke briquettes, PR41.
- 57 Food starch.
- 58 Tobacco.
- 59 Natural product, not classified above.
- 30 Natural product, undetermined.

Wood, Paper

- 61 Growing wood.
- 62 Felled but uncut wood.
- 63 Sawn wood.
- 64 Wood shavings.
- 65 Hardboard, plywood.
- 66 Fiberboard (low density material), wood pulp.
- 67 Paper, untreated, uncoated.
- 68 Cardboard.
- 69 Wood, paper, not classified above.
- 60 Wood, paper, undetermined.

Fabric, Textile, Fur

- 71 Man-made fabric, fiber, finished goods.
- 72 Cotton, rayon, cotton fabric, finished goods.
- 73 Wool, wool mixture fabric, finished goods.
- 74 Fur, silk, other fabric, finished goods.
- 75 Wig.
- 76 Human hair.
- 79 Fabric, textile, fur, not classified above.
- 70 Fabric, textile, fur, undetermined.

Material Compounded with Oil

- 81 Linoleum.
- 82 Oil cloth.
- 83 Treated and/or coated paper.
- 84 Waterproof canvas.
- 85 Dry rags.
- 86 Asphalt treated material.
- 89 Material compounded with oil, not classified above.
- 80 Material compounded with oil, undetermined.

Other Type of Material Ignited

- 97 Multiple types of material first ignited.
- 98 Type of material not applicable.
- 99 Type of material not classified above.
- 00 Type of material undetermined or not reported.

FORM OF MATERIAL IGNITED

Structural Component, Finish

- 11 Exterior roof covering, surface, finish.
- 12 Exterior sidewall covering, surface, finish.
- 13 Exterior trim, appurtenances.
- 14 Floor covering, surface.
- 15 Interior wall covering, surface items permanently affixed to wall and door surface.
- 16 Ceiling covering, surface.
- 17 Structural member, framing.
- 18 Thermal, acoustical insulation within wall, partition, or floor/ceiling space.
- 19 Structural component, finish, not classified above.
- 10 Structural component, finish, undetermined.

Furniture

- 21 Upholstered sofa, chair, vehicle seats.
- 22 Nonupholstered chair, bench.
- 23 Cabinetry.
- 24 Ironing board.
- 25 Appliance housing or casing.
- 29 Furniture not classified above.
- 20 Furniture, undetermined.

Soft Goods, Wearing Apparel

- 31 Mattress, pillow.
- 32 Bedding, blanket, sheet, comforter.
- 33 Linen, other than bedding.
- 34 Wearing apparel not on a person.
- 35 Wearing apparel on a person.
- 36 Curtain, blind, drapery, tapestry.
- 37 Goods not made up.
- 38 Luggage.
- 39 Soft goods, wearing apparel, not classified above.
- 30 Soft goods, wearing apparel, undetermined.

Adornment, Recreational Material

- 41 Christmas tree.
- 42 Decoration for special event.
- 43 Book.
- 44 Magazine, newspaper, writing paper.

- 45 Toy, game.
- 46 Awning, canopy.
- 47 Tarpaulin, tent.
- 49 Adornment, recreational material, not classified above.
- 40 Adornment, recreational material, undetermined.

Suppliers, Stock

- 51 Box, carton, bag.
- 52 Basket, barrel.
- 53 Pallet, skid (not in use).
- 54 Rope, cord, twine, yarn.
- 55 Packing, wrapping material.
- 56 Bale storage.
- 57 Bulk storage.
- 58 Cleaning supplies.
- 59 Supplies, stock not classified above.
- 50 Supplies, stock, undetermined.

Power Transfer Equipment, Fuel

- 61 Electrical wire, cable insulation.
- 62 Transformer.
- 63 Conveyor belt, drive belt, V belt.
- 64 Tire.
- 65 Fuel.
- 69 Power transfer equipment, fuel, not classified above.
- 60 Power transfer equipment, fuel, undetermined.

General Form

- 71 Agricultural product.
- 72 Fence, pole.
- 73 Fertilizer.
- 74 Growing, living form.
- 75 Rubbish, trash, waste.
- 76 Cooking materials.
- 77 Sign.

Special Form

- 81 Dust, fiber, lint.
- 82 Pyrotechnics, explosives.
- 83 Atomized, vaporized liquid.
- 84 Glass.
- 85 Palletized material, material stored on pallets.
- 86 Gas or liquid in or from pipe or container.
- 87 Rolled material.
- 88 Adhesive.

Other Form of Material

- 97 Multiple form of material ignited.
- 98 Form of material not applicable.
- 99 Form of material not classified above.
- 00 Form of material undetermined or not reported.

IGNITION FACTOR

Incendiary

- 11 Incendiary, not during civil disturbance.
- 12 Incendiary, during civil disturbance.

Suspicious

- 21 Suspicious, not during civil disturbance.
- 22 Suspicious, during civil disturbance.

Misuse of Heat of Ignition

- 31 Abandoned, discarded material.
- 32 Thawing.
- 33 Falling asleep.
- 34 Inadequate control of open fire.
- 35 Cutting, welding too close to.
- 36 Children with, child playing.
- 37 Unconscious, mental, physical impairment.
- 39 Misuse of heat of ignition not classified above.
- 30 Misuse of heat of ignition, undetermined.

Misuse of Material Ignited

- 41 Fuel spilled, released accidentally.
- 42 Improper fusing techniques.
- 43 Flammable liquid used to kindle fire.
- 44 Washing part, cleaning, refinishing, painting.
- 45 Improper container.
- 46 Combustible too close to heat.
- 47 Improper storage.
- 48 Children with, child playing.
- 49 Misuse of material ignited not classified above.
- 40 Misuse of material ignited, undetermined.

Mechanical Failure, Malfunction

- 51 Part failure, leak, break.
- 52 Automatic control failure.
- 53 Manual control failure.
- 54 Short circuit, ground fault.
- 55 Other electrical failure.
- 56 Lack of maintenance, worn out.
- 57 Backfire.
- 58 Mechanical failure, malfunction not classified above.
- 59 Mechanical failure, malfunction, undetermined.

Design, Construction, Installation Deficiency

- 61 Design deficiency.
- 62 Construction deficiency.
- 63 Installed too close to combustibles.
- 64 Other installation deficiency.
- 65 Property too close to.
- 66 Design, construction, installation deficiency not classified above.
- 67 Design, construction, installation deficiency, undetermined.

Operational Deficiency

- 71 Collision, overturn, knockdown.
- 72 Accidentally turned on, not turned off.
- 73 Unattended.
- 74 Overloaded.
- 75 Spontaneous heating.
- 76 Improper startup, shutdown procedures.
- 79 Operational deficiency not classified above.
- 70 Operational deficiency, undetermined.

Natural Condition

- 81 High wind.
- 82 Earthquake.
- 83 High water, including floods.
- 84 Lightning.
- 89 Natural condition not classified above.
- 80 Natural condition, undetermined.

Other Ignition Factor

- 91 Animal.
- 92 Rekindled from a previous fire.
- 99 Other ignition factor not classified above.
- 00 Ignition factor undetermined or not reported.

Construction Class

- 0 No Building Involved.
- 1 Fireproof Structure.
- 2 Fire Protected Structure.
- 3 Non-fireproof Structure.
- 4 Wood Frame Structure.
- 5 Metal Structure.
- 6 Heavy Timber Structure.

Classification of Building By Use—Commercial

- 01 Bank.
- 02 Brewery.
- 03 Coal Pocket.
- 04 Department Store.
- 05 Electrical Power Plant.
- 06 Factory: Multi Occupancy.
- 07 Factory: Single Occupancy.
- 08 Foundry.
- 09 Freight Depot.
- 10 Garage: Non-Storage.
- 11 Garage: Storage.
- 12 Gas Works.
- 13 Lumber Yard.
- 14 Motor Vehicle Repair Shop.
- 15 Office Building.
- 16 Oil Selling Station.
- 17 Oil Storage Plant.
- 18 Pier, Wharve, Dock, Bulkhead Building.
- 19 Restaurant, diner.
- 20 Shed, Newsstand, Shanty.
- 21 Shipyard, Drydock.
- 22 Stable.
- 23 Steam Generating Plant.
- 24 Store Building, Taxpayer.
- 25 Warehouse, Storehouse.
- 26 Store Building & Private Dwelling.
- 39 Other Commercial.

Classification of Building By Use—Public

- 40 Airport Building.
- 41 Asylum.
- 42 Bridge.
- 43 Bus Terminal.
- 44 Church, Synagogue.
- 45 Dance Hall, Banquet Hall.
- 46 Dispensary, Clinic.
- 47 Ferry Terminal.
- Government Buildings—(Not otherwise classified):
- 48 City.
- 49 Interstate.
- 50 Federal.
- 51 Foreign.
- 52 State.
- 53 Hospital, Infirmary.
- 54 Nursing Home.
- 55 Railroad Station.
- 56 School: College, University.
- 57 School: Private High.
- 58 School: Public High.
- 59 School: Public Jr. High.
- 60 School: Private Elementary.
- 61 School: Public Elementary.
- 62 School: Children's Nursery.
- 63 School: Other.
- 64 Television Studio.
- 65 Theatre, Legitimate.
- 66 Theatre, Motion Picture.
- 67 Transit System—Station Structure.
- 68 Tunnel.
- 69 Other Public.

Residential

- 80 Apartment Hotel "A."
- 81 Apartment House "A."
- 82 Boarding House, Rooming House "B."
- 83 Convent, Rectory, Monastery, etc.
- 84 Dormitory—School, Club, Lodge.
- 85 Hotel "B."
- 86 Lodging House "B."
- 87 Motel.
- 88 Private Dwelling: One Family.
- 89 Private Dwelling: Two Family.
- 90 Tenement: New Law "A."
- 91 Tenement: Old Law "A."
- 92 Converted Dwelling "A."
- 99 Other Residential.

Building Status

- 1 Occupied.
- 2 Partly Occupied, Good Condition.
- 3 Partly Occupied, Deteriorating.
- 4 Vacant.
- 5 Under Demolition.
- 6 Under Construction.

Damage to Building or Contents

- 0 None.
- 1 1 to 15%.
- 2 16 to 49%.
- 3 50% or Greater.

Area Fire Origin—Floor

- 00 Outside Building.
- 01 1st Floor.
- to
- 94 94th and Higher.
- 95 Attic.
- 96 Roof.
- 97 Basement.
- 98 Cellar.
- 99 Sub-cellar.

Area Fire Origin—Room or Area

- 10 Area Not in Building.
- 11 Attic.
- 12 Awning.
- 13 Balcony.
- 14 Basement.

- 15 Bathroom Toilet.
- 16 Bedroom, Sleeping Area.
- 17 Ceiling.
- 18 Cellar.
- 19 Chimney.
- 20 Classroom Lecture Area.
- 21 Closet.
- 22 Cockloft.
- 23 Court—Exterior.
- 24 Court—Interior.
- 25 Dining Room, Dining Area.
- 26 Duct—Air Conditioning.
- 27 Duct—Exhaust.
- 28 Flooring.
- 29 Furnace Room.
- 30 Hallway—Private.
- 31 Hallway—Public.
- 32 Incinerator Closet or Room.
- 33 Kitchen, Cooking Area.
- 34 Living Room.
- 35 Lobby.
- 36 Machinery Room.
- 37 Office Area.
- 38 Operating Laboratory Area.
- 39 Partition.
- 40 Porch.
- 41 Projection Booth.
- 42 Recreation Area.
- 43 Roof.
- 44 Sales Showroom Display Area.
- 45 Shaft—Duct, Pipe.
- 46 Shaft—Dumbwaiter.
- 47 Shaft—Elevator.
- 48 Shaft—Exterior Light.
- 49 Shaft—Interior Light.
- 50 Shaft—Vent.
- 51 Shipping Receiving Loading Area.
- 52 Stage.
- 53 Stairway.
- 54 Storage Room Area.
- 55 Vacant—Room, Apartment or Area.
- 56 Work Area, Workroom.
- 57 Other Areas, Not Classified (state area).

Area Fire Origin—Occupancy Classification—Commercial**Factory:**

- 99 Chemicals.

Clothing:

- 01 Dresses.
- 02 Undergarment.
- 03 Other (state type).
- 04 Dry Cleaning Laundry.
- 05 Electrical Products.
- 06 Food & Drink Products.
- 07 Furniture.
- 08 Furs, Fur Goods.

Hats:

- 09 Men's.
- 10 Women's.
- 11 Leather, Leather Products.
- 12 Machine Shop Metal Works.
- 13 Paints.
- 14 Paper Products.
- 15 Petroleum Products.
- 16 Plastics, Rubber.
- 17 Printing & Allied Industries.
- 18 Shoes.
- 19 Textiles.
- 20 Toy or Doll.
- 21 Woodworking.
- 22 Other Factories Not Classified (state type).

Store:

- 23 Auto Accessories.
- 24 Bakery.
- 25 Butcher.

4

Area Fire Origin—Occupancy Classification—
(continued)

- Stores:**
- 26 Candy, Cigar, Stationery.
 - 27 Clothing.
 - 28 Department, Large.
 - 29 Department, Small (5&10).
 - 30 Dry Cleaner & Tailor.
 - 31 Drug.
 - 32 Electrical Appliances.
 - 33 Fruit & Vegetables.
 - 34 Furniture.
 - 35 Grocery, Dairy, Delicatessen.
 - 36 Haberdashery.
 - 37 Ladies Accessories.
 - 38 Laundry.
 - 39 Paint Hardware.
 - 40 Restaurant Luncheonette.
 - 41 Shoe.
 - 42 Shoe Repair.
 - 43 Super Market.
 - 44 Tavern.
 - 45 Other Stores Not Classified (state type).
- Garages:**
- 46 Non Storage.
 - 47 Storage.
 - 48 Oil Selling Station.
 - 49 Motor Vehicle Repair Shop.
 - 50 Office Building.
- Warehouse:**
- 51 Film.
 - 52 Paper, Rags, Fibre.
 - 53 Other (state type).
 - 54 Freight Depot.
 - 55 Pier.
 - 56 Shipyard.
 - 57 Lumber Yard.
 - 58 Shed, Newsstand, Shanty, etc.
 - 59 Other Commercial Building Occupancies. Not Classified (state type).
- Residential**
- 60 Apartment Hotel, Multiple Dwelling "A."
 - 61 Apartment House, Multiple Dwelling "A."
 - 62 Boarding House, Rooming House, Multiple Dwelling "B."
 - 63 Hotel, Multiple Dwelling "B."
 - 64 Lodging House, Multiple Dwelling "B."
 - 65 Private Dwelling.
 - 66 Rectory, Convent, Monastery, etc.
 - 67 Tenement House, New Law, Multiple Dwelling "A."
 - 68 Tenement House, Old Law, Multiple Dwelling "A."
 - 69 Other Residential, Not Classified (state type)
- Public**
- 70 Airport.
 - 71 Cabaret, Banquet Hall.
 - 72 Church.
 - 73 Dance Hall.
 - 74 Hospital.
 - 75 Motion Picture Theatre.
 - 76 N.Y. Transit System—Station.
 - 77 Passenger Depot.

- 78 School.
- 79 Theatre.
- 80 T.V. Studio.
- 81 Other Public, Not Classified (state type).

Manner Extension

- 00 Confined to area of origin.
- 01 Cockloft.
- 02 Door or Opening Between Rooms.
- 03 Floor.
- 04 Half Stairway.
- 05 Partition.
- 06 Pipe Recess.
- 07 Shaft-Dumbwaiter.
- 08 Shaft—Elevator.
- 09 Shaft—Air, Light, Chute, Duct, etc.
- 10 Ceiling.
- 11 Window.
- 12 Other (state how).

Number of Occupancies

- 01 1 Occupancy.
- 02 2 Occupancies.
- 99 99 or more Occupancies.

Buildings

- 0 did not spread beyond building of origin.
- 1 1 structure or vehicle.
- 9 9 or more buildings or vehicles.

Note: Form BF-24A must be submitted for each building or vehicle listed in this coded space.

Smoke Detector

- 0 No detector present.
- 1 Ionization type, power disconnected or battery removed by occupant.
- 2 Ionization type, provided early warning.
- 3 Ionization type, failed to operate, battery powered.
- 4 Ionization type, failed to operate, line voltage power.
- 5 Photoelectric type, power disconnected or battery removed by occupant.
- 6 Photoelectric type, provided early warning.
- 7 Photoelectric type, failed to operate, battery powered.
- 8 Photoelectric type, failed to operate, line voltage power.
- 9 Not possible to determine if detector operated or not.

Classification by Type Fire or Emergency

Transportation Fires

- 87 Ship, Vessel.
- 88 Motor Vehicle.
- 89 Other Transportation (state type).

Non-Structural Fires

- 86 ADV (Abandoned/Derelect Motor Vehicle).
- 90 Bonfire.
- 91 Brush, Grass.
- 92 Demolition Wood, Building Site.
- 93 Dump, Land Fill.
- 94 Rubbish—Outside Building.

- 95 Manhole.
- 96 N.Y. Transit System—Yard, Roadway, Ties, etc.
- 97 Railroad—Yard Roadway, Ties, etc.
- 98 Tunnel, Bridge.
- 99 Other Non-Structural, Not Classified (state type).

Emergency

- 02 Chimney.
- 03 Elevator, Escalator.
- 04 Explosives Escort.
- 05 First Aid—Assist Person(s).
- 06 First Aid—Resuscitation.
- 07 Marine.
- 08 Precarious Condition—Signs, Trees, etc.
- 09 Subway—Railroad.
- 10 Water Leak.
- 11 Bomb—Unexploded, Scare.
- 12 Collapse—Cave In.
- 13 Collision—Vehicular Incident.
- 14 Controlled Fire, Permitted.
- 15 Flood Condition—Broken Water Main.
- 16 Incinerator.
- 17 Leak—Fuel Oil, Gasoline, etc..
- 18 Leak—Hum. Gas, Flam. Vapor.
- 19 Lightning.
- 20 Oil Burner.
- 21 Person Locked In, Locked Out.
- 22 Power—Electrical.
- 23 Pressure Rupture.
- 24 Refrigerant Leak.
- 25 Smoke Condition, Odor, Fumes.
- 26 Sprinkler.
- 27 Steam Discharge.
- 28 Defective Alarm Device (other than Sprinkler).
- 29 Smoke Detector.
- 30 Other.

Power for Equipment

- 01 1-23 volts A.C.
- 02 24 volts A.C.
- 11 1-6 volts D.C.
- 12 7-12 volts D.C.
- 15 115 volts A.C.
- 28 208 volts A.C.
- 30 220-230 volts A.C.
- 33 231-330 volts A.C.
- 34 331 or higher volts AC.
- 50 25-50 volts A.C.
- 61 Butane.
- 62 Coal, Coke, Charcoal, Peat.
- 63 Fuel Oil, No. 1 or No. 2.
- 64 Fuel Oil, No. 3 or No. 4.
- 65 Fuel Oil, No. 5 or No. 6.
- 66 Gasoline.
- 67 Kerosene.
- 68 LN gas (stored as liquid).
- 69 LP gas (stored as liquid).
- 70 Natural or illuminating gas (as a gas).
- 71 Paper.
- 72 Propane.
- 99 Other.

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Appendix C
EXPLANATION OF NUMERIC CODES FROM 1987 TO PRESENT

Explanation of Numeric Codes Used on Fire and Emergency Reports -

From June 1, 1987, to present

MO2-1 H1-911268-5-R25-815

14.1 TYPE OF REPORT

- Code No.**
- 1 Structural
 - 2 Transportation Fire
 - 3 Non-Structural Fire
 - 4 Emergency Response
 - 5 False Alarm
 - 6 Additional data (BF-240)

14.2 HOW REPORTED

- Code No.**
- 10 Telephone
 - 20 Street — Manual
 - 21 Class 3 — Manual
 - 30 Class 3 — P.F.A.
 - 31 Class 3 Valve, Sprinkler — P.F.A.
 - 32 Class 3, Other Automatic — P.F.A.
 - 40
 - 50 Verbal
 - 60 Pre-Recorded Telephone Alarm
 - 70 Tie Line (Direct Line to Dispatcher — Pipeline Corp.)
 - 80 Street Box — ERS
 - 81 Class 3 — ERS
 - 90 Gable Television Link

Note: 1, P.F.A. stands for Private Fire Alarm. These are received using the 3-Box-Terminat Designation.

2, If the alarm was encountered while responding to or returning from another alarm, it is considered a verbal alarm.

3, A pre-recorded telephone alarm (PRTA) is used to designate those telephone alarms received from recording or pre-dialed machines, whether directly to 911, 7-digit telephone or an alarm service.

14.3 INITIAL ALARM

- Code No.**
- 0 Special Call Other Than Engine Only — No Chief
 - 1 Box (Street or Class 3)
 - 5 Special Call Engine Only — No. Chief
 - 8 Special Call (Chief Operated)
 - 9 Still

14.4 HIGHEST ALARM

- Code No.**
- 0 Initial Alarm
 - 1 More than the Initial Alarm & Less than 3 Engines & 2 Ladder Cos. at work.
 - 2 2nd Alarm
 - 3 3rd Alarm
 - 4 4th Alarm
 - 5 5th Alarm
 - 6 Simultaneous
 - 7 Signal 7-5

14.5 BOROUGHS

- Code No.**
- 1 Manhattan
 - 2 Bronx
 - 3 Staten Island
 - 4 Brooklyn
 - 5 Queens

14.6 HAZARDOUS MATERIALS

14.6.1 Class to be obtained from D.O.T. required labels or placard or from shipping papers or other documents.

- Code No.**
- 00 No Hazardous Materials Involved
 - 11 Class A Explosives
 - 12 Class B Explosives
 - 13 Class C Explosives
 - 15 Blasting Agents
 - 21 Flammable Gases
 - 22 Non-Flammable Gases
 - 23 Poison Gases
 - 24 Chlorine
 - 25 Oxygen

FIRE RECORD CODE LIST

- 31 Flammable Liquids, flashpoint 100 degrees or less.
- 33 Combustible Liquids, flashpoint greater than 100 degrees.
- 41 Flammable Solids
- 42 Spontaneously Combustible Materials
- 43 Materials Dangerous when Wet
- 51 Oxidizers
- 52 Organic Peroxides
- 51 Poisons
- 52 Etiologic (Infectious) Substances
- 53 Irritants
- 71 Radioactive I Materials
- 72 Radioactive II Materials
- 73 Radioactive III Materials
- 81 Corrosives
- 98 Multiple Classes (More than one hazardous material)
- 99 Other

14.6.2 Amount & Unit — the letter designating the unit of measurement shall follow the two digits indicating the amount. Example: 3000 gals. of gasoline would be correctly coded as 07G in the "Amount" field.

- 000 No Hazardous Material Involved
- | | |
|----------------|--|
| 01 Less than 1 | F Cubic feet, for gases only |
| 02 1-9 | G Gallon |
| 03 10-49 | M Multiple Units — Ex: a spill involves a liquid and a solid |
| | P Pound |
| | T Ton |

05 100-499

06 500-999

07 1,000-4,999

08 5,000-9,999

09 10,000-49,999

10 50,000-99,999

11 100,000 and more

**14.7 HEATING EQUIPMENT INVOLVED—
TYPE OF FUEL USED**

- Code No.**
1. Kerosene
 2. L.P.G.
 3. Electric
 4. Wood
 5. Coal
 6. Oil
 7. Natural Gas
 8. Gasoline
 9. Other
 0. No Heating Equipment Involved

14.8 HOW EXTINGUISHED

- Code No.**
0. Before Arrival
 1. Hand Extinguishers
 2. Sprinkler Heads (State Number of heads that operated in Operations Section)
 3. Booster Stream
 4. Low Pressure Hydrant Stream
 5. One 1½" or larger hoseline from a pumping unit or a standpipe outlet, regardless of line termination (Controlling Nozzle, Deckpipe, Stang, Multi Versal, Ladder Pipe, T/L, Foam Nozzle, etc.)
 6. Two 1½" or larger hoselines as above.
 7. Three 1½" or larger hoselines as above.
 8. Four or more 1½" or larger hoselines as above.
 9. Other (State How).

14.9 SPRINKLER PERFORMANCE—If sprinklers were present or a factor in this operation, record their performance.

1. Equipment Operated
2. Equipment in service, did not operate
3. Equipment present, fire too small to operate
4. Equipment operated, did not extinguish fire
8. No equipment present
9. Equipment present, not in service. (Record action taken in Operations Section)

14.10 STANDPIPE PERFORMANCE—If a standpipe system was present or used in this operation, record its performance.

1. Standpipe serviceable and used

2. Standpipe present but not used
8. No standpipe present
9. Equipment present, not in service. (Record action taken in Operations Section)

14.11 CONDITION ON ARRIVAL CODES

- 0 No indication of fire
- 1 Overheat
- 2 Smoldering
- 3 Open Flame
- 8 Out on Arrival

14.12 EQUIPMENT INVOLVED IN IGNITION**1. HEATING SYSTEMS**

10. Solar panel.
11. Central heating unit, furnace
12. Water heater.
13. Woodstove, wall furnaces, fixed local heating unit
14. Indoor fireplace
15. Portable heating unit
16. Chimney, gas vent flue
17. Chimney vent connector
18. Heat transfer system, ducts, pipes.
19. Not classified above.

2. COOKING EQUIPMENT

21. Fixed, stationary surface unit, stove
22. Fixed, stationary oven
23. Fixed, stationary food warming appliance.
24. Deep fat fryer
25. Portable cooking, warming unit
26. Open fired grill
27. Grease hood, duct.
29. Not classified above.

3. AIR CONDITIONING, REFRIGERATION EQUIPMENT

31. Central air conditioning, refrigeration equipment
32. Water Cooling device, tower
33. Cold boxes, freezers, refrigerators.
34. Fixed, stationary local air conditioning unit
35. Portable air conditioning, refrigeration unit, dehumidifier.
39. Not classified above.

4. ELECTRICAL DISTRIBUTION EQUIPMENT

41. Fixed Wiring, power lines, junction boxes.
42. Transformer, overcurrent or disconnect equipment.
43. Meter, meter box.
44. Power Switch gear, fused, circuit breakers.
45. Switch, receptacle outlet.
46. Lighting fixture, lamp-holder ballast, sign.
47. Cord, plug
48. Lamp, light bulb.
49. Not classified above.

5. APPLIANCES EQUIPMENT

50. Dishwasher.
51. Television, radio, sound or picture.
52. Clothes dryers.
53. Washing machine.
54. Floor care equipment, vacuum.
55. Separate motor, generator.
56. Hand tools, soldering irons, drills.
57. Controlled heat appliance, electrical blankets, steam irons, heat tapes.
58. Electrical razors, can openers.
59. Not classified above.

6. SPECIAL EQUIPMENT

61. Electronic equipment, radar, x-rays, computer, telephone, transmitter equipment.
62. Vending machine, drinking fountain.
63. Office machines.
64. Biomedical equipment, device.
65. Separate pump, compressor, sump pump.
66. Internal combustion engine.
67. Conveyor
68. Printing press.
69. Not classified above.

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7. PROCESSING EQUIPMENT

71. Furnace, oven, kiln.
72. Casting, molding, forging.
73. Heat treating, quench tank.
74. Working, shaping, machine saws, grinders, sanders, etc.
75. Coating machine, asphalt saturating, rubber spreading machines.
76. Painting, dipping, spraying.
77. Chemical process, distilling.
78. Waste recovery.
79. Not classified above.

8. SERVICE, MAINTENANCE EQUIPMENT

81. Inclinerator.
82. Bearing, brake.
83. Rectifier, charger, battery.
84. Tarpot, tar kettle.
85. Arc, oil lamp, gas mantles.
86. Elevator.
87. Torches, bunsen burners.
88. Not classified above.

9. OTHER OBJECTS, EXPOSURE FIRE

96. Vehicle, exhaust systems, vehicle parts.
98. No equipment involved.
99. Other object, Exposure Fire not classified above.

14.13 FORM OF HEAT IGNITION**1. HEAT FROM FUEL-FIRED, FUEL-POWERED OBJECT**

The difference between subdivision 11 and subdivision 12 is whether a spark, ember or flame actually escaped from the equipment, or whether it was simply overheating of outside surface of the equipment (or its internal heat) causing the ignition of nearby combustibles.

11. Spark, ember, flame escaping from gas fueled equipment.
12. Heat from gas fueled equipment, pilot lights, normal flames.
13. Spark, ember, flame escaping from liquid fueled equipment.
14. Heat from liquid fueled equipment, pilot lights.
15. Spark, ember, flame escaping from solid fueled equipment.
16. Heat from solid fueled equipment.
17. Spark, ember, flame escaping from equipment, fuel not known.
18. Heat from equipment; fuel not known.
19. Not classified above.

2. HEAT FROM ELECTRICAL EQUIPMENT ARCING, OVERLOADED.

21. Water caused short circuit arc.
22. Short circuit arc from mechanical damage.
23. Short circuit arc from defective, worn insulation.
24. Unspecified short circuit arc.
25. Arc from faulty contact, loose connection, broken conductor.
26. Arc, spark from operating equipment or switch.
27. Heat from overloaded equipment, wires, motors.
28. Fluorescent light ballast.
29. Not classified above.

3. HEAT FROM SMOKING MATERIAL

31. Cigarette.
32. Cigar.
33. Pipe.
38. Not classified above.

4. HEAT FROM OPEN FLAME, SPARK

41. Cutting torch operation (separating metals).
42. Welding torch operation (joining metals).
43. Blow torches, plumbers torches, Bunsen Burners, soldering, paint stripping.
44. Candle, taper.
45. Match.
46. Lighter (flame type).
47. Campfires, bonfires, warming fires, rubbish fires.
48. Backfire from internal combustion engine.
49. Not classified above.

5. HEAT FROM HOT OBJECT

51. Heat, spark from friction, overheated tires.
52. Molten metal, hot forging and hot glass.
53. Hot ember, ash.
54. Electric lamp, light bulbs.
55. Rekindle, reignition.
56. Heat from properly operating electrical.
57. Heat from improperly operating electrical equipment.
59. Not classified above.

6. HEAT FROM EXPLOSIVES, FIREWORKS

61. Explosives, bombs, ammunition.
62. Blasting agent.
63. Fireworks, spiders.
64. Paper cap, party popper.
65. Model rocket, not amateur rocketry.
66. Incendiary device.
67. Not classified above.

7. HEAT FROM NATURAL SOURCE

71. Sun's heat.
72. Spontaneous ignition, chemical reaction.
73. Lightning discharge.
74. Static discharge.
79. Not classified above.

8. HEAT SPREADING FROM ANOTHER HOSTILE FIRE (EXPOSURE)

81. Heat from direct flame, convection currents.
82. Reradiated heat.
83. Heat from flying brand, ember, spark.
84. Conducted heat.
89. Not classified above.

9. OTHER FORM OF HEAT OF IGNITION

97. Multiple forms of heat of ignition.
99. Not classified above.

14.14 TYPE OF MATERIAL IGNITED**1. GAS**

11. Natural gas.
12. LP-City Gas (LP and air mix).
13. Manufactured gas.
14. LP-Gas.
15. Anesthetic gas.
16. Acetylene.
17. Specialty gas other than anesthetic.
19. Not classified above.

2. FLAMMABLE, COMBUSTIBLE LIQUID

21. Ethyl ether, pentane and ethylene oxide (Class 1A).
22. Acetone, ethyl alcohol, JP-4 jet fuel and methyl ethyl ketone, (Class 1B).
23. Gasoline.
24. Butyl alcohol, propyl alcohol styrene and turpentine, (Class 1C).
25. Kerosene, Fuel Oil 1, 2, 4, 5 and Diesel Fuel.
26. No. 6 fuel oil, cottonseed oil and creosote oil, (Class 1IA).
27. Cooking oil, transformer and lubricating oil, (Class 1IB).
28. Not classified above.

3. VOLATILE SOLID, CHEMICAL

31. Fat, grease (food).
32. Grease (nonfood), petroleum jellies.
33. Polish, paraffin, wax.
34. Creosote, pitch, adhesive, resin, tar, gelatin, rosin, asphalt.
35. Applied paint, varnish.
36. Combustible metal magnesium titanium and zirconium.
37. Solid chemical, explosives.
38. Radioactive material.
39. Not classified above.

4. PLASTIC**41. RIGID PLASTICS**

Included are molded plastics such as appliance cases, floor tile, decorative kitchen laminates.

42. RIGID FOAM PLASTICS

Included are rigid thermal foam insulation for walls and refrigerators.

43. FLEXIBLE PLASTICS

Included is electrical wire insulation.

44. FLEXIBLE FOAM PLASTICS

Included are mattresses, furniture interior foam and carpet pads.

45. FILM PLASTICS

Included are polyethylene trash bags, photographic film and coated wallpaper.

49. Plastic not classified above.

5. NATURAL PRODUCTS

51. Rubber.
52. Cork.
53. Leather.
54. Grass, leaves, hay and straw.
55. Grain, leathers, felt, kapok, hemp, jute, cotton, before processing.
56. Coal, coke, briquettes, peat.
57. Food, starch, excluding fat and grease.
58. Tobacco.
59. Not classified above.

6. WOOD, PAPER

61. Growing wood, tree.
62. Felled but unseason wood.
63. Finished lumber, finished wood.
64. Wood shavings, sawdust excelsior.
65. Hardboard, plywood.
66. Fiberboard, wood pulp, press board.
67. Paper, untreated, uncoated.
68. Cardboard.
69. Not classified above.

7. FABRIC, TEXTILE, FUR

71. Man-made fabric, fiber, finished goods.
72. Cotton, rayon, cotton fabric.
73. Wool, wool mixture, fabric.
74. Fur, silk, other fabric.
75. Wig.
76. Human hair.
79. Not classified above.

8. MATERIAL COMPOUNDED WITH OIL

81. Linoleum.
82. Oil cloth.
83. Treated and/or coated paper, wax paper.
84. Waterproof canvas.
85. Oily rags.
86. Asphalt treated material.
89. Not classified above.

9. OTHER TYPE OF MATERIAL IGNITED

97. Multiple types of material first ignited.
99. Not classified above.

14.15 FORM OF MATERIAL IGNITED**1. STRUCTURAL COMPONENT, FINISH**

11. Exterior roof covering, surface, finish.
12. Exterior sidewall, covering surface, finish, eaves.
13. Doors, porches and platforms.
14. Tile, carpet, rug flooring and stairs.
15. Interior wall covering.
16. Ceiling covering surface.
17. Structural member, framing.
18. Thermal, acoustical insulation, within wall or ceiling.
19. Not classified above.

2. FURNITURE

21. Upholstered sofa, chair, vehicle seats.
22. Nonupholstered chair, bench.
23. Cabinetry, filing cabinets, pianos, dressers, desks, tables and bookcases.
24. Ironing board.
25. Appliance housing or casing.
29. Not classified above.

3. SOFT GOODS, WEARING APPAREL

31. Mattress, pillow.
32. Bedding, blanket, sheet, comforter, heating pad.
33. Linen, towels, tablecloths.
34. Wearing apparel not on a person.
35. Wearing apparel on a person.
36. Curtain, blind, drapery, tapestry.
37. Fabrics, yard goods.
38. Luggage.
39. Not classified above.

4. ADORNMENT, RECREATIONAL MATERIAL

- 41. Christmas tree.
- 42. Decoration for special event.
- 43. Book.
- 44. Magazine, newspaper, writing paper, Mes.
- 45. Toy, game.
- 46. Awning, canopy.
- 47. Tarpaulin, tent.
- 49. Not classified above.

5. SUPPLIES, STOCK

- 51. Box, carton, bag.
- 52. Basket, barrel.
- 53. Pallet, skid.
- 54. Rope, cord, twine, yarn.
- 55. Packing, wrapping material.
- 56. Bale storage.
- 57. Bulk storage.
- 58. Brooms, brushes, mops, cleaning cloths, cleaning supplies.
- 59. Not classified above.

6. POWER TRANSFER EQUIPMENT, FUEL

- 61. Electrical wire, cable insulation.
- 62. Transformer.
- 63. Conveyor belt, drive belt, v-belt.
- 64. Tire.
- 65. Fuel.
- 69. Not classified above.

7. GENERAL FORM

- 71. Argicultural product.
- 72. Fence, pole.
- 73. Fertilizer.
- 74. Forests, brush and grass.
- 75. Film, creosote, rubbish, trash, waste.
- 76. Cooking materials.
- 77. Sign.

8. SPECIAL FORM

- 81. Dust, fiber, lint, sawdust.
- 82. Pyrotechnics, explosives.
- 83. Atomized, vaporized liquid.
- 84. Chips.
- 85. Material stored on pallets.
- 86. Accelerants.
- 87. Rolled material.
- 88. Adhesive.

9. OTHER FORM OF MATERIAL

- 92. Multiple form of material ignited.
- 99. Not classified above.

14.16 IGNITION FACTOR (CAUSE)**1. INCENDIARY**

- 11. Incendiary.
- 12. Incendiary, during civil disturbance.

2. SUSPICIOUS

- 21. Suspicious.
- 22. Suspicious, during civil disturbance.

3. MISUSE OF HEAT OF IGNITION

- 31. Abandoned, discarded material, cigarette, etc.
- 32. Thawing.
- 33. Falling asleep.
- 34. Inadequate control of open fire.
- 35. Cutting, welding too close to.
- 36. Children with matches, lighter, etc.
- 37. Unconscious, mental, physical impairment.
- 39. Not classified above.

4. MISUSE OF MATERIAL IGNITED

- 41. Fuel spilled, released accidentally.
- 42. Improper fueling technique.
- 43. Flammable liquid used to kindle fire.
- 44. Washing part, cleaning, refinishing, painting.
- 45. Improper container.
- 48. Combustible too close to heat.
- 47. Improper storage.
- 49. Not classified above.

5. MECHANICAL FAILURE, MALFUNCTION

- 51. Part failure, leak, break.
- 52. Automatic control failure.
- 54. Short circuit, ground fault.
- 55. Other electrical failure.
- 56. Lack of maintenance, worn out, failure to clean.
- 57. Backfire.
- 59. Not classified above.

6. DESIGN, CONSTRUCTION, INSTALLATION DEFICIENCY

- 61. Design deficiency, catalytic converter failure.
- 62. Construction deficiency.
- 63. Installed too close to combustibles.
- 64. Other installation deficiency.
- 65. Property too close to, included are exposure fires.
- 69. Not classified above.

7. OPERATIONAL DEFICIENCY

- 71. Collision, overturn, knockdown.
- 72. Accidentally turned on, not turned off.
- 73. Unattended.
- 74. Overloaded.
- 75. Spontaneous heating.
- 76. Improper startup, shutdown procedures.
- 79. Not classified above.

8. NATURAL CONDITION

- 81. High wind.
- 82. Earthquake.
- 83. High water, including floods.
- 84. Lightning.
- 89. Not classified above.

9. OTHER IGNITION FACTORS

- 91. Animal.
- 92. Rekindled from a previous fire.
- 99. Not classified above.
- 00. No Fire.

14.17 JUVENILE INVOLVED IN IGNITION

- 0. Juvenile Not Involved in Ignition or No information that a Juvenile was involved.
- 1. Juvenile Involved in Ignition.

14.18 CONSTRUCTION CLASS**Code No.**

- 0. No building involved.
- 1. Fireproof Structure.
- 2. Fire Protected Structure.
- 3. Non Fireproof Structure.
- 4. Wood Frame Structure.
- 5. Metal Structure.
- 6. Heavy Timber Structure.

14.19 CLASSIFICATION OF BUILDING BY USE**COMMERCIAL**

- 592. Bank.
- 723. Brewery.
- 895. Coal Storage.
- 581. Department Store.
- 615. Electrical Power Plant.
- 708. Factory: Multi-Occupancy.
- 709. Factory: Single Occupancy.
- 771. Foundry.
- 894. Freight Depot.
- 882. Garage: Non-Storage.
- 889. Garage: Storage.
- 767. Gas Works, Natural Gas Plant.
- 851. Lumber Yard.
- 573. Motor Vehicle Repair Shop, Paint Shop.
- 581. Office Building, State, City, Federal or Commercial.
- 571. Oil Selling Station.
- 841. Oil Storage Plant.
- 898. Pier, Wharf, Dock, Bulkhead Building.
- 161. Restaurant, Diner.
- 925. Shed, Newstand, Shanty.
- 781. Shipyard, Drydock.
- 815. Stable.
- 614. Steam Generating Plant.

- 599. Storebuilding, Taxpayer.
- 891. Warehouse/Storehouse.
- 410. Store Building & Private Dwelling.
- 580. Other Commercial.

PUBLIC

- 171. Airport Building.
- 361. Asylum.
- 921. Bridge.
- 173. Bus Terminal.
- 133. Church, Synagogue.
- 121. Dance Hall, Banquet Hall.
- 334. Dispensary, Clinic.
- 177. Ferry Terminal.
- 331. Hospital, Infirmary.
- 311. Nursing Home.
- 174. Railroad Station, Street Level.
- 175. Railroad Station, Below Grade.
- 178. Railroad Station, Above Grade.
- 241. School: College, University.
- 215. School: High School.
- 214. School: Junior High.
- 213. School: Elementary.
- 211. School: Children's Nursery.
- 210. School: Other.
- 185. Television Studio.
- 181. Theatre, Legitimate.
- 183. Theatre, Motion Picture.
- 170. Transit System—Station Structure.
- 822. Tunnel.
- 118. Other Public.

RESIDENTIAL

- 489. Apartment Hotel "A".
- 429. Apartment House "A".
- 439. Boarding House, Rooming House "B".
- 485. Convent, Rectory, Monastery, etc.
- 461. Dormitory—School, Club, Lodge.
- 449. Hotel "B".
- 430. Lodging House "B".
- 440. Motel.
- 411. Private Dwelling: One Family.
- 414. Private Dwelling: Two Family.
- 420. Tenement: New Law "A".
- 423. Tenement: Old Law "A".
- 422. Converted Dwelling "A".
- 490. Other Residential.

SPECIAL PROPERTIES

- 972. Airport Runway.
- 934. Cemetery.
- 981. Construction Site.
- 932. Dump, Landfill.
- 931. Open Land, Fields.
- 965. Parking Area, Lot.
- 983. Pipeline, Power Line Right-of-Way.
- 962. Public Street.
- 952. Railroad Switching Yard, marshalling yard.
- 936. Vacant Lots.
- 939. Outdoor Property Not Classified.

14.20 BUILDING STATUS CODE**Code Description**

- 1. Occupied: The building is normally fully occupied or is intended to be fully occupied. A few vacant areas, which are rentable, may exist.
 - 2. Partly Occupied: The building is in good condition and more than 25 percent of the areas are vacant.
 - 3. Partly Occupied, Deteriorating: The building has some vacant areas and these are expected to remain vacant until demolition or alteration because of the condition of the building or its surroundings.
 - 4. Vacant: The building is entirely vacant. (Even if squatters are present.)
 - 5. Under Demolition: The building is in the process of being torn down.
 - 6. Under Construction: The building is under construction and does not have any occupants.
 - 7. Under Construction: The building is partially occupied, whether under a temporary certificate of occupancy or not.
- Note: The status code applies to the building, not the fire area. Therefore, codes 1, 2 and 3 may be used whether the fire itself occurred in a vacant or occupied area, and code 1 may apply even if the fire occurred in a vacant area (for example, a fire in a vacant apartment being repaired for a new tenant). The occupied or vacant status of the fire area is now recorded on the "Area of Origin" Code. (see Paragraph 2.19.2)

4

14.21 COMPLEX

- 11. **PUBLIC RECREATION COMPLEX**
Included are zoos, amusement parks and general recreation parks.
- 12. **STADIUM, EXHIBITION HALL COMPLEX**
Included ballparks, racetracks, sports gardens and arenas.
- 14. **CLUB COMPLEX**
Included are golf clubs, tennis clubs and country clubs.
- 20. **EDUCATIONAL COMPLEX**
Included are schools, colleges and universities.
- 33. **MEDICAL CARE COMPLEX**
Included are Hospitals, Medical Centers, Mental Institutions.
- 34. **PRISON COMPLEX**
- 40. **BUSINESS WITH RESIDENTIAL COMPLEX**
Included are apartments over stores.
- 41. **DWELLING COMPLEX (ONE AND TWO-FAMILY)**
- 42. **APARTMENT COMPLEX**
- 44. **HOTEL COMPLEX**
Included are motels, inns and lodges.
- 47. **MOBILE HOME PARK COMPLEX**
- 58. **SHOPPING COMPLEX**
Included are department stores malls, discount houses and shopping centers. Also included are groups of business and commercial establishments which may contain theaters and other places of assembly.
- 59. **OFFICE COMPLEX**
Included are non-military government office complexes.
- 61. **POWER PRODUCTION COMPLEX**
- 63. **MILITARY RESERVATION DEFENSE COMPANY**
- 65. **FARM COMPLEX**
- 70. **INDUSTRIAL PLANT, MANUFACTURING COMPLEX**
- 80. **WAREHOUSE, STORAGE COMPLEX**
- 91. **CONSTRUCTION COMPLEX**
Included are demolition operations.
- 93. **CAMPSITE COMPLEX**
- 94. **WATERFRONT COMPLEX**
Included are marinas.
- 95. **RAILROAD TRANSPORT COMPLEX**
- 96. **ROAD COMPLEX**
Included are highways, streets and all public ways.
- 97. **AIRPORT COMPLEX**
- 98. **NO COMPLEX**
If other properties meeting the definition for a complex as defined above are identified, they may be indicated by Complex Code 99.

AREA FIRE ORIGIN

14.22 FLOOR CODE NO.

- 00 OUTSIDE BUILDING**
- 01 1st Floor
- to to
- 94 94th and Higher
- 95 Attic
- 96 Roof
- 97 Basement
- 98 Cellar
- 99 Sub-Cellar

14.23 AREA FIRE ORIGIN— OCCUPANCY CLASSIFICATION

00 NOT IN BUILDING

COMMERCIAL

- Factory:**
- 99 Chemicals
- 01 Dresses
- 02 Undergarment
- 03 Other (state type)
- 04 Dry Cleaning Laundry
- 05 Electrical Products
- 06 Food and Drink Products

- 07 Furniture
- 08 Furs, Fur Goods
- 09 Men's Hats
- 10 Women's Hats
- 11 Leather, Leather Products
- 12 Machine Shop Metal Works
- 13 Paints
- 14 Paper Products
- 15 Petroleum Products
- 16 Plastics, Rubber
- 17 Printing and Allied Industries
- 18 Shoes
- 19 Textiles
- 20 Toy or Doll
- 21 Woodworking
- 22 Other Factories not classified (state type)
- Store:**
- 23 Auto Accessories
- 24 Bakery
- 25 Butcher
- 26 Candy, Cigar, Stationary
- 27 Clothing
- 28 Department, large
- 29 Department, small (5 & 10)
- 30 Dry Cleaner & Tailor
- 31 Drug
- 32 Electrical Appliance
- 33 Fruits and Vegetables
- 34 Furniture
- 35 Grocery, Dairy, Delicatessen
- 36 Haberdashery
- 37 Ladies Accessories
- 38 Laundry
- 39 Paint, Hardware
- 40 Restaurant Luncheonette
- 41 Shoe
- 42 Shoe Repair
- 43 Supermarket
- 44 Tavern
- 45 Other Stores not classified (state type)
- Garage:**
- 46 Non storage
- 47 Storage
- 48 Oil Selling Station
- 49 Motor Vehicle Repair Shop
- 50 Office Building
- Warehouse:**
- 51 Film
- 52 Paper, Rags, Fibre
- 53 Other (state type)
- 54 Freight Depot
- 55 Pier
- 56 Shipyard
- 57 Lumber yard
- 58 Shed, Hoiststand, Shanty, etc.
- 59 Other Commercial Building Occupancies, not classified (state type)
- Residential:**
- 60 Apartment, Hotel, Multiple Dwelling "A"
- 61 Apartment House, Multiple Dwelling "A"
- 62 Boarding House, Rooming House, Multiple Dwelling "B"
- 63 Hotel, Multiple Dwelling "B"
- 64 Lodging House, Multiple Dwelling "B"
- 65 Private Dwelling
- 66 Rectory, Convent, Monastery, etc.
- 67 Tenement House, New Law, Multiple Dwelling "A"
- 68 Tenement House, Old Law, Multiple Dwelling "A"
- 69 Other Residential, not classified (state type)
- Public:**
- 70 Airport
- 71 Cabaret, Banquet Hall
- 72 Church
- 73 Dance Hall
- 74 Hospital
- 75 Motion Picture Theatre
- 76 N.Y. Transit System Station
- 77 Passenger Depot
- 78 School
- 79 Theatre
- 80 TV Studio
- 81 Other Public, not classified (state type)

14.24 AREA OF FIRE ORIGIN

0. MEANS OF EGRESS

- 01. Hallway, corridor, mail.
- 02. Exterior stairway.
- 03. Interior stairway.
- 04. Escalator.
- 05. Lobby, entrance way.
- 08. Not classified above.

1. ASSEMBLY AREA

- 11. Fixed seats (100 or more persons).
- 12. Without fixed seats (100 or more persons).
- 13. With or without fixed seats, (less than 100 persons)
- 14. Living room, family room, lounge area.
- 15. Sales, showroom area.
- 16. Library, art galleries, exhibit.
- 17. Swimming pool area.
- 18. Not classified above.

2. FUNCTION AREAS

- 21. Bedrooms, patient rooms, cells, lockups.
- 22. Wards, dormitories, barracks.
- 23. Dining area, luncheon, cafeteria.
- 24. Kitchen, cooking area, cloakroom.
- 25. Laundry area.
- 28. Health clubs, massage parlors, barber, beauty.

3. FUN AREAS (continued)

- 31. Laboratory.
- 32. Printing or photographic room.
- 33. First aid, treatment room.
- 34. Operating room.
- 35. Electronic, computer, telephone room, telephone booth.
- 36. Performance, stage area, indoor sports.
- 37. Projection room, stage light.
- 38. Process, manufacturing area.
- 39. Not classified above.

4. STORAGE AREAS

- 41. Tank, bin, product storage room.
- 42. Closet.
- 43. Supply room.
- 44. Records storage room, vault.
- 45. Shipping, receiving, loading mail room.
- 46. Trash or rubbish container, compactor.
- 47. Garage, carport, vehicle storage.
- 49. Not classified above.

5. SERVICE FACILITIES

- 51. Elevator, dumbwaiter.
- 52. Electrical, plumbing, ventilation shaft.
- 53. Light shaft.
- 54. Laundry or mail chute.
- 55. Duct.
- 56. Display window.
- 57. Chimney, flue, stovepipe.
- 58. Conveyor.
- 59. Not classified above.

6. SERVICE, EQUIPMENT AREA

- 61. Machinery room.
- 62. Heating equipment, water heater area.
- 63. Switchgear area, transformer vault.
- 64. Incinerator room area.
- 65. Maintenance shop, workshop, paint shop, welding shop.
- 66. Test cell.
- 67. Enclosure with pressurized air.
- 68. Enclosure with enriched oxygen atmosphere.
- 69. Not classified above.

7. STRUCTURAL AREAS, NON-FUNCTIONAL

- 71. Crawf space, cellar, substructural area.
- 72. Exterior balcony, open porch.
- 73. Floor and ceiling assembly concealed floor/ceiling space.
- 74. Roof and ceiling assembly, concealed roof/ceiling space.
- 75. Wall assembly, concealed wall space.
- 76. Exterior wall surface.
- 77. Exterior roof surface.
- 78. Awning, overhang.
- 79. Not classified above.

8. TRANSPORTATION, VEHICLE AREAS

- 81. Passenger area.
- 82. Trunk, load carrying area.
- 83. Engine, running gear, wheel area.
- 84. Fuel tank, fuel line.
- 85. Operating, control area, cab, cockpit.
- 86. Exterior exposed surface.
- 89. Not classified above.

9. OTHER AREAS OF ORIGIN

- 91. On or near railroad right of way, embankment.
- 92. On or near highway, public way, street.
- 93. Terrace, patio, courtyard.
- 94. Lawn, field, open area, vacant lot.
- 95. Wildland area, woods.
- 97. Multiple location.
- 98. Vacant room, apartment or area.
- 99. Not classified above.

14.25 MANNER OF EXTENSION**Code No.**

- 00 Confined to area of origin.
- 01 Cockloft.
- 02 Door or opening between rooms.
- 03 Floor.
- 04 Hall, Stairway.
- 05 Partition.
- 06 Pipe Recess.
- 07 Shaft-dumbwaiter.
- 08 Shaft-Elevator.
- 09 Shaft-air, Light, Chute, Duct, etc.
- 10 Ceiling.
- 11 Window.
- 12 Other (state type).

14.26 NUMBER OF OCCUPANCIES**Codes Description**

- 01 1 occupancy
- 02 2 occupancies
- .
- .
- .
- 99 99 or more occupancies

14.27 BUILDINGS**Code: 0 to 9**

- 0— did not spread beyond building of origin
- 1—1 structure or vehicles
- .
- .
- .

9—9 or more buildings or vehicles

NOTE: Form BF-24A must be submitted for each building or vehicle listed in this coded space.

14.28 DAMAGE CODES**14.28.1 Percentage Codes**

- 0 No appreciable damage
- 1 From 1 through 15%
- 2 From 16 through 49%
- 3 50% or greater

14.28.2 Extent of Damage Codes: To be used in the Damage Category Boxes "Flame, Smoke and Water".

- 1. Confined to object or origin.
- 2. Confined to part of room or area of origin.
- 3. Confined to room of origin.
- 4. Confined to fire-rated compartment of origin.
- 5. Confined to floor of origin.
- 6. Confined to structure of origin.
- 7. Extended beyond the structure of origin.
- 9. No damage of this type.

14.29 SMOKE AND HEAT DETECTOR CODES

- 14.29.1 Present
 - 1 Present
 - 0 Not Present

14.29.2 Type

- 1. Smoke
- 2. Heat

14.29.3 Power Source

- 1. Battery
- 2. A/C

14.29.4 Performance

- 1. In room of fire; operated
- 2. Not in room of fire; operated
- 3. In room of fire; did not operate
- 4. Not in room of fire; did not operate
- 5. In room; fire too small to operate
- 6. Did not operate; power source removed
- 9. Not classified

14.30 POWER FOR EQUIPMENT

- 01 1-23 volts A.C.
- 02 24 volts A.C.
- 11 1-6 volts D.C.
- 12 7-12 volts D.C.
- 15 115 volts A.C.
- 28 208 volts A.C.
- 30 220-230 volts A.C.
- 33 231-330 volts A.C.
- 34 331 or higher volts A.C.
- 50 25-50 volts A.C.
- 61 Butane
- 62 Coal, Coke, Charcoal, Peat
- 63 Fuel Oil, No. 1 or No. 2
- 64 Fuel Oil, No. 3 or No. 4
- 65 Fuel Oil, No. 5 or No. 6
- 66 Gasoline
- 67 Kerosene
- 68 LN gas (stored as liquid)
- 69 LP gas (stored as liquid)
- 70 Natural or Illuminating gas (as a gas)
- 71 Paper
- 72 Propane
- 99 Other

14.31 CODE FOR TYPE OF ACTION TAKEN

- 1. Extinguishment
- 2. Rescue
- 3. Investigation
- 4. Remove Hazard
- 5. Standby
- 6. Salvage
- 7. First Aid
- 9. Cancelled Enroute

14.32 CLASSIFICATION BY TYPE FIRE OR EMERGENCY**TRANSPORTATION**

- Code No.**
- 87 Ship, Vessel
- 88 Motor Vehicle
- 89 Other Transportation (state type)

NON-STRUCTURAL FIRES

- Code No.**
- 84 Explosion, no after fire
- 85 Outside Spill/Leak with Fire
- 86 ADV (Abandoned/Derelict Motor Vehicle)
- 90 Bonfire
- 91 Brush, Grass
- 92 Demolition Wood, Building Site
- 93 Dump, Land Fill
- 94 Rubbish—Outside Building
- 95 Manhole
- 96 N.Y. Transit System—Yard, Roadway, Ties, etc.
- 97 Railroad Yard, Roadway, Ties, etc.
- 98 Tunnel, Bridge
- 99 Other Non-Structural, not classified (state type)

EMERGENCY

- Code No.**
- 03 Elevator, Escalator
- 04 Explosives Escort
- 05 First Aid—Assist Person(s)

- 06 First Aid—Resuscitation
- 07 Marine
- 08 Precarious Condition—Signs, Trees, etc.
- 09 Subway, Railroad
- 10 Water Leak
- 11 Bomb—Unexploded, Scare
- 12 Collapse—Cave In
- 13 Collision—Vehicular Incident
- 14 Controlled Fire, Permitted
- 15 Flood Condition—Broken Water Main
- 16 Incinerator
- 17 Leak—Fuel Oil, Gasoline, etc.
- 18 Leak—Illuminating Gas, Flammable Vapor
- 19 Lightning
- 20 Oil Burner
- 21 Person Locked In, Locked Out
- 22 Power Electrical
- 23 Pressure Rupture
- 24 Refrigerant Leak
- 25 Smoke Condition, Odor, Fumes
- 26 Sprinkler—Leak, Water Discharge, Damaged Head, etc.
- 27 Steam Discharge
- 28 Defective Alarm Device (other than Sprinkler)
- 29 Smoke Detector
- 30 Defective Alarm (Sprinkler)—Surge, Work on System, etc.
- 31 Other

14.33 MOBILE PROPERTY TYPE CODES

- 11 Automobile
- 12 Bus
- 13 Motorcycle, Snowmobile
- 14 Motorhome
- 15 Travel Trailer
- 17 Mobile Home
- 20 Freight, Road Transport
- 30 Rail Transport
- 40 Water Transport
- 50 Air Transport
- 60 Heavy Equipment
- 70 Special Vehicles, Containers
- 99 Other Mobile Property Types

Appendix D SIGNIFICANT FIRES IN WTC 1

Significant fire incidents occurring in WTC 1

Significant Fire	Incident Date	Fire Location	# Sprinklers Activated	# Standpipes Activated	Cause of Fire	Material Ignited
1	9/9/77	B-6 level storage room	2		None listed	Not listed
2	9/23/77	Dumpster on B-4 level	2		Not classified	Trash/waste
3	10/16/81	Floor 19 office area	-	2	Discarded material	Furniture
4	12/23/83	2 dumpsters on B-4 level	2	1	Suspicious	Trash/waste
5	1/27/85	Office space on mezzanine level (floor 2)	2		Incendiary	Trash/waste
6	9/10/85	Garbage dumpster in service elevator lobby on floor 43	2	1	Suspicious	Trash/waste
7	11/1/85	Storage closet on B-4 level	3	1	Suspicious	Supplies/stock
8	6/7/86	Dumpster fire on floor 106, compactor room on floor 107	2	1	None listed	Trash/waste
9	9/30/91	Office on B-4 level	≥1	2	Discarded material	Trash/waste
10	11/19/91	Electrical closet on floor 93	0	2	Short circuit	Electrical wire or cable insulation
11	7/23/92	Level B-5 at the power distribution panel	0	2	Electrical failure	Electrical wire or cable insulation
12	11/10/99	Computer room on floor 104	3	≥1	None listed	Plastics, electronic equipment

REPORT - STRUCTURAL FIRE

FOR FIRE RECORDS USE ONLY	TYPE REPORT		DATE AND TIME ALARM RECEIVED					DURATION OF INCIDENT		LOCATION			REPORT		
	MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ALARM	INCIDENT
	09	09	77	1	2304	01 00	4	1 0	1 00	70		5006	0113	0063	01 321

AIDED AND CASUALTIES				RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN													
CIVILIANS																					
EVACUATED	FIRST AID	INJURED	DYED	UNINFORMED INJURED	ENG. SO. ARRIVE	LADDERS	NO. SPRINK. H2O OPEN	SMOKERS ENTERED	CAUSE	FIRE MARKS	CONSTRUCT.	USE	STATUS	STATUS	STATUS	STATUS	STATUS				
00	00	00	00	00	03	2	0	02	00	0			1	15	1	0	1	99	54	50	00

ADDRESS: 1 World Trade Center Man.
 NUMBER: 110 STREET: 200x200 BOROUGH: _____
 BUILDING: _____ (Second Card) STORIES: _____ AREA: _____
 NAME OF OCCUPANT: Sgt. Daniels P.A. Police ROOM/APRT. NO: _____
 LEFT IN CHARGE: _____

5	006	0	10	7	001	0	10	7	008	0	10								
---	-----	---	----	---	-----	---	----	---	-----	---	----	--	--	--	--	--	--	--	--

OPERATIONS

Upon arrival at command post was told of fire in B 6 level storage room, operations as follows.
 Ladder 1 made necessary investigation, located fire, vented, overhauled.
 Ladder 3 checked for extension, vented overhauled.
 Engine 6 stretched line from standpipe and stood fast.
 Fire was extinguished by sprinkler system before arrival.
 EN. 4 supervised operations on fire floor.
 Fire Patrol 2 on the scene.

S.C. Rudy E. DiGeorgio / EN D.C. _____
Rudy E. DiGeorgio 2306 _____
 TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL
 DIV. PAGE 1 OF 1

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED				DURATION OF INCIDENT		LOCATION				REPORT						
TYPE REPORT		MONTH	DAY	YEAR	CO. NO.	HOUR	MINUTE	HOURS	MINUTES	ROW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	ALARM	INCIDENT	REPORT NUMBER	FIRE BATTALION	BADGE NUMBER
1		09	23	77	1	22	00	25	4	1	0	1	0070	5	006	0113	0153	01187

AIDED AND CASUALTIES				EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN								
CIVILIANS		RESP.		EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN								
EVACUATED	FIRST AID	INJURED	KILLED	UNINJURED	EXTINGUISHMENT	CAUSE	EXTINGUISHMENT	STATUS	STATUS	FLOOR CODE	ROOM OR AREA CODE							
00	00	00	00	03	2	0	02	00	1	63	1	15	1	0	99	5	20	00

ADDRESS **1 World Trade Ctr.** **Man**
NUMBER STREET BOROUGH

BUILDING **110 250 x250**
(Second Card) STORIES AREA

PONYA **B-4 (Low**
NAME OF OCCUPANT ROOM/APT. N

Pat Lorenza (PONYA)
LEFT IN CHARGE

COMPANIES	TYPE NO.	SECT.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.	PTS.
	1	006	0	05	7	001	0	05										

OPERATIONS
 Responded to 3-70-10 (Manual Alarm)

Upon arrival was informed of fire in Dumpster B-4 level 1 WTC. Ordered investigation and found fire therein, which had been extinguished prior to the arrival of this dept. Operations as follows:

E.6- Rolled up lengths stood fast.

L.1- Search. examination, ventilation of B-4 level, conditions as stated.

Michael R. Porgio 1
BN. D.C.

Michael R. Porgio **2251**
TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

DIV. PAGE
 OF

ADMINISTRATIVE COMPANY

REPORT - STRUCTURAL FIRE

BF 24 (1-80)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		COS. RESP.					
1	01	5	006	0113	10-16-81	1912	02:30	6	1	7	1	8084	0172	01	531	03	2
COMMUNITY		COMPANY		MUNICIPALITY		DAY		YEAR		HOUR		MINUTE		MONTH		DAY	
FIRST AND LAST		ADDRESS		CITY		STATE		ZIP		STREET NAME		BUILDING		APARTMENT		FLOOR	
1		U.S. Trading Corp		104		103		178		1973		World Trade Center		99		2001200	
NAME OF OCCUPANT		STREET NAME		BUILDING		APARTMENT		FLOOR		AREA		OFFICER		AREA		OFFICER	
Mr. Gusman (JBD)		99		2001200		Mr. Gusman (JBD)		2001200		Mr. Gusman (JBD)		2001200		Mr. Gusman (JBD)		2001200	

AIDED AND CASUALTIES		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE	
CIVILIANS		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE	
CIVILIANS		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE	
CIVILIANS		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE	

UNIT	PTS	ITEM	194	200	206	212	217
5	010	20	5	006	10	5	007
05	7	001	20	7	008	20	

OPERATIONS

Responded to alarm box 8084. Upon arrival were informed by Port Authority personnel of a fire in the above location. Initial reports also indicated that the fire had penetrated the skin of the bldg Signal 10-75 was transmitted. Port Authority personnel stretched initial hand line into fire location. Eng. 10- Stretched standpipe line, extinguished main body of fire, washed down. Eng. 6- Took handline from P.A. personnel, assisted in extinguishment. Eng. 7- Relieved Eng. 10 on line, supplied standpipe. Led. 1- To fire floor, performed primary and secondary searches, vented, overhauled. Led. 8- To 20th floor, performed primary and secondary searches on that and upper floors.

ADMINISTRATIVE COMPANY

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION			
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NO.	BUILDING NO.	TERM. STAGE	COUR. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTR. PRODUCT	USE	STATUS	FLOOR CODE	Rm/Area Code	OCCUPANCY	MANNER OF OCCUPANCIES
6	10	16	31	1912	1	8084	00												

NUMBER (INCL. HYPHEN)		STREET NAME		IF MOBILE PROPERTY	
YR.	MAKE	MODEL	79 SERIAL NO.	LICENSE	STATE
1	001	10			

OPERATIONS

Lad.8 (cont.)- Forced door to Office room#2073

Res.1- Checked vent ducts and stairways on and above fire floor, secured passenger elevators serving fire floor.

Patrol#1- On scene, salvage work on 16th and 17th floors.

Patrol#2- On scene, salvage work on 18th floor.

Div.1- D.C. Rossi on scene, in charge of Department operations upon arrival.

B.C. <u>James J. McKenna</u>	1	D.C. <u>John D. Rossi</u>	1	PAGE
James J. McKenna	1916	John D. Rossi	DIV. 1	202
TYPE FULL NAME	TIME OF ARRIVAL	TYPE FULL NAME	TIME OF ARRIVAL	

REPORT - STRUCTURAL FIRE

BF-24 (1/80)-175M-00551 (85)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		CUS. RESP.			
1	01	5	010	12-23-83	00:25	2	1	0	1	8093	0228	01	075	03	2
COMMUNITY BOARD		BLOCK NUMBER		YEAR		MINUTES		BOX NUMBER		FLOOR CODE		FIRE EXTENSION			
ADMITTED		MONTH		DAY		HOURS		BOX DAMAGE		FLOOR CODE		WITHIN BLDG.			
EVAQUATED		SPRINKLER		EQUIP INVOLVED		HEAT FORM		STATUS		OCCUPANCY		NO. BLDG.			
FIRST AID		LINES OPEN		EQUIP STAGE		MATERIAL TYPE		USE		MANNER OF		SMOKE DETECTORS			
INJURED		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
KILLED		LINES OPEN		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		2			
AIDED AND CASUALTIES		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		3			
CIVILIANS		LINES OPEN		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
EXTINGUISHMENT		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
STRUCTURE		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
AREA		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
FIRE ORIGIN		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			
SPECIAL USE		SPRINKLER		EQUIP STAGE		MATERIAL TYPE		CONSTRUCT		OCCUPANCY		1			

1	Port Authority	104	108
1	World Trade Center	126	130
99	STORAGE	132	137
200	X200	137	137
P.A. Police		LEFT IN CHARGE	

UNIT	PTS	ITEM	YR	MAKE	MODEL	SIN	POWER
5	010	10	7	001	10	194	200
188	194	200	205	212	217	151	168
187	187	187	187	187	187	187	187

OPERATIONS

Responded to report of fire in B-4 Level, and heavy smoke condition. Found two duppsters fully involved in seperate locations on same floor. Sprinklers extinguished major portion of fire. Signal 10-44 code 1.

Engine Co. 10 - Stretched from standpipe, and extinguished remaining fire.
Ladder Co. 1 - Overhauled, checked for extension and vented.

B.C. Rudolph S. Quatrone 1st D.C. 02:53 BN. 02:53

TYPE FULL NAME TIME OF ARRIVAL

PAGE 1 OF 1

AUG 28 2003
RLZ

REPORT - STRUCTURAL FIRE

BF-24 (11/80)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		HIGHEST ALARM		BOX LOCATION		REPORT		COS. RESP.							
ADMIN. COMPANY	BLOCK NUMBER	MONTH	DAY	YEAR	HOUR	MINUTE	HOURS	MINUTES	INITIAL ALARM	BOX NUMBER	BOX LOCATION	REPORT NUMBER	BATTALION	ENGINE NUMBER	ADDRESS						
1	01	5	01	01	27	85	01	00	2	1	1	8084	0293	01	113	02	2				
8000787																					
AIDED AND CASUALTIES		EXTINGUISHMENT		HEAT FORM		MATERIAL TYPE		MATERIAL FORM		FACTORY		STATUS		FLOOR CODE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE	
EVAQUATED	FIRST AID	INJURED	KILLED	UNFURNISHED	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER	SPRINKLER
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
STREET NAME		STREET NUMBER		STREET TYPE		STREET CITY		STREET STATE		STREET ZIP		STREET ZIP		STREET ZIP		STREET ZIP		STREET ZIP		STREET ZIP	
1		106		1		1		1		1		1		1		1		1		1	
World Trade Center		106		1		1		1		1		1		1		1		1		1	
New York City		New York City		New York City		New York City		New York City		New York City		New York City		New York City		New York City		New York City		New York City	
Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ		Port Authority NY, NJ	
NAME OF OCCUPANT		ROOM, APT. NO.		YR.		MAKE		MODEL		S/N		POWER		LEFT IN CHARGE		AREA		SPECIAL USE		SPECIAL USE	
Sgt. Doubraski, PA Police		200x200		110		132		132		132		132		132		132		132		132	
EQUIPMENT INVOLVED IN IGNITION		ITEM		PTS.		UNIT		ITEM		PTS.		UNIT		ITEM		PTS.		UNIT		ITEM	
5		006		05		7		010		05		7		010		05		7		010	
188		194		200		206		212		217		217		217		217		217		217	
OPERATIONS		TYPE FULL NAME		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL		TIME OF ARRIVAL	
On arrival, found two sprinkler heads containing fire in unoccupied office occupancy on mezzanine level. Units assigned as follows:		John J. Spillivane		10-41		10-41		10-41		10-41		10-41		10-41		10-41		10-41		10-41	
Eng. 6: Stretched line, stood fast.		John J. Spillivane		1		1		1		1		1		1		1		1		1	
Lad. 1: Located fire, searched, extinguished remaining fire. Shut down sprinkler system.		John J. Spillivane		2055		2055		2055		2055		2055		2055		2055		2055		2055	
Lad. 10: Checked for extension.		John J. Spillivane		2055		2055		2055		2055		2055		2055		2055		2055		2055	

AUG 28 2003
JRE
8160138

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		COS. RESP.				
COMMUNITY BRANCH	ADMIK COMPANY	BLOCK NUMBER	MONTH	DAY	YEAR	HOUR	MINUTE	MINUTES	HOW REPORTED	HIGHEST ALARM	BOX NUMBER	REPORT NUMBER	BATTALION	ENGINE NUMBER	LADDER	
1	01	5010	09	10	85	1605	01	00	1	2	1	8084	0119	01	578	7 6

AIDED AND CASUALTIES		EXTINGUISHMENT		IGNITION		STRUCTURE		AREA		FIRE ORIGIN		SPECIAL USE												
EVAQUATED	FIRST AID	INJURED	KILLED	UNIFORMED	SPRINKLER CODE	STANDPIPE	TEAM STAGE	EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	CONSTRUCT	STATUS	BLDG DAMAGE	FLOOR CODE	M/MARCA CODE	OCCUPANCY	MANNER OF	OCCUPANCY'S	NO BLDGS	SMOKE DETECTORS	WITHIN BLDG	FIRE EXTENSION		
00	00	00	00	5	2	1	3	89	00	60	75	21	1	15	1	0	43	35	81	00	01	1	2	

STREET NAME		TYPE	
NUMBER	STREET NAME	TYPE	STREET
1	World Trade Center	1	STREET

NAME OF OCCUPANT: Port Authority NY NJ
 ROOM, APT. NO.: 4-3 FT
 BUILDING: 132
 AREA: 200 x 200
 STORAGES: 99

EQUIPMENT INVOLVED IN IGNITION	
YR.	MAKE

LEFT IN CHARGE	
NAME	POSITION
Sgt. Mbin	PA Police Dept.

EQUIPMENT INVOLVED IN IGNITION														
UNIT	PTS.	ITEM	MODEL	S/N	POWER									
5	010	10	5	006	02	7	010	10	7	008	09	7	001	10

OPERATIONS

Upon arrival at the Command Ctr of the World Trade Center, Batt. 1 was informed by the PA Police that, according to their reports, there was a sprinkler flow and smoke condition on the 43 floor. When Ladder 10 (1st due) reported a medium smoke condition on the 43 floor, Batt. 1 transmitted signal 10-76. The fire was located in a garbage dumpster in a service elevator lobby on the 43 F and was extinguished by 2 sprinkler heads with no extension.

Engine 10- Took rolled-ups to 42 Floor. Stretched a 2 1/2 line from the standpipe in B stairwell to fire location. Line used for overhauling. Chauffeur manned the Standpipe phone at the CP and assi in communications.

B.C. *Kenneth T. McGowan* / D.C. *John S. Hodgens*
 Kenneth T. McGowan 1611 John Hodgens
 TYPE FULL NAME TIME OF ARRIVAL
 PAGE 1 OF 2

TYPE REPORT				DATE AND TIME ALARM RECEIVED				BOX LOCATION				IGNITION				STRUCTURE				AREA OF ORIGIN				FIRE EXTENSION	
6				09 10 85 1605 1				8084																	
NUMBER (INCL. HYPHEN)		STREET NAME		TYPE		8160199		IF MOBILE PROPERTY																	
1		World Trade Center																							
YR.		MAKE		MODEL		79 SERIAL NO.		LICENSE		STATE															
5		007 02																							
UNIT		PTS.																							
189		195		201		207		213		219		225		231		236									

OPERATIONS

Engine 6- (teamed with E.10) Assisted E. 10 in Standpipe stretch.
 Engine 7- Manned the Standpipe phone in Stairway B on 1st Fl., relayed messages to and from Command Center
 Ladder 10- To 43 fl, stairway B, found fire, searched 43 fl (negative) made necessary examination and overhaul of fire area.
 Ladder 1- to 44 fl, searched for fire, smoke extension, searched for troubled occupants (negative) Checked top ten fls (101-110) for smoke (Neg.)
 Ladder 8- Made secondary search of 43 fl (negative). Searched fls 44 to 49. Searched affected service elevator cars #17 & 29.
 Batt. 4- Set up operations post on 43 fl. Communicated with Command Center, supervised operations of units on 43 and 44 fls.
 E.4, E.3 (HiRise Unit), L.15 & Res. Co 1 stood fast, took up.
 Brooklyn Cos responding on supplemental Boxes 9031 & 9032 at 1617 hrs Batt 31, Batt 32, E. 205, E. 279, L.101, L.110 stood fast, took up.
 F.C.U. - Established Field Hqtrs, Monitored Communications.
 Sprinkler heads (2) replaced by P.A. personnel.
 Signal 10-41, Code 1 transmitted, Evidence of separate, previous fire reported to FM McCaffrey.

Responded to Scene: AC Matthew Farrell, Manhattan Borough Commander

Signal	Time	By
10-84	1609	E.10
10-76	1615	Batt 1
P.W.H.	1627	Div 1
U.C.	1640	Div 1

R.C.	<i>Kenneth T. McGowan</i>	1	D.C.	<i>John J. Hodgens</i>	1	PAGE
	Kenneth T. McGowan	1611		John Hodgens		2 OF 2
	TYPE FULL NAME	TIME OF ARRIVAL		TYPE FULL NAME	TIME OF ARRIVAL	

FIRE RECORDS

REPORT - STRUCTURAL FIRE

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		COS. RESP.																							
1	01	5	010	11	01	05	00	15	3	1	7	1	0003	0000	01	150	03	2																	
COMMUNITY BOARD		BLOCK NUMBER		YEAR		HOURS		MINUTES		HOW REPORTED		INITIAL ALARM		BOX NUMBER		REPORT NUMBER		ENGINE NUMBER		FIRE ENGINE NUMBER		FLOOR CODE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE							
AIDED AND CASUALTIES		EXTINGUISHMENT		EQUIP INVOLVED		HEAT FORM		MATERIAL TYPE		FACTOR		CONSTRUCT		STATUS		BLDG DAMAGE		FLOOR CODE		AREA CODE		OCCUPANCY		MANNER OF OCCUPANCY		NO. BLDGS. WITHIN BLDG.		SMOKE DETECTORS		OCCUPANCY'S		SPECIAL USE			
EVACUATED		FIRST AID		INJURED		KILLED		CIVILIANS		UNFURNISHED		SPRINKLER CODE		STANDPIPE TAPES USED		EQUIP STAGE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE			
NUMBER		STREET NAME		TYPE		BUILDING		AREA		BUILDING		AREA		BUILDING		AREA		BUILDING		AREA		BUILDING		AREA		BUILDING		AREA		BUILDING		AREA			
100		World Trade Center		126		130		104		106		108		110		112		114		116		120		124		128		132		136		140			
NAME OF OCCUPANT		ROOM, APT. NO.		YR.		MAKE		MODEL		SIN		POWER		LEFT IN CHARGE		NAME		ADDRESS		CITY		STATE		ZIP		CITY		STATE		ZIP		CITY		STATE	
K. S. D. Gale Raggio		900x500		133		900		500		900		500		900		500		900		500		900		500		900		500		900		500		900	
EQUIPMENT INVOLVED IN IGNITION		UNIT		PTS.		ITEM		YR.		MAKE		MODEL		SIN		POWER		LEFT IN CHARGE		NAME		ADDRESS		CITY		STATE		ZIP		CITY		STATE		ZIP	
5		10		5		007		05		15		006		05		17		010		10		17		001		10		10		17		001		10	

OPERATIONS

Upon arrival to box 8093, at the World Trade Center complex found the following conditions. Proceeded to W.T.C. Command Post and was informed by Port Authority P.D. of heavy smoke condition on B4 level in area under trade center between nos. 1&2 WTC. Report from companies was for fire in storage closet of mens bathroom in this area, with three sprinkler heads activated keeping fire under control until arrival of F.D. units Co's operated VIZ:

Joseph L. Barracato
 TIME OF ARRIVAL: 0408
 DIV: D.C.
 TYPE FULL NAME: Joseph L. Barracato
 TIME OF ARRIVAL: 1012
 PAGE 1 OF 2

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION				
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NO.	BUILDING NO.	TERM. STAGE	EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTR. TYPE	USE	STATUS	FLOOR CODE	Rm./AREA CODE	OCCUPANCY	MANNER OF OCCUPANCY	
6	11	01	85	04	05	1	8093													

NUMBER (INCL. HYPHEN)	SUFFIX	PREFIX	STREET NAME	TYPE	SUFFIX	IF MOBILE PROPERTY
182			WTC			

YR.	MAKE	MODEL	SERIAL NO.	LICENSE	STATE

UNIT	PTS.	189	195	201	207	213	219	225	231	236

OPERATIONS

- E-10 stretched line into fire area from standpipe and extinguished all remaining in closet area
- E-7 Stretched line from opposite side of fire and stood fast
- E-6 assisted E10 in stretching line and relieved on line and then washdown
- L-10 found fire and performed necessary VES and overhaul in area, made primary and secondary search, then up
- L-1 performed necessary VES and checked for possible extension in surrounding areas

Times: 10-84 0408
 10-75 0410
 All Hands 0425
 10-41-1 0425

B.C. Joseph L. Barracato 1 D.C. _____

BN. _____ DIV. _____

Joseph L. Barracato 0408 _____

TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

PAGE 2 OF 2

REPORT - STRUCTURAL FIRE

BF-24 (1180)-175M-60853 (83)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		HOW REPORTED		BOX LOCATION		REPORT		COS. RESP.		
ADMIN. COMPANY	BLOCK NUMBER	MONTH	DAY	YEAR	HOUR	MINUTE	HOURS	MINUTES	HIGHEST ALARM	BOX NUMBER	BOX LOCATION	REPORT NUMBER	BATTALION	ENGINE NUMBER	LADDER MAKE	
1	015	07	06	07	01	10	01	10	1	1	1	1	1	075	04	2

AIDED AND CASUALTIES		EXTINGUISHMENT		IGNITION		STRUCTURE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE												
EVACUATED	FIRST AID	INJURED	KILLED	UNFORMED	CODE	SPRINKLER	STANDPIPE	TEAM STAGE	EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	CONSTRUCT	STATUS	BLDG DAMAGE	FLOOR CODE	RM AREA CODE	OCCUPANCY	MANNER OF OCCUPANCY	NO. BLDGS WITHIN BLDG	SMOKE DETECTORS	SPECIAL USE			
00	00	00	00	2	02	01	2	00	00	99	75	00	1	15	1	1	1	1	1	1	1	1	2	3

NAME OF OCCUPANT		STREET NAME		BUILDING		EQUIPMENT INVOLVED IN IGNITION	
NUMBER	APT. NO.	STREET NAME	TYPE	NO.	APT. NO.	YR.	MAKE
1	106	WTC	I	106-107	106	99	STOKES

EQUIPMENT INVOLVED IN IGNITION		LEFT IN CHARGE	
UNIT	PTS.	ITEM	POWER
5	007	1010	105
10	5	006	05
15	010	05	10
20	05	010	05
25	001	05	07
30	001	05	07

OPERATIONS

Received 1st alarm for a heavy smoke condition on the 110th floor. While responding received 2nd. source and the box was filled out. Upon arrival found fire in garbage dumpster on the 106th floor. Sprinklers in operation and a heavy smoke condition on 106-110th floors. - Units operated V12: Transmitted 10/76.

B.C. Paul A. Tate BIN. 1 D.C. 1

TYPE FULL NAME Paul A. Tate TIME OF ARRIVAL 01:15 DIV. 1 PAGE 1 OF 1

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION							
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NO.	BUILDING NO.	TERM STAGE	EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCT	USE	STATUS	BLDG DAMAGE	COUNT'S DMG	FLOOR CODE	RM AREA CODE	OCCUPANCY	MANNER OF	OCCUPANCIES	
6	06	07	86	09	49	1	8084	0	3	00	00	99	75	1	15	1	1	1	94	57	40	00	99

NUMBER (INCL. HYPHEN)	SUFFIX	PROV. DIRECT.	STREET NAME	TYPE	SUFFIX	PROV. DIRECT.	IF MOBILE PROPERTY
1			WTC				

YR.	MAKE	51	54	MODEL	79	SERIAL NO.	LICENSE	STATE

UNIT	PTS.	195	201	207	213	219	225	231	236
1	001	05	5	003	02				

OPERATIONS

L.7- Upon arrival reported to 106th floor and stretched from standpipe to fire and extinguished same. Fire in dumpster assisted L.10 in making search of area. Negative

L.6 Reported to 106th floor. Ordered to stand fast. Then up.

L.10 Reported to 106th Floor. Ordered to stand fast. Then up.

L.10 Reported to 107th floor. Found fire in compactor room. Sprinkler in operation. Forced entry to sprinkler shut-off room. Shut same. Made necessary search and examination. Then up.

L.1 Reported to 107th floor. Assisted Ladder 10 in search and examination. Negative search. Then up.

R-1 searched floors above fire. Light smoke. Negative. Then up.

L.3/Air-raise Unit: ordered to 10-2

Field Comm Unit: - ordered to 10-2

Batt. 4: supervised operations on 106-110 floors. Units L.7, L.10 L.1 and R-1. Then up.

B.C. _____ BN. _____ D.C. _____ DIV. _____

_____ TIME OF ARRIVAL _____ TYPE FULL NAME _____ TIME OF ARRIVAL _____

ADMINISTRATIVE COMPANY

PAGE
OF

REPORT — STRUCTURAL FIRE

BF-24

BF-24 (12/88) REV. 01/88

TYPE REPORT		COMMUNITY BOARD		MONTH		DAY		YEAR		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		HOW REPORTED		MIDDLE ALARM		BROUOH ALARM		BOX LOCATION		BOX NUMBER		INCIDENT NUMBER		INCIDENT LOCATION		REPORT		COMPANIES RESPONDING		HAZ. MAT.		SPECIAL EQUIP.		REMOVED EQUIP.		
1	01	5	01	09	30	91	1832	01	35	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10

AIDED AND CASUALTIES		EXTIN. GUISHMENT		IGNITION		STRUCTURE		FIRE ORIGIN		FIRE EXTENSION		DAMAGE		DETECTORS	
ENRAGED	KILLED	UNFROD	SPR	WATER	STATUS	COMPLX	AREA OF ORIGN	MANAGER	IN BLDG	FLAME	SMOKE	GLASS	SMOKE	SMOKE	
00	00	01	6	1	1	1	1	1	1	1	1	1	1	1	

ADDRESS		STREET NAME		TYPE		START		STOP		WIDTH		LENGTH	
1	1	1	1	1	1	1	1	1	1	1	1	1	1

OPERATIONS

Upon arrival to the box we found the following conditions: Fire in an office on the B4 level of 1 WTC. Co's operated vizi. E 10 - took position and hooked up to hydrant, stretched line & operated to extinguish fire. E 7 - stretched 2nd line and operated to extinguish fire. E 6 - relieved Eng 10 and washed down. L 10 - performed necessary VES of of fire floor, performed primary search-negative, overhauled. L 1 - searched floor above, for extension-negative, performed secondary search of the fire floor-negative

Port Authority Police Officer Blapson

NAME OF OCCUPANT: _____ ROOMAPT: _____ YR: _____ MAKE: _____

EQUIPMENT INVOLVED IN IGNITION

UNIT	PTS.	ITEM
5	010	10
7	010	10
5	007	10
2	001	10
5	006	10

LEFT IN CHARGE: _____ MODEL: _____ SERIAL NUMBER: _____ POWER: _____

DEFECTIVE DETECTOR

BRAND	SERIAL NO.

PAGE 1 OF 1

REPORT - ADDITIONAL DATA
STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED					BOX LOCATION		INCIDENT NUMBER		BUILDING NAME			IGNITION		STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION				
MONTH	DAY	YEAR	HOUR	MINUTE	SECOND	BOX NUMBER	INCIDENT NUMBER	BUILDING NAME	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER	PERFORMANCE	FLOOR	OCCUPANCY	AREA CODE	MANPOWER	OCCUPANCY	REVISED REPORT			
6	11	10	91	18	27	1	8084	0562	00	3	41	2	2	13	61	1	59	1	93	81	52	09	04	0

NUMBER (INCL. HYPHEN)	STREET NAME	TYPE	HEIGHT
1	WORLD TRADE CENTER		

DAMAGE		DETECTORS	
IS CALLED	FLAME	SMOKE	WATER
0	0	0	0

STORIES	WIDTH	LENGTH
99	0250	0250

IF MOBILE PROPERTY	TYPE	YR.	MAKE	MODEL	V.I.N.	LICENSE	STATE

UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	
5	205	02	5	279	02	5	055	02	5	024	02	5	015	02
7	010	30	7	001	30	7	015	30	7	008	20	7	110	10
7	010	30	7	001	30	7	015	30	7	008	20	7	110	10

OPERATIONS

STRATEGY: To attempt to contain the fire situation to electrical closets, and to prevent panic and hysteria in occupancies with large civilian populations, and establish parameters of fire and smoke condition as quickly as possible.

Action taken:

1. On arrival at WTC command post, assumed command of fire situation,
2. Communicated with Ladder Co. 10 who confirmed fire situation on floors 93, 94, 95 and possibly on 96,
3. Ordered the transmission of signal 10-76 based on: potential for large volume of fire, height to fire area, time involved in units response, difficulty in effecting good voice communications in building,
4. Ordered Manhattan Dispatcher to alert 10-76 arriving units to assemble in Lobby Staging area, pending unit assignment,
5. Ordered first alarm units to conduct diligent search.
6. Ordered 1st alarm Engine companies to stretch from the "A" stairwell, but not to use water until confirmation of power off was received for electrical closets,

Lawrence M. Byrnes	ONE	E.N.	1830	DC		DIV.	2
TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED

BF-24A (12/86) WFO-60000-1000-1

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT			DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.				IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION		
MONTH	DAY	YEAR	HOUR	MINUTE	SECOND	BOX NUMBER	ALARM NUMBER	BUILDING NO.		FLYING	TYPE	MATERIAL	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANAGER	OCCUPANCY	REVISED ACCOUNT		
6	11	19	91	18	27	1	0084	0562	00	3	41	25	43	61	1	591	1	93	81	52	09	04	0

NUMBER (INCL. HYPHEN)	STREET NAME	TYPE	ZIP CODE
11	WORLD TRADE CENTER		

DAMAGE		DETECTORS	
% DAMAGE	FLAME	SMOKE	WATER
PRESENT	TYPE	POWER	PERFORMANCE
2	1	1	1
0	0	0	0
0	0	0	0

World Trade Center

BUILDING	AREA	
	WIDTH	LENGTH
99	0250	0250

IF MOBILE PROPERTY

TYPE	YR.	128	MAKE	143	MODEL	158	V.I.N.	225	LICENSE	STATE

185	195	201	207	213	219	225	231

OPERATIONS

- Confirmed with WTC personnel, engineering staff as to time frame for electrical power removal for effected floors,
- Denied WTC Police request to initiate general evacuation of floors "93 to roof level", based on unknowns of: a. smoke conditions, b. stair availability, c. numbers of people that may be involved,
- Upon notification by WTC Engineering staff of (2) elevators stuck at floor 88 and 101, Ladder Co. 6 assigned task of victim removal, as accompanied by WTC elevator mechanic,
- As Chief Officers arrived at Command Post they were issued WTC Handie Talkies and their assignments,
- Called for EMS response for reported burn victim (mechanic with facial burns and for possible needs,
- Primary search of upper floors proved to be time consuming due to large floor area and limited Handie Talkie capabilities, conducted by 1st alarm trucks,
- Rescue Company 1 assigned to follow up secondary search of floors with subsequent assisting Ladder companies
- 10-76 Signal proved very effective, provided immediate response of Chief Officers to initiate various sector controls.

BC	Lawrence M. Byrnes	1830	oc.		DIV.	3
	TYPE FULL NAME	TIME ARRIVED		TYPE FULL NAME	TIME ARRIVED	

BF-24A (12/86) 15712-011531-00229-11

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT			DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER			BUILDING NO.			IGNITION			STRUCTURE			AREA OF ORIGIN		FIRE EXTENSION	
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	INCIDENT NUMBER	BUILDING NO.	CORE OR APPROX. EQUIP. INVOLVED	FLAME FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS CODE	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY	REVISED REPORT			
6	11	1991	18	27	11	2084	0562	001341	23	43	61	1	591	1	193	81	52	09	04	0				

BORO	NUMBER (INCL. HYPHEN)	SUFFIX PREFIX	DIRECT	STREET NAME	TYPE	SUFFIX DIRECTION
1	1			WORLD TRADE CENTER		

DAMAGE			DETECTORS					
SPX. PERFORMANCE	% DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER	PERFORMANCE
2	1	1	0	0	0	0	0	0

World Trade Center

BUILDING	AREA	
	WIDTH	LENGTH
53	00	0250
114	0250	0250

IF MOBILE PROPERTY		TYPE	YR.	MAKE	MODEL	V.I.N.	LICENSE	STATE

UNIT	PTS.	OPERATIONS

Chief Officers at scene:

DAC. E. Butler,,, CW Duty,
 DC. H. Meyer5 Div. 1,
 DC. V. Dunn Div. 3,
 B.C. L. Byrnes Batt. ONE,
 B.C. R. Ardisson Batt. 2
 B.C. Davison Batt. 4,
 B.C. Roche Batt. 6,
 B.C. Shelley Batt. 31,
 B.C. Wagner Batt. 32,
 B.C. Dawe Batt. 7,
 B.C. Cesark Safety Battalion.

Personnel Present at Scene:

R. Schirer Fire Comm. Liaison,
 D.C. Basile EMS Supervisor,
 Lt. Valle NYPD Pct. 1 supervisor,
 Mr. T. Cancelliere WTC Bldg Mgr.,
 (2) Representative of Salvation Army.

B.C.	ONE	D.C.	DIV.
TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED
Lawrence M. Byrnes	1830		

DF-24A (12/66) **REPORT - ADDITIONAL DATA**
STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER		BDR. DIV. NO.		IGNITION		STRUCTURE		APERT. CODE	
MONTH	DAY	YEAR	HOUR	MINUTE	BOREHOLE	BOX NUMBER	INCIDENT NUMBER	INCIDENT NUMBER	BDR. DIV. NO.	CAUSE OR MEANS	EQUIP. INVOLVED	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	FLOOR	FLOOR	APERT. CODE
6	11	1991	18	27	1	8088	0562	00	3	41	23	15	61	1	391	1	53

NUMBER (INCL. HYPHEN)		SUBTYPE		STREET NAME	
57	1	57	1	WORLD TRADE CENTER	

DAMAGE		DEFECTORS	
PERFORMANCE	PERFORMANCE	PERFORMANCE	PERFORMANCE
FLAME	SMOKE	WATER	PRESENT
TYPE	POWER	PERFORMANCE	
21	1	0	0

World Trade Center

IF MOBILE PROPERTY

TYPE	YR.	128	MAKE	140	MODEL	158	V.I.N.
169	195	201	207	213	219	225	
227	UNIT	PTS.	243	249	255	261	267

OPERATIONS

Unit Operations:

Eng. 10: Responded to the 93rd floor, stretched 2 1/2" hose, hooked up to standpipe in assisted Lad. 10 in search and size up 94th floors, used a fog nozzle to extinguish in electrical closets, assisted in evacuating civilians, connected to buildings standpipe.

Eng. 6: Responded to the 95th floor, stretched 2 1/2" hose, stood fast, assisted in clearing of fire area, connected to and supplied siamese.

Eng. 7: Responded to the 93rd floor, stretched 2 1/2" hose from the "B" stairway, opened ECC, connected to standpipe and supplied.

Eng. 4: Responded to the 97th floor, hooked up 2 1/2" hose, stood fast, assisted in clearing.

Following Engine Companies reported to Lobby stood fast: Eng. 18, 205, 24, 10, and 204.

** E-10 also used dry chem on 93

AC _____ ONE _____ dc _____
 R.N. _____
 Lawrence M. Byrnes 1830
 TYPE FULL NAME TIME ARRIVED

BF-24A (12/86)

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	BUILDING OR APART. EQUIP. INVOLVED	IGNITION		STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION					
MONTH	DAY	YEAR	HOUR	MINUTE	BOX NO.	BOX NUMBER	MATERIAL TYPE				MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANAGER	OCCUPANCY	REVISED REPORT		
6	11	19	91	18	27	1	8084	0562	00	341	23	43	61	1	591	1	93	81	52	09	01	0

PROPERTY	NUMBER (INCL. HYPHEN)	STREET NAME	TYPE	STATE
1	1	WORLD TRADE CENTER		

DAMAGE		DETECTORS	
% DAMAGED	PLANE	SMOKE	WATER
PRESENT	TYPE	POWER	PERFORMANCE
2	1	1	1
0	0	0	0

World Trade Center

BUILDING		AREA	
STORIES	WIDTH	LENGTH	
99	0250	0250	

IF MOBILE PROPERTY		OCCUPANT (Driver)		ROOM/APT.	
TYPE	YR.	MAKE	MODEL	V.I.N.	LICENSE

UNIT	PTS.	UNIT	PTS.	UNIT	PTS.	UNIT	PTS.

OPERATIONS

UNIT OPERATIONS cont:

- Lad. 10: Conducted primary search on floors 93, 94, 95, and 96, and 97. Unit split into 3 teams, located fire condition in electrical distribution closets, called for placement of hand lines, conducted opening up operations on 94th floor to check for fire extension, evacuated unknown member of civilians from floors 94 through 95 during initial operations,
- Lad. 1: Conducted primary search on 93rd floor, conducted secondary search on floors 94 to 101, proved to be negative, conducted survey on floors 81 through 92 for water damage to electrical closets due to hand-line use, negative.
- Lad. 15: Conducted primary and secondary searched of floors 93 to 97, negative results,
- Lad. 8: Conducted examination of floors 92 to 101 for possible fire extension from electrical closets, negative, conducted secondary search on floors 94 and 95,
- Lad. 110: Performed secondary search of floors 96 through 110, negative results,

B.C.	ONE	DC.	DIV.
Lawrence M. Byrnes	1830		
TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED

REPORT - ADDITIONAL DATA
STRUCTURAL FIRE - TRANSPORTATION FIRE - NON-STRUCTURAL FIRE OR EMERGENCY

TYPE PERCENT		DATE AND TIME				BOX LOCATION		INCIDENT NUMBER				BUILDING NO.				IGNITION				STRUCTURE				AREA OF ORIGIN				FIRE EXTENSION	
MONTH	DAY	YEAR	HOUR	MINUTE	BOX NUMBER	BOX LETTER	NUMBER	ALPHA	BETA	GAMMA	DELTA	FLOOR	WING	SECTION	TYPE	MATERIAL	CONSTRUCTION	USE	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY	REBBS REPORT					
6	11	11	01	16	27	1	2024	0562	00	3	41	23	43	61	1	5	91	1	93	81	5	2	09	04	0				

ADDRESS		STREET NAME		TYPE	
NUMBER (INCL. HYPHEN)	SUFFIX	STREET NAME	TYPE	STREET	PREVIOUS
111		WORLD TRADE CENTER			

DAMAGE		DETECTORS	
PERFORMANCE	PERFORMANCE	PERFORMANCE	PERFORMANCE
2	1	1	1

BUILDING		AREA	
STORIES	WIDTH	LENGTH	
9	0250	0250	

OCCUPANT (Driver)		ROOM/APT.	
TYPE	YR.	MAKE	MODEL

IF MOBILE PROPERTY		LICENSE		STATE	
TYPE	YR.	MAKE	MODEL	V.I.N.	LICENSE

OPERATIONS

Unit Operations Cont:

Lad. 6: Conducted secondary search 66 floors 105 to 110, negative results, removed (2) civilians from stalled elevators on the 38th and 101st floors, no injuries to civilians, or damage to building.

Lad. 20: Conducted secondary search of floors 98, 99, and 100 negative results.

Lad. 131: Conducted search of floors 105 to 110, with negative results.

Field Communications Unit: Set up Communications/Command Post in Basement, WYC Command Post,

Battalion 2 supervised Lobby Staging Area,

Battalions 4, 6, and 7 operated on various floors with units so assigned,

Division 3 operated as Operations OIC on various floors.

Division 1 operated at the Command Post as CIC.

<p style="text-align: center;"><i>Lawrence M. Byrnes</i></p> <p style="text-align: center;">Lawrence M. Byrnes</p>	<p>ONE</p> <p>B.N.</p> <p>1830</p>	<p style="text-align: center;"><i>Harold Meyer</i></p> <p style="text-align: center;">Harold Meyer</p>	<p>DIV.</p> <p>8</p>
TYPE FULL NAME	TIME ARRIVED	TYPE FULL NAME	TIME ARRIVED

INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		ALARM RECEIVED		REPORT		COMPANIES RESPONDING		FIRE ORIGIN		FIRE EXTENSION		DAMAGE		DETECTOR	
WORLD TRADE CENTER		07-23-02 02:50		02:50		02:50		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER	
STREET NAME		STREET NUMBER		CITY		STATE		ZIP		FLOOR		AREA		AREA		AREA		AREA	
WORLD TRADE CENTER		110		NEW YORK		NY		10048		110		110		110		110		110	
FLOOR		FLOOR		FLOOR		FLOOR		FLOOR		FLOOR		FLOOR		FLOOR		FLOOR		FLOOR	
110		110		110		110		110		110		110		110		110		110	
OFFICER		OFFICER		OFFICER		OFFICER		OFFICER		OFFICER		OFFICER		OFFICER		OFFICER		OFFICER	
Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.		Mr. Tom Cancelliere, Mgr.	
EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION		EQUIPMENT INVOLVED IN IGNITION	
WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER	
WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER		WORLD TRADE CENTER	

Response to alarm of fire, reported as a transformer fire, on the 5th sub basement level. Upon confirmation of fire requested box transmission.

Strategy here is to identify fire area, conduct required primary and secondary searches for effect ventilation of fire area, limit smoke condition build up in building, limit amount and duration of service interruption in the Twin Towers complex.

REPORT - ADDITIONAL DATA
STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT			DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	IGNITION			STRUCTURE			AREA OF ORIGIN		FIRE EXTENSION			
MONTH	DAY	YEAR	HOUR	MINUTE	SECOND	BOX NUMBER	ALPHA	GRID OR AREA			COUP INVOLVED	HEAT SOURCE	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	FLOOR	STAIRS	FLOOR CODE	OCCUPANCY	AREA CODE	STAIRS	OCCUPANT
6	07	23	92	22	02	1	8093	0455	01	342	24	43	61	1	542	1	99	2	69	00	99	0

NUMBER (INCL. HYPHEN)	STREET NAME	TYPE	CURVE DIRECTION
99-0200-0400	WORLD TRADE CENTER		

SPK PERFORMANCE		DAMAGE			DETECTORS	
OR DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER
0	0	0	0	0	0	0

IF MOBILE PROPERTY	TYPE	YR.	128	MAKE	143	MODEL	158	V.I.N.	169	LICENSE	STATE

185	195	201	207	213	219	225	231
7 010 20	7 001 20	7 008 20	7 006 20	1 001 20	10092200	5 024 12	5 003 12
5 005 12	7 015 12	7 020 12					

OPERATIONS

Due to high electrical voltage (13000 volts confirmed, no water was used in initially, pending confirmation of power off at the electrical distribution panel.

Due to large floor area of the 5th floor-sub-basement, responding units were split into teams viz: Ladder Co. 10 and Engine 10 using the K13 stair to approach the fire area, Ladder 1 to use 2nd stairway-K12, to access the 5th sub. basement level. These units were tasked with pin-pointing the fire area, an area of 200' x 400'.

A member of Ladder Co. 1 having found the fire situation in a very large power distribution panel, attempted to relay information to his officer. Prior to his transmission firefighter was struck by a shock blast generated by the involved panel. Ladder 1 firefighter knocked unconscious required a concerted effort to remove to a separate safe area.

Unit Operations.

Engine 10 - Operated on 5th sub level, stretched a 2 1/2" hand line from the standpipe, operated when power off confirmation received. Company

Engine 7 - Operated on fire floor with line off standpipe, operated under B.C. Demarest, Batt. 4, extinguished fire, used dry chemical extinguishers on fire.

DC: <i>Lawrence M. Byrnes</i> Lawrence M. Byrnes TYPE FULL NAME	1 B.N. 2205 TIME ARRIVED	DC: _____ _____ TYPE FULL NAME	DIV. 3 _____ TIME ARRIVED
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3F-24A (12/86) REPORT ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT				DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER				BUILDING NO.				IGNITION				STRUCTURE				AREA OF ORIGIN				FIRE EXTENSION	
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGHS	BOX NUMBER	INCIDENT NUMBER	BUILDING NO.	END BR	EQUIP INVOLVED	HEAT SOURCE	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY	REVIS'D REPORT									
6	07	23	92	2202	1	8093	0455	01	3	42	24	43	61	1	642H1	99	32	63	00	99	0										

ADDRESS				STREET NAME				TYPE	
NO.	SUFFIX	PREF.	DIRECT	STREET NAME				TYPE	SUFFIX DIRECTION
				WORLD TRADE CENTER					

DAMAGE				DETECTORS			
SPK. PERFORMANCE	% DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER PERFORMANCE
0	0	0	0	0	0	0	0

OCCUPANT (Driver)				ROOM/APT.			
NO.	NAME	TYPE	NO.	NO.	NO.	NO.	NO.
94	Poet Authority NY/NJ		113	5th sub. base.			

BUILDING			
STORIES	AREA	WIDTH	LENGTH
99	0200	0400	

IF MOBILE PROPERTY				MAKE				MODEL				V.I.N.				LICENSE		STATE	
TYPE	YR.	126	128	143	145	147	149	151	153	155	157	159	161	163	165	167	169	171	173

OPERATIONS								
UNIT	PTS.	243	249	255	261	267	273	279

Operation cont:

Engine 6 - Assisted Eng 7 in stretch of and operation of a 2½" line into fire area, performed search of area, overhauled as necessary,

Engine 55 - Operated with and relieved Eng. 7 on hand line on fire floor, took up hose lines,

Engine 4 - Under supervision of BC. Turnes, B2, transported injured member of Lad. 1 to ambulance on the B1 level of the fire building, relieved Eng. 10 on a hand line, overhauled, took up hand line,

Engine 24 - Transported Air Cylinders fire area under supervision of BC. Jackson,

Engine 3 - Ordered to and did provide air cylinders to operating units of the B5 level.

Engin

Engine 5 - Operated as Command Post Company

Stood Fast - Eng9Sat1, Engines 15, 28. 33, 34, 207/Maxi, 284/Sat.3,

BC Lawrence M. Byrnes 1

Lawrence M. Byrnes 2205

TYPE FULL NAME TIME ARRIVED

CRC 226

DIV. 3

BF-24A (12/86) **REPORT - ADDITIONAL DATA**
STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION				
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	BOX NUMBER			COND. ON ARRIVAL	EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER
6	07	23	92	22	02	1	8093	0455	01	3	42	24	43	61	1	99	32	63	00	99	0

BORO	NUMBER (INCL. HYPHEN)	SUFFIX	PREFIX	DIRECT	STREET NAME	TYPE	SUFFIX	DIRECTION
					WORLD TRADE CENTER			

SPL. PERFORMANCE		DAMAGE		DETECTORS			
% DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER	PERFORMANCE
0	0	0	0	0	0	0	0

OCCUPANT (Driver)	ROOM/APT.
Port Authority NY/NJ	5th sub base.

IF MOBILE PROPERTY	TYPE	YR.	128	MAKE	143	MODEL	158	V.I.N.	LICENSE	STATE	D

189	195	201	207	213	219	225	231

237	UNIT	PTS.	243	249	255	261	267	273	279

OPERATIONS

Operations cont:

Ladder 1- Operated at the B5 level, conducted search to pinpoint the fire area, conducted a primary search for possible employees trapped. FF. Amodio injured in explosion of 13000 volt distribution panel,

Ladder 10- Performed a search of the B5 level to identify the fire area, and searched for possible trapped employees, gathered and used dry chemical extinguishers on the fire prior to power removal, overhauled as required,

Ladder 8- Performed a secondary search of the fire area, used dry chemical extinguishers, assisted in overhauling,

Ladder 6- Placed and used portable exhaust fans in stairwells to effect ventilation, took up,

Ladder 15- Supplied spare SCBA cylinders to staging area,

Ladder 20- Supplied spare SCBA cylinders to staging area,

B.C. Lawrence M. Byrnes 1 B.N. D.C. _____ DIV. _____

Lawrence M. Byrnes 2205 TYPE FULL NAME TIME ARRIVED

CRC 228

BF-24A (12/86)

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER		IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION						
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	INCIDENT NUMBER	BUILDING NO.	CAUSE ON ARRIVAL	EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY	REVISED REPORT		
6	07	23	92	22	02	1	8093	0455	01	3	42	24	43	61	1	642	1	99	63	63	00	99	0

ADDRESS		STREET NAME		TYPE		
BORO	NUMBER (INCL. HYPHEN)	SUFFIX	PREFIX	DIRECT	TYPE	SUFFIX
1					WORLD TRADE CENTER	

DAMAGE		DETECTORS	
SPK. PERFORMANCE	% DAMAGED	FLAME	SMOKE
0	0	0	0

OCCUPANT (Driver)		ROOM/APT.	
NAME	ROOM/APT.	STORIES	AREA
Port Authority NY/NJ	5th sub. base.	99	0200 0400

IF MOBILE PROPERTY		TYPE		MAKE		MODEL		V.I.N.		LICENSE		STATE	
TYPE	YR.	MAKE	MODEL	V.I.N.	LICENSE	STATE							

OPERATIONS

Operation cont:

- Rescue 1- Company split to perform several operations-
1. Assisted in administering first aid to Injured firefighter,
 2. Conducted secondary search of fire area, negative,
 3. Used Thermal Camera to check for possible fire extension,

Rescue 2- Assisted (2) civilian electricians (with SCBA's) to confirm power off in electrical panel, relayed confirmation of power off to Command Post. Assisted in hand line operation, assisted in VES of fire floor.

Chief Officers present:

- | | |
|---------------------------|-----------------------|
| DAC R. Palmer, CW Duty | |
| DC. R. Manson Div. 1, | |
| B.C. L. Byrnes Batt. 1, | B.C. Costa Batt. 7, |
| B.C. W. Demarest Batt. 4, | B.C. Miccio Batt. 6, |
| B.C. R. Turner, Batt. 2, | B.C. Nardone Batt. 9. |
| B.C. JACKSON Batt. 33, | B.C. ROSS Batt. 31. |

BC. Lawrence M. Byrnes 1 B.N.	DC. _____ DIV. _____ PAK
_____ TYPE FULL NAME	_____ TIME ARRIVED
_____ TYPE FULL NAME	_____ TIME ARRIVED

F-24A (12/86) 15HZ-861531-028-N

REPORT -- ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION			
MONTH	DAY	YEAR	HOUR	MINUTE	BOX NUMBER	BOX NUMBER	COND. ON ARRIVAL			EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY
6	11	10	9	23	01	1	8084	0648	00												
ADDRESS		BORO		NUMBER (INCL HYPHEN)		SUFFIX		PREFIX		DIRECT		STREET NAME				TYPE		SUFFIX		DIRECTION	
11												WORLD TRADE CENTER									
SPL. PERFORMANCE		DAMAGE		DETECTORS																	
% DAMAGED		FLAME		SMOKE		WATER		PRESENT		TYPE		POWER		PERFORMANCE							
48		53		94		113		OCCUPANT (Driver)		ROOM/APT.		B		S		T		O		R	
IF MOBILE PROPERTY		TYPE		YR.		MAKE		MODEL		V.I.N.		LICENSE		STATE		DM					
189		195		201		207		213		219		225		231							
237		UNIT		PTS.		243		249		255		261		261		273		279			

OPERATIONS

E-7 Stretched precautionary line from standpipe.
 F.S.D. for World Trade Center - Mr. Mike Hurly.
 O.E.M. Lt. Wilson.

F.M. Kregler #361 responded on BFI's own knowledge of prior suspicious activity. Job #11201.

B.C. _____	<i>John M. Akerman</i>	01	B.N. _____	D.C. _____	DIV. _____	PAGE 2 OF
Bc John Akerman	23:07					
TYPE FULL NAME		TIME ARRIVED		TYPE FULL NAME		TIME ARRIVED

Appendix E SIGNIFICANT FIRES IN WTC 2

Significant fire incidents occurring in WTC 2

Significant Fire	Incident Date	Fire Location	# Sprinklers Activated	# Standpipes Activated	Cause of Fire	Material Ignited
1	5/19/75	Floor 32	-	3	Incendiary	Trash/waste
2	4/12/77	Duct work over grill in restaurant on floor 107	2		None listed	Duct work
3	3/22/93	Fan motor room on floor 108	2		Mechanical failure	Not classified

INFORMATION REPORT USE ONLY	DATE AND TIME ALARM RECEIVED										DURATION OF ALARM										LOCATION										INCIDENT	REPORT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	YEAR	MONTH	DAY	HR	MIN	SEC	MIN	SEC	MIN	SEC	MIN	SEC	FLOOR	STAIR	ROOM	AREA	FLOOR	STAIR	ROOM	AREA	FLOOR	STAIR	ROOM	AREA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	05	19	75	21	38	03	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	142

REPORT	LOCATION	INCIDENT	OFFICER	DATE AND TIME	ALARM RECEIVED	CONT'D	REMARKS
E.27		Stretched line to 32nd fl. Operated to extinguish remaining fire. assisted in search. Overhauled fire area.					
L.10		Forced door to 32nd fl. - stairway "C". Operated house hose line to assist in making search. Then operated on 32nd fl. continuing search. Made examination. Then assisted in overhauling. Then relieved by L.1.					
L.1		Made search of floors 33, 34, and 35. Then made examination at 33rd fl. for extension of fire.					
E.10 (Spec. called)		Ordered to stand fast at 31st fl. Then relieved on hose lines 32nd fl. to assist in overhauling. Then took up lines of E.6 & 7.					
L.8 (Spec. called)		Assisted in making secondary search of office occupancies 32nd fl. Then relieved L.10 overhauling fire.					
Batt. 4 - Supervised units initially operating on the 32nd fl.							
Batt. 1 - Ordered to assist in supervision in fire area. Then relieved Batt. 4 and supervised secondary search, examination and overhauling.							
E.9		Ordered to stand fast. Then made search of 44th fl.					
E.55		Relieved operating units on the 32nd fl. where necessary.					
E.24		Made examination 20th, 40th and 60th fls. (2 WTC)					
E.17		Made search examination 20, 40th, 60th fls (1 WTC)					
L.15		Made search of perimeter office occupancies 32nd fl. Then made secondary search and examination of 44th fl. Then made final examination of 31st fl. core area.					
Batt. 32 Supervised examination in #1 WTC. Then supervised examination in #2 WTC 44th and 60th fls.							
Mar. 1		Stretched line to gate and ordered to stand fast.					
Res. 1		Administered Administered oxygen to Fr. O'Neill E.7. Then made examination for fire extension around perimeter of fire area and relieved 31st fl.					
Superpumper System Superpumper and Sat. 2 ordered to return to qtrs. Sat 1 ordered to stand fast at hook up site then to qtrs/							
FCU. Established Field Hdqts. monitored HT circuits. Transmitted Progress reports. Maintained central base.							
MSU - Serviced Units, Exchanged 30 cylinders.							
(Time of Special Calls: 2150 hrs. 2nd alarm: 2154 hrs. under control: 2257 hrs.)							
Chief Officers Operating:				BC Votruba, Batt. 1	BG Bagley, Bn		

REPORT STRUCTURAL FIRE																															
FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		HOW REPORTED			LOCATION			REPORT											
		TYPE REPORT	MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ALARM	INCIDENT	REPORT NUMBER	FILING BATTALION	BADGE NUMBER												
		1	04	12	77	1	1315	00	30	1	1	0	1	0070	5	006	0113	0058	01	999											
AIDED AND CASUALTIES										EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN															
CIVILIANS					RESP.	EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN																			
EVACUATED	FIRE AID	INJURED	KILLED	IDENTIFIED INJURED	RESP.	CAUSE	CAUSE	CONSTRUCT	USE	STATUS	STATUS	FLOOR CODE	ROOM OR AREA CODE	OCCUPANCY	MARKING OR TYPING																
00	00	00	00	00	02	00	0	1	15	1	0	1	07	33	40	00															
ADDRESS 2 World Trade Center Man										Windows on the World Rest.																					
BUILDING 110 400 x 400										NAME OF OCCUPANT Mr. Sarnelli FSD																					
STORIES										LEFT IN CHARGE																					
COMMENTS																															
7 001 0 05 5 006 0 05																															
TYPE NO. SECT. PTS.																															

OPERATIONS

On arrival found fire to be extinguished prior to arrival ;
 Fire was located in duct work over grills in in restaurant on 107 th
 floor, Bn. 1 notified dispatcher to notify board of Health of possible
 food contamination from heat smoke and gases in restaurant.

B. 6 Took rolled ups to 107 floor, stretched line and stood fast.

L. 1 Made necessary search and investigation.

F.P. 2 on scene replaced two sprinkler heads.

William M. Feehan 1
 B.N.
 ABC William M. Feehan 1318
 TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME

BT-24 (1/2/00) 6130P-HUGB-N

TYPE REPORT 1

INCIDENT LOCATION: 101 5 01 08 03 22 93 0839 00 40 10 1 01 8087 0286 0058 01 620 03 02 01 00 0000 01 00 00 00 00 00

DATE AND TIME ALARM RECEIVED: MONTH 03, DAY 22, YEAR 93, HOURS 08, MINUTES 39, SECONDS 40

INCIDENT DURATION: MINUTES 10, SECONDS 10

HOW REPORTED: INITIAL ALARM, BOX NUMBER 8087, REPORT NUMBER 0286

REPORT: INCIDENT NUMBER 0058, BATTALION 01, FLIGHT NUMBER 620, ENGINEER NAME 03, LADDER NUMBER 02, OTHERS 01, COMPANIES RESPONDING CLASS 00, HAZ MAT AMOUNT 00, SPECIAL USE 00

REVISION REPORT: 1, 2, 3

DEFECTIVE DETECTOR: BF-24

STRUCTURE: 101, 106, 110, 114

STREET NAME: 128, 129, 146, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400

OPERATIONS: Upon arrival at Box 8087 found smoke condition on the 108th floor caused by a overheated bearing in a fan motor room ACS-108-4. Smoke Det. caused 2 sprinkler heads to go off. Units operated VIZ: E10-Hooked up to standpipe on the 108th fl. stoodfast, then up. L10-Made necessary search and examination, found cause of smoke condition, checked for extension found neg. Then up. E6-Assisted L10 in search, then up.

Signature: Gordon Symon

Page: 1 of 3

F-24A (12/86) 15H-2-661531-902B-N

REPORT — ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION				
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	BUILDING NO. CONT. ON FORM#1			EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY
6	05	22	93	0839	1	8083	0058	00													
1	2		8	12		17		23		32		37		43		47					

ADDRESSES	BOUNDRY	NUMBER (INCL. HYPHEN)	SUFFIX PREFIX DIRECT	STREET NAME		TYPE	SUFFIX DIRECTION
		2		WTC			
	57		68			88	93

SPL. PERFORMANCE		DAMAGE			DETECTORS	
% DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER PERFORMANCE
48		53				

OCCUPANT (Driver)		ROOM/APT.	
94	113		123

BUILDING	STORIES	AREA	
		WIDTH	LENGTH

IF MOBILE PROPERTY		TYPE	YRL	128	MAKE	143	MODEL	158	V.I.N.	219	LICENSE	225	STATE	DM	231
		189		195		201		207		213		219		225	231
		237	UNIT	PTS	243	240	255	261	261	273	270				

OPERATIONS

E7-Assisted E10 in stretching line, then up.
 L1-Assisted L10 in search, then up.

1

B.C. Gordan Symon B.N. 1st D.C. _____ DIV. _____

_____ TIME ARRIVED 0844 _____ TIME ARRIVED _____

PAGE 2 OF 2

Appendix F

FIRES WITH STANDPIPES AND SPRINKLERS IN WTC 1 AND WTC 2

Additional fire incidents involving the deployment of standpipe lines in WTC 1 and WTC 2:

- Fires involving the use of one standpipe line and the activation of one sprinkler (4 in total)

REPORT - STRUCTURAL FIRE

BF-24 (12/86)

TYPE REPORT		COMMUNITY BOARD		MONTH		DAY		YEAR		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		SPECIAL USE												
1	01	5	010	03	24	91	2104	01	25	18	01	25	18	1	7	1	8084	0332	0406	01	380	07	05	05	000	0	1	2	3	
AIDED AND CASUALTIES		EXTIN. GUSHMEN		IGNITION		STRUCTURE		FIRE ORIGIN		FIRE EXTENSION		DAMAGE		DETECTORS																
CIVILIANS		KILLED		MATERIAL TYPE		MATERIAL FORM		HEAT FORM		EQUIP INVOLVED		EXTIN. GUSHMEN		MATERIAL TYPE		MATERIAL FORM		HEAT FORM		EQUIP INVOLVED		EXTIN. GUSHMEN		MATERIAL TYPE		MATERIAL FORM		HEAT FORM		
00	00	00	00	5	1	1	3	98	99	67	58	11	0	1	059	1	59	05	59	05	00	01	0	1	2	5	2	1	1	
BOND		STREET NAME		TYPE		SUITE		DIRECT		AREA		WIDTH/LENGTH		SERIAL NO.																
1	1	World Trade Center		1						99	0250	0250	0250	181																
NYPD		ROOM/APT		FLOOR		LEFT IN CHARGE		Sgt. Bleeker		NYPD		Sgt.		294																
EQUIPMENT INVOLVED IN IGNITION		UNIT		PTS		ITEM		MODEL		SERIAL NUMBER		POWER		BADGE NO																
W	5	010	10	5	007	02	5	004	05	7	A	10	7	001	10															
R	1																													

Chief officers & Officials on Scene

D.C. Hassett	MSFC	Signal	Time	By order of
B.C. Casey	Battalion 1	8084	2104	Disp.
B.C. Demarest	Battalion 4	10-76 8084	2110	Bn. 1
FM Corbett	#224	75 8084	2126	Div. 1
FSD Raggio	NYPD	U.C.	2128	Div. 1
Sgt. Bleeker	NYPD PD.	10-41-1	2133	Div. 1

B.C. *[Signature]* John B. Casey
 TYPE-FULL NAME
 TIME OF ARRIVAL 2109
 DC. Bruce Hassett
 TYPE-FULL NAME
 TIME OF ARRIVAL 2121
 PINK-REFERRAL
 RINK-ADMINISTRATIVE COMPANY

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Appendix G

FIRES WITH STANDPIPES IN WTC 1 AND WTC 2

Additional fire incidents involving the deployment of standpipe lines in WTC 1 and WTC 2:

- Fires involving the use of one standpipe line (27 in total)

TYPE OF FIRE	DATE AND TIME ALARM RECEIVED						LOCATION OF INCIDENT						REPORT		
	MONTH	DAY	YEAR	HOURS	MINUTE	SECONDS	ALARM	INCIDENT	ALARM	INCIDENT	ALARM	INCIDENT			
1	06	15	73	2015	00	45	21	01	0067	7	010	0033	0104	02	325

AIDED AND CASUALTIES						RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN										
CIVILIANS																				
EVACUATED	INJURED	DECEASED	PROPERTY DAMAGE	UNOCCUPIED	INJURED	CAUSE	STATUS	CONSTRUCT	USE	STATUS										
00	00	00	00	01	05	2	9	00	01	1	6+	1	15	1	1	1	06	57	50	00

ADDRESS: 1 World Trade Center Manhattan
NUMBER STREET BOROUGH

BUILDING: 110 200x200
STORIES AREA

Unoccupied 6518
NAME OF OCCUPANT ROOM NO.

Security Guards
LEFT IN CHARGE

5	006	0	10	7	010	0	10													
---	-----	---	----	---	-----	---	----	--	--	--	--	--	--	--	--	--	--	--	--	--

OPERATIONS

Upon arrival found fire in rubbish in room 6518 On the 65th. floor, fire confined and extinguished. Fire was in an unoccupied office of bldg E.6: Stretched line off standpipe extinguished. fire, had taken rolled ups to 65th. floor.

L.10: Overhauled, made necessary examination, ventilated.

On Scene: Fire Patrol #2.

Injured Member: Fr. 1st. Vincent Segretto #9050 Lad. 10, twist right knee. Dr. Schwartz notified. No time lost.

Louis Pike 2 John J. Hart 1
TYPE FULL NAME BN. DC TYPE FULL NAME DIV. PAGE

2017 2017
TIME OF ARRIVAL TIME OF ARRIVAL

FIRE RECORDS

REPORT - STRUCTURAL FIRE

DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		LOCATION				REPORT			
												ALARM		INCIDENT					
TYPE REPORT		MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ADMIN. COMPANY	ROOM NUMBER	REPORT NUMBER	FIREFIGHTING BATTALION	SERGEANT NUMBER
1		04	12	71	904	01	40	11	17	1	1	1	00707	010	0031	0096	01	999	

AIDED AND CASUALTIES				RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN											
CIVILIANS		FIRE																	
EVA. CURED	FIRST AID	INJURED	DECEASED	PROPERTY	CAUSE	STATUS	ROOM OF ORIGIN	NUMBER OF EXTENSION											
00	00	00	00	01	6	00	01	6	00	01	6	06	01	15	01	2	05	07	00

ADDRESS 2 World Trade Center				PORT AUTHORITY			
NUMBER	STREET	BOROUGH	NAME OF OCCUPANT	ROOM/APRT. NO.			
110	200x200		Mr. Sarnelli (Fire Safety Dir)				
BUILDING	STORIES	AREA	LEFT IN CHARGE				
(Second Card)							

5-006	5-007	20	5-027	12	010	20	001	20	008	0
7-015	10									

OPERATIONS

Received Alarm Class 3-70-4,
 On Arrival proceeded to the 5th. floor, smoke reported there and floors above.
 E-6 took in rolled-up lengths and masks, proceeded to check out 9th and 10th. floors, then checked 21st, 22nd, and 61st. floors.
 E-7 found fire, rubbish burning on foyer of 5th. floor, extinguished with line taken from standpipe.
 L-10 examined and overhauled, checked 14th to 17th. floors for smoke.
 L-1 checked following floors, 9, 10, 11, 61st and 69th. assisted in crowd control.
 E-27 checked 10th and 11th. floor and assisted in crowd control.
 L-8 checked the 80th thru 99th. floor.
 L-15 checked 100th thru 110th. floors.
 Deputy chief Hart was on scene.
 BC. Whitney supervised following Cos. L-1-, L-10, E-7, E-27 (Batt. 4)
 Sgt. Keaghan of FF-92 was on scene.
 Fire was also found on 49th. Floor, Extinguished on arrival, found and checked out by E-7. Fire Marshall Peritti Called, because of suspicious fire.

Charles M. Blauch 1

Charles M. Blauch	0907	John J. Hart	PAGE
TYPE FULL NAME	TIME OF ARRIVAL	TYPE FULL NAME	TIME OF ARRIVAL

REPORT - STRUCTURAL FIRE

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED						DURATION OF INCIDENT		HOW REPORTED			LOCATION			REPORT		
TYPE REPORT	MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ADMIN. COMPANY	BLOCK NUMBER	REPORT NUMBER	FILING BATCH/NO.	BADGE NUMBER	
1	10	30	75	1	03	08	00	25	4	1	01	00	70	7	010	0033	0181	01445

AIDED AND CASUALTIES				RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN															
CIVILIANS		UNIFORMED	ENG. CO.	LADDERS	CODE	NEE SPRINK	STANDPIPE	CAUSE	FIRE	WARRANT	CONSTRUCT	USE	STATUS	PLANT	CONTROL	FLOOR	ROOM OR	AREA CODE	COMPANY	NUMBER OF	EXTENSION		
EVACUATED	FIRST AID	INJURED	KILLED	UNIFORMED INJURED	ENG. CO. MARKING	LADDERS	CODE	NEE SPRINK	STANDPIPE	CAUSE	FIRE	WARRANT	CONSTRUCT	USE	STATUS	PLANT	CONTROL	FLOOR	ROOM OR	AREA CODE	COMPANY	NUMBER OF	EXTENSION
00	00	00	00	00	03	2	6	00	01	2	1	15	0	0	2	32	30	50	00				

ADDRESS	# 2 World Trade Center	Manhattan	Port of N.Y. Authority
NUMBER	110	STREET	NAME OF OCCUPANT
BUILDING	110	BOROUGH	Fire Safety Director
(Second Card)	STORIES	AREA	LEFT IN CHARGE
		250x250	

COMPANIES	5	006	0	05	7	010	0	05
-----------	---	-----	---	----	---	-----	---	----

OPERATIONS

Responded to Class 3-70-4

Upon arrival found fire in planter on 32 floor there confined and ~~extinguished~~ extinguished as follows.

E.6 - Carry in rolled up lengths, hook up to S/P outlet, stretch line and operate on and extinguish fire and necessary wash down.

L.10 - Make necessary examination of 32 and 33 floors and overhaul burnt debris on 32 floor.

Fergus J. McDermott #2 1st D.C. BN. _____

Fergus J. McDermott #2 _____

TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

DIV. _____ PAGE _____ OF _____

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED				DURATION OF INCIDENT		HOW REPORTED			LOCATION			REPORT			
TYPE REPORT	MONTH	DAY	YEAR	CD NO.	HOUR	MINUTE	HOURS	MINUTES	INITIAL ALARM	HIGHEST ALARM	BOROUGH	ALARM BOX NUMBER	ADMIN. COMPANY	INCIDENT BLOCK NUMBER	REPORT NUMBER	FILING BATTALION	BLDGE NUMBER
1	03	09	76	1	1603	00 30	4	1	0	1	0070	5 006	0010	0124	04	880	

AIDED AND CASUALTIES				RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN													
CIVILIANS		FIRE FIGHTERS																			
EVAQUATED	FIRST AID	INJURED	KILLED	UNIFORMED INJURED	ENG. SO. MARINE	LADDERS	NO SPARK TEST OPEN	BLANDY/THIMBLETS	EXTING. CENTER	CAUSE	FIRE MARSHAL	CONSTRUCT	USE	STATUS	PARCEL TO BLDG	CONNECTION TO FLOOR	FLOOR CODE	ROOM OR AREA CODE	OCCUPANCY	MANNER OF EXTENSION	
00	00	00	00	00	03	2	6	00	01	1	64	1	15	1	1	0	00	10	50	00	

ADDRESS **1 World Trade Center** Man. STREET

BUILDING **110** BOROUGH **Man.**

(Second Card) STORIES **204 x 204** AREA

NAME OF OCCUPANT **Various** ROOM/APT. NO.

LEFT IN CHARGE **Lt. John Elliott PAPT**

COMPANIES	TYPE NO.	SECT.	PIS.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
	5	055	0	10	7	008	0	05									

OPERATIONS

On arrival found light fire condition in rubbish piled against wall in main concourse which had caused scorching to said wall.

E 55 Stretched line from standpipe outlet and extinguished fire. washed down.

L 8 Examined for extension and unshauled.

Stanley Hirschfield 4 D.C. _____

Stanley Hirschfield 1608 _____

TYPE FULL NAME TIME OF ARRIVAL

_____ DIV. PAGE

_____ TIME OF ARRIVAL **1** OF **1**

ADMINISTRATIVE COMPANY

REPORT - STRUCTURAL FIRE

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED						DURATION OF INCIDENT		LOCATION				REPORT				
		MONTH	DAY	YEAR	CB NO.	HOUR	MINUTE	HOURS	MINUTES	ALARM	INCIDENT	ALARM	INCIDENT	REPORT	REPORT			
1		10	20	76	1	1618	00	40	11	10	1	0070	5	006	011	008	01	10

AIDED AND CASUALTIES				RESPIRATORS	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN									
CIVILIANS	FACULTY	PIPELINES	INURED														
00	00	01	00	00	30	2	6	00	01	1	1	15	1	0	0	79	00

ADDRESS **1 World Trade Centre Man.** BOROUGHS **Man.** NAME OF OCCUPANT **Port Authority of NY** ROOM/APRT. NO. **Mr. Sarnelli 73D**

BUILDING **Tower "B" 110** STORIES **1300** AREA **X 300** LEFT IN CHARGE

COMPANIES	TYPE	NO.	SECT.	PIS.	NO.	SECT.	PIS.	NO.	SECT.	PIS.	
5	007	01	05	5	006	01	02	5	024	01	02
7	001	01	05	7	008	01	02				

OPERATIONS

On arrival was notified by Mr Sarnelli of a rubbish fire on the 79 floor south west quadrant tower B .

- E. 7 Responded to 79 floor stretched line from standpipe, extinguished fire
- E. 6 Stretched line and stood fast in fire control center area.
- E. 24 Stretched line and stood fast in stairway in lobby area.
- L. 1 Performed necessary search, ventilation, and over haul on fire floor.
- L. 8 Stood fast with tools and masks in stairway at lobby.

Injured P.O. Keely (port Authority Police) # 1501 removed to Beekman Hospital via public ambulance. Apparent smoke inhalation.

Theodore A. Campbell
 Theodore A. Campbell 1620 DIV. PAGE OF

ADMINISTRATIVE COMPANY

FOR FIRE RECORDS USE ONLY										DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT										LOCATION										REPORT																																																	
TYPE REPORT					MONTH					DAY					YEAR					CO. NO.					HOUR					MINUTE					HOURS					MINUTES					HOW REPORTED					INITIAL ALARM					HIGHEST ALARM					BOROUGH					ALARM NUMBER					INCIDENT NUMBER					REPORT NUMBER					FIRE BATTALION					BRIGADE NUMBER				
1					06					24					77					1					2205					01					55					+					07					1					0070					5					006					0113					0158					01					531				

AIDED AND CASUALTIES										RESP.										EXTINGUISHMENT										INVESTIGATION										STRUCTURE										AREA FIRE ORIGIN																																																																																														
CIVILIANS					EVACUATED					FIRST AID					INJURED					KILLED					UNINFORMED					INJURED					FIRE SO					MARINE					LADDERS					CODE					NO SPRINK					INSTRUMENT					EQUIPMENT					CAUSE					FIRE					MATERIAL					CONSTRUCT					USE					STAIRS					ELEVATOR					EQUIPMENT					FLOOR					CODE					ROOM OR					AREA CODE					OCCUPANCY					MASTER OF					EXTRADITION				
00					03					07					00					00					03					4					0					00					01					1					62					1					15					1					1					0					46					31					50					00																																												

ADDRESS: 1 World Trade Ctr Man Port of N.Y. Authority hallw
NUMBER STREET BOROUGH NAME OF OCCUPANT ROOM/APT. NO.

BUILDING: 110 250 x250 Richard Hintzen(Fire Safety D
(Second Card) STORES AREA LEFT IN CHARGE

46th

5	006	0	20	5	007	0	12	5	024	0	12	1	001	0	10	7	001	0	20	7	008	0	20
7	015	0	10																				

COMPANIES

OPERATIONS

Responded to 3-70-2(Manual Alarm)

While responding Batt.1 notified via dept. radio of special call additional Ladder Co(L.15) due to report of fire 46th fl. Upon arrival was informed of fire 46th fl public hallway near freight elevator. Ordered investigation and found fire therein, which had been extinguished prior to the arrival of this dept. Evacuation instituted by Port Authority personnel prior to arrival of Fire Dept. units. Report of smoke detector operational of the 103rd fl. Fire located between freight elevators 49 & 17.

E.6- Rolled up lengths to the 44th fl. Connected to standpipe therein and stretched to fire floor(46th) Washed down fire area for overhauling purposes.

E.7- Assisted in stretch, then ordered to search, examination of 53rd to 58th fls. Also Checked 45th fl. report of smoke condition.

E.24- Reported to secondary command post (~~53rd fl~~). Then ordered to check smoke condition report 53rd fl. Then ordered to search, & examination of 53rd to 56th fls. Also checked out smoke detector 103rd fl.

James J. McKenna 1 *Matthew J. Farrell* 1
bc DIV. PAGE

James J. McKenna 2208 Matthew J. Farrell
TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

BF-24A (6/76)

REPORT — Additional Data

Structural Fire, Transportation Fire, Non-Structural Fire or Emergency

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED				ALARM
TYPE REPORT	MONTH	DAY	YEAR	CO. NO.	HOUR	MINUTE
1	06	24	77	2	2205	1
BOROUGH		BOX NUMBER				
1		0070				

10	11	12	13	14	15	16	17	18	19	20
S TYPE NO. SECT. FTS.										
43	44	45	46	47	48	49	50	51	52	53

OPERATIONS

- L.1- Initially to the fire floor (46th) operated for overhauling search & examination, ventilation of same. Then search, examination & ventilation of the 107th to 46th fl. Stairway "B".
- L.8- Initially to secondary command post. (West St). Then ordered to check 78th to 60th fls search & examination. Also assisted in overhauling fire floor (46th)
- L.15- Special called to report to West St. Then through lobby to secondary command post. Enroute found (2) civilian cleaning personnel (female) had been removed to lobby suffering smoke inhalation. Performed first Aid on injured civilians. Then relieved by Res. 1 with resuscitator. Then ordered to search 47th to 52nd fls as (2) injured civilians reported to have worked on the 48th & 50th fls.
- Res.1- Relieved L.15 and administered first aid (Inhalation) to injured civilians. Then ordered Officer & remainder of members went to investigate report of smoke & people on the 55th fl. Then down to 46th fl. Search, examination of floors enroute.
- Batt.1- Initially in command, then ordered to ~~set up~~ set up additional command in lobby, as first aid station. Two public ambulances standing by with (4) resuscitators. Directed search operations of E.7, L.15, Res. 1. Ordered smoke purge 45th to 107 when fire was out.
- Batt.2- Ordered to supervise units on the fire floor & report conditions therein. Supervised in part operation of E.6, L.1
- Batt.32 - Ordered to supervise operations of units above fire floor.
- Div.1- In overhauled command of operations at command post B.1 level.

by James J. McKenna B.N. _____ D.C. _____ DIV. _____ PAGE 1 OF 3
James J. McKenna 2208 Matthew J. Farrell
TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

REPORT - Additional Data

Structural Fire, Transportation Fire, Non-Structural Fire or Emergency

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED				ALARM		
TYPE REPORT	MONTH	DAY	YEAR	CD NO.	HOUR	MINUTE	BOROUGH	BOX NUMBER
1	06	24	77	2	22	05	1	0070

TYPE	NO.	SECT.	FIS.

OPERATIONS

Act Asst Chief Munk on the scene to supervised overall operations.

Remarks: L. 1 checked all elevator cars before leaving scene.
 Ordered 10-41 Code 1 due to report from Port Authority police of labor trouble with Maintenance personnel (Temco)
 Dept. Photographer ordered to scene to take pictures of fire area.

Alarm was turned in by Mr. Nick Cappola, Temco Maintenance
 (2) Beekman Ambulances on the scene under Mr. B. John

Injured Civilians:

#Name	Address	Injury	Treated
██████████	████████████████████	Smoke inhal.	Beekman & Released
██████████	████████████████████	Smoke inhal.	" " "
██████████	████████████████████	Smoke Inhal.	Received O2 not removed to Hos

Note : All of the above are employees of the Temco Co.

- Sgt. Steve Fox Bd# 264 Burn to Fingers Rt Hand.
- Ptl A. Halicker Burn to Rt Wrist
- Ptl Meyers Smoke inhal
- Ptl. Carcaic Smoke Inhal.

Note: Police members of Port Authority Police Dept. All injured treated at Beekman Hospital & released.

by James J. McKenna D.C. Div. PAGE OF

James J. McKenna 2208 Matthew J. Farrell

TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

BF-24 (6/72)-50M-121973(75)

REPORT

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		ALARM INC.						
TYPE REPORT		MONTH	DAY	YEAR	CD NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ADMIN COMPANY	BLOCK NUMBER	REF NO.			
		1	07	13	77	1	15	30	00	30	1	1	0	1	0070	5 006	0113	0122	01	10

AIDED AND CASUALTIES				RESP.		EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN	
CIVILIANS													
EVACUATED	FIRST AID	INJURED	KILLED	UNIFORMED HYDRANT	ENG. SO. MACHINE	LEADERS	CODE	NO. SPRAYS AND CHARGES	STANDPIPE RESULTS	CAUSE	FIRE MARSHAL	CONDUCT	USE
00	00	00	00	00	30	2	5	00	01	0		1	15
												1	0
												09	57
												50	00

ADDRESS: # 1 World Trade Center Tower B
 NUMBER: 110 STREET: 600 x 600 BOROUGH: AREA:
 BUILDING: (Second Card) STORIES:

Port Authority
 NAME OF OCCUPANT: Mr. Sarnelle FSD.
 ROOM/APT. LEFT IN CHARGE:

5	007	0	05	7	001	0	05
---	-----	---	----	---	-----	---	----

OPERATIONS

On arrival found fire to be in airconditioning room on the 9th fl
 E. 7 Stretched Line, extinguished fire.
 L. 1 Made necessary search and overhaul.

Theodore A. Campbell 1
 B.C. THEODORE A. CAMPBELL 1535 D.C. DIV. PAGE
 TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

REPORT - STRUCTURAL FIRE

FOR FIRE RECORDS - USE ONLY		DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		LOCATION				REPORT		
		TYPE REPORT		MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	LOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ADMIN. COMPANY	BOC# NUMBER	REPORT NUMBER	ENGINE BATTALION
1		08	04	77	1	1105	00	20	4	1	1	1	0070	6	006	00113	0070	04	999	

AIDED AND CASUALTIES				EXTINGUISHMENT				INVESTIGATION				STRUCTURE				AREA FIRE ORIGIN			
CIVILIANS		RESP.		EXTINGUISHMENT		INVESTIGATION		STRUCTURE		AREA FIRE ORIGIN		STRUCTURE		AREA FIRE ORIGIN		STRUCTURE		AREA FIRE ORIGIN	
EVA. CU. TED	FIRST AID	INJURED	FILLED	UNIT OWNED	TRUCKS	LADDERS	CODE	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN	PP. OPEN
00	00	00	00	00	03	25	00	01	1	62									

E-6

ADDRESS: **1 World Trade Center** **Man.**
NUMBER STREET BOROUGH

BUILDING: **110** **200 x 200**
(Second Card) STORIES AREA

NAME OF OCCUPANT: **Various** ROOM/APT. NO.: **n/a**
 LEFT IN CHARGE: **Sgt. Brown, 109, P.A.P.D.**

TYPE	NO.	SECT.	PTS.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
5	006	0	05	7	001	0	05													

OPERATIONS

On arrival found fire in accumulated rubbish in elevator lobby of 35th floor which had caused scorching of the walls and ceiling. Port Authority personnel had extinguished fire with hand extinguishers and standpipe hose. Fire termed suspicious by P.A.P.D.

E 6 Responded with rolled-up lengths, hooked-up to standpipe and stood fast.

L 1 Searched, examined for extension and overhauled.

ABC *James Hallinan* 4 D.C.
 James Hallinan 1110 DIV. PAGE 1 OF 1
TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

FOR FIRE RECORDS USE ONLY	DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		LOCATION			REPORT			
	TYPE REPORT		MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	ALARM NUMBER	INCIDENT	REPORT NUMBER	FILING BATTALION	BADE NUMBER
	1	11	03	77	1	1845	00	30	4	1	0	1	8085	5	006	0113	0015	04	480

AIDED AND CASUALTIES					RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN													
CIVILIANS																						
EVACUATED	FIRST AID	INJURED	KILLED	UNIFORMED INJURED	ENG. SQ. / MARINE	LADDERS	NO. STINK-LEGS DOWN	STANDPIPE LINES USED	RUBBER CONTIN.	CAUSE	FIRE MARSHAL	CONSTRUCT	USE	STATUS	DAMAGE TO BLDG	STATUS TO FLOOR	FLOOR CODE	ROOM OR AREA CODE	OCCUPANCY	MANNER OF EXTENSION		
00	00	00	00	00	03	2	5	00	01	1	62			1	15	1	1	0	58	21	50	00

ADDRESS # 1 World Trade Center Tower 1 Man. Closet
NUMBER STREET BOROUGH
 BUILDING 110 300 X 300
(Second Card) STORIES AREA
NAME OF OCCUPANT ROOM/APT. NO
 Sgt. Fox P.A. H.A.
LEFT IN CHARGE

10	16 22	28 29	35 36	42 43	49 50	56
5	006	010	7001	005		
57	TYPE NO.	SECT.	PTS.	64	70 71	77 10
				63		16 22
						28 29
						35

OPERATIONS

On arrival found cause of alarm to be fire in janitorial closet in volving rags and rubbish. Batt 4 requested a 10-41 Codel Fire caused searing of paint on walls and ceiling.

E-6 Stretched rolled up lengths and hooked up to standpipe outlet and extinguished fire.

I-1 Made examination of walls and ceiling and ventilated as necessary.

Stanley Hirschfield 4th
B.N. D.C.
Stanley Hirschfield 1850
TYPE FULL NAME TIME OF ARRIVAL
DIV. PAGE
 1 OF 1
TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

FOR FIRE RECORDS USE ONLY	DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		LOCATION		REPORT			
	TYPE REPORT	MONTH	DAY	YEAR	CD NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOY NUMBER	ADMIN. COMPANY	BLOCK NUMBER	REPORT NUMBER	FILING BATTALION
1	02	13	78	1		2018	00	45	4	1	0	1	8089	5 006	0113	0071	01	531

AIDED AND CASUALTIES				RESP.	EXTINGUISHMENT	INVESTIGATION	STRUCTURE	AREA FIRE ORIGIN														
CIVILIANS																						
EVACUATED	FIRST AID	INJURED	KILLED	UNIFORMED INJURED	ENG. SQ. MACHINE	LADDERS	NO SPRINKLERS OPEN	STANDPIPE LINES USED	CAUSE	FIRE MARSHAL	CONSTRUCT	USE	STATUS	DAMAGE TO BLDG	EXTENTS TO FLOOR	FLOOR CODE	ROOM OR AREA CODE	OCCUPANCY	MANNER OF EXTINCTION			
00	00	00	00	00	03	2	5	00	01	1	62			1	15	1	1	0	94	15	50	00

ADDRESS 2 World Trade Ctr Man Port of N.Y. Authority 107
NUMBER STREET BOROUGH NAME OF OCCUPANT ROOM/APT. NO.

BUILDING 110 200 x200 Sgt. Wascott PONYA Police
(Second Card) STORIES AREA LEFT IN CHARGE

10	16 22	28 29	35 36	42 43	49 50	56		
5	006	0210	7	001	0	10		
10	16 22	28 29	35 36	42 43	49 50	56		
TYPE NO.	SECT.	PTS.	44	70 71	77 10	16 22	28 29	35

OPERATIONS

Responded to manual alarm box 8089-

Upon arrival was informed of fire 107th fl. Ordered investigation and found fire in rubbish & maint. materials therein. Batt. 1 ordered additional Battalion Chief to respond on report of definite fire. Batt.4 responded.

R.6- Rolled up lengths to the fire floor extinguished remaining fire

L.1- Search, examination of fire floor & floor above. Opened walls for examination. Overhauled burned materials.

Bn.4- Ordered to supervise operations on the fire floor.

Div. 1- Responded to scene, and assumed command.

Note: Batt.1 transmitted 10-4 Code 2 & requested F.M. to respond.

B.C. James J. McKenna 2020 Matthew J. Farrell PAGE 1 OF 1
BN. D.C. DIV. TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

FOR FIRE RECORDS USE ONLY	DATE AND TIME ALARM RECEIVED										DURATION OF INCIDENT		LOCATION				REPORT			
	TYPE REPORT		MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	HOURS	MINUTES	HOW REPORTED	INITIAL ALARM	HIGHEST ALARM	BOROUGH	BOX NUMBER	ADMN. COMPANY	BLOCK NUMBER	REPORT NUMBER	PLANT BATTALION	BADE NUMBER
	1	01	18	79	1	2353	00	45	4	1	0	1	8027	5	006	0113	0164	01	352	

AIDED AND CASUALTIES					RESP.	EXTINGUISH. MENT	INVEST. IGATION	STRUCTURE	AREA FIRE ORIGIN													
CIVILIANS																						
EVAQUATED	FIRST AID	INJURED	KILLED	UNIFORMED INJURED	ENG. SQ. MARKING	LADDERS CODE	NO SPRINK. LERE OPEN	STANDPIPE FINES USED	EMERGENCY COVER	CAUSE	FIRE MARSHAL	CONSTRUCT.	USE	STATUS	EXHIBIT	CONTRIBUTOR	FLOOR CODE	ROOM OF AREA CODE	OCCUPANCY	MANNER OF EXTENSION		
00	00	00	00	00	03	2	5	00	01	1	62			1	15	1	1	0	06	31	50	00

ADDRESS: 2 World Trade Center Man. N.Y. State
 NUMBER: 110 STREET: 150x150 BOROUGH: Man.
 BUILDING: 110 STORIES: 110 AREA: Man.
 (Second Card) LEFT IN CHARGE: Bon Bailly P.A. Police

5	006	0	10	5-007-0	7	001	0	10	7	008	0	10							
---	-----	---	----	--------------------	---	-----	---	----	---	-----	---	----	--	--	--	--	--	--	--

OPERATIONS

Upon arrival was told of fire on the 6th floor, operations as follows.
 Ladder 1 made necessary investigation, located the fire, vented, overhauled and searched.
 Ladder 8 searched and vented floor above, overhauled.
 Engine 6 stretched a line from standpipe and extinguished the fire.
 Engine 6 washed down.
 Batt. 2 on the scene.
 Div. 1 on the scene.

Joseph A. Hingerton D.C. PAGE 1 of 1
Joseph A. Hingerton 2355
 TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

DF 24 (11/00)

TYPE REPORT	COMMUNITY BOARD	ADONIS COMPANY	INCIDENT LOCATION	DATE AND TIME ALARM RECEIVED	INCIDENT DURATION	HIGHEST ALARM	BOX LOCATION	REPORT	COS. RESP.											
1	01	5	006	0113	04	19	80	1406	02	30	1	1	2	11	8086	0156	01	531	07	3

EXACATED	FIRST AID	INJURED	KILLED	UNFURNISHED	CODE	SPRINKLER	NO. OPEN	STAIRS USED	EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	CONSTRUCT.	USE	STATUS	BLDG. DAMAGE	FLOOR CODE	RM AREA CODE	OCCUPANCY	MANNER OF OCCUPANCY	OCCUPANCY'S	NO. BLDG. DETECTORS	SPECIAL USE	
300	00	00	00	5	00	01	3	98	30	40	50	31	15	1	1	1106	54	59	00	01	0	2	3

NUMBER	STREET NAME	TYPE	STREET	APART.
1	WORLD TRADE	CONTR	1	130

96 Port Authority N.Y. & N.J.

110 BUILDING

212 x 212 AREA

Mr. John Barrett, Y.S.D. LEFT IN CHARGE

NAME OF OCCUPANT	ROOM, APT. NO.	YR.	MAKE	MODEL	SIN. /	POWER
EQUIPMENT INVOLVED IN IGNITION						

UNIT	PTS.	ITEM
5	006	20
188	194	200
200	206	212
212	217	

OPERATIONS

Upon arrival Batt. 1 received report of activated smoke detector in return air duct 106 floor Tower #1. Batt. 1 subsequently received reports of heavy smoke on floor 106, light smoke on floor 109, heavy odor of smoke in stairways "A" and "B" leaving only stairway "C" as a clear exit

B.C. James J. McKenna BN. 1409 D.C. 1 DIV. 15

TYPE FULL NAME _____ TIME OF ARRIVAL _____

TYPE FULL NAME _____ TIME OF ARRIVAL _____

ADMINISTRATIVE COMPANY

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION								
MONTH	DAY	YEAR	HOUR	MINUTE	SECOND	BOX NO.	BUILDING NO.	FLOOR	TYPE	EQUIP. INVOLVED	MATERIAL TYPE	MATERIAL FORM	USE	STATUS	BUS. DAMAGE	CONT'S DAMAGE	FLOOR CODES	PARADE CODE	OCCUPANCY	MANNER OF OCCURRENCE			
6	04	19	20	14	06	11	5026	01	3	38	30	Ap	50	1	15	1	1	1	106	5A	59	CO	OT

NUMBER (BUL. HYDRA)	TYPE	MAKE	MODEL	YEAR	79 SERIAL NO.	LICENSE	STATE
1		WORLD TRADE	CATER				

OPERATIONS

Operations of Cos. continued:

Lad. 1 to 106 floor to investigate activated smoke alarm, searched and located fire, checked floor above for extension, and overhauled.

Eng. 7 Responded to 109 fl. to investigate a sprinkler alarm, found no sprinkler flow, and light smoke condition.

Lad. 8 Responded to 109 fl. with Eng. 7.

Eng. 7, and Lad. 8 then reported to 108, 107, and 106 fls. made search and assisted in evacuation of Restaurant.

Eng. 10, Responded to 106 fl. to assist and relieve Eng. 6 on the line.

2nd. alarm units reported to command post, stood fast then ordered to take up by DAG Glasse.

Rescue 1 responded on 2nd. alarm, reported to 107 fl. assisted in evacuation of restaurant, then to 106 fl. to assist Lad. 1, then ordered to take up.

B.C. James J. McKenna B.N. 1409 P.C. _____

James J. McKenna 1409

TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

(1) White Copy: Fire Records (2) Canary Copy: Battalion (3) Pink Copy: Administrative Company (4) Goldenrod Copy: Referral

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		IGNITION			STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION				
MONTH	DAY	YEAR	MOON	WIND	REPORTER	BOX NO.	ZIP CODE	TRM. STAGE	GROUP INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	STATUS	FLOOR CODE	FLOOR CODE	OCCUPANCY	OCCUPANCY	OCCUPANCY	
6	04	19	30	1406	11	1005	101	5	98	30	40	50	1	15	1	1	1	1	1

NUMBER	STREET NAME	IF MOBILE PROPERTY
1	WORLD TRADE CENTER	

YR.	MAKE	MODEL	SERIAL NO.	LICENSE	STATE

OPERATIONS

Operations of Cos. continued:

Chief Officers on scene:

- DAC Glasse, City wide command Chief.
- D.C. Rossi Dept. chief 1st. Div.
- B.C. James J. McKenna Chief 1st. Batt.
- B.C. Louis Pike Chief 2nd. Batt.
- B.C. John T. Carroll Chief 4th. Batt.
- B.C. Edward J. Miller Chief 6th. Batt.

Field Comm. unit, Lieut. Soranno on scene.

Fire Patrol #2 on scene.

W.F.C. fire safety director Mr. John Barrett on scene.

P.A. Patrolmen Cemonuk, and Oorbeek on Duty at Command Post.

Building Mechanical System failures noted:

- #1 Sprinkler alarm received for unsprinklerd 109 Fl.
- #2 Return air duct smoke detectors did not shut fans down.
- #3 Heat fused link shut damper in purge system.
- #4 107 floor standpipe phone unreliable due to feed back from radios.

B.C. James J. McKenna D.C. _____

James J. McKenna 1409

TYPE FULL NAME TIME OF ARRIVAL TYPE FULL NAME TIME OF ARRIVAL

(1) White Copy: Fire Records (2) Canary Copy: Battalion (3) Pink Copy: Administrative Company (4) Green Copy: Referent

REPORT - ADDITIONAL DATA

STRUCTURAL FIRE TRANSPORTATION FIRE NON-STRUCTURAL FIRE OR EMERGENCY

DATE AND TIME ALARM RECEIVED				BOX LOCATION				IGNITION				STRUCTURE				AREA OF ORIGIN				FIRE EXTENSION											
6	1	5	40	1409	1	808	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

MEMBER NUMBER				STREET NAME				IF MOBILE PROPERTY			

YEAR				MAKE				MODEL				SERIAL NO.				LICENSE				STATE			

OPERATIONS

High Rise Report prepared and forwarded to Div. of Fire Prevention.
 Follow up on Mechanical and Electrical malfunctions being made with Port Authority.
 See copy of High Rise report for details.

S.C. *James J. McKenna*

James J. McKenna

1409^{BN}

D.C.

PAGE 1

TYPE FULL NAME		TIME OF ARRIVAL	

(1) White Copy: Fire Records (2) Canary Copy: Battalion (3) Pink Copy: Administrative Company (4) Goldenrod Copy: Referral

KEPUKI - SIMULTANEOUS FIRE

BF-24 (1/80)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		COS. RESP.													
1	01	5	006	0113	11	04	80	0123	00:15	6	1	0	1	8093	0026	01	531	032							
ADMIN. COMPANY		BLOCK NUMBER		YEAR		MONTH		DAY		HOUR		MINUTE		STAIRS		FLOOR CODE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE			
1		11		80		04		11		00		15		6		1		0		1		8093		0026	
FIRING		BATTALION		REPORT NUMBER		BOX NUMBER		ELEVATION		FLOOR CODE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE		FIRE DETECTORS		SMOKE DETECTORS		NO. OCCUPANTS		MANNER OF OCCUPANCY	
1		1		1		1		1		1		1		1		1		1		1		1		1	
EVAUATED		INJURED		KILLED		UNFORMED		CODE		SPRINKLER		STANDPIPE		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL FORM		HEAT FORM		EQUIP INVOLVED		STATUS	
0		0		0		0		0		0		0		0		0		0		0		0		0	
FIRST AID		INFORMED		UNFORMED		CODE		SPRINKLER		STANDPIPE		EXTINGUISHMENT		MATERIAL TYPE		MATERIAL FORM		HEAT FORM		EQUIP INVOLVED		STATUS		CONSTRUCT	
0		0		0		0		0		0		0		0		0		0		0		0		0	
ADMIN. COMPANY		BLOCK NUMBER		YEAR		MONTH		DAY		HOUR		MINUTE		STAIRS		FLOOR CODE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE		FIRE DETECTORS	
1		1		80		04		11		00		15		6		1		0		1		8093		0026	
STREET NAME		TYPE		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.		STREET NO.	
World Trade Center		1		105		105		105		105		105		105		105		105		105		105		105	
NAME OF OCCUPANT		ROOM, APT. NO.		YR. BUILT		MAKE		MODEL		S/N		POWER		EQUIPMENT INVOLVED IN IGNITION		OPERATIONS		UNIT		PTS		ITEM		C	
N.Y. 7th Fl. Port Authority		Carpenter's Ra.		99		250x250		AREA		Sarnelli (JSD)		LEFT IN CHARGE		5		010		7		001		05		188	
EQUIPMENT INVOLVED IN IGNITION		OPERATIONS		UNIT		PTS		ITEM		C		O		S		188		194		200		206		212	
1		1		1		1		1		1		1		1		1		1		1		1		1	

Responded to alarm box 8093. Upon arrival found cause to be for a rubbish fire at the above location. Eng.10- Stretched standpipe line, extinguished fire, washed down. Lad.1- Searched, found fire, vented, checked for extension, overhauled.

B.C. James J. McKenna 1 D.C. James J. McKenna 0126
 BN. 1 DIV. 1 OF 1
 TYPE FULL NAME _____ TIME OF ARRIVAL _____

ADMINISTRATIVE COMPANY

TYPE REPORT: COMMUNITY BOARD, INCIDENT LOCATION: 1 01, INCIDENT REPORTED: 02-17-81, DATE AND TIME ALARM RECEIVED: 00:40, BOX LOCATION: 808A 0141 01531 032, REPORT NUMBER: 01531 032, COS. RESP.: LADDER, ENG. SQ. MAKE: MAREL, LADDER: 2

AIDED AND CASUALTIES				EXTINGUISHMENT				IGNITION				STRUCTURE				AREA FIRE ORIGIN				FIRE EXTENSION				SPECIAL USE			
EVAQUATED	FIRST AID	INJURED	KILLED	UNFURNISHED	COPE	SMOKERS	NO OPEN LINES USED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	BLDG DAMAGE	FLOOR CODE	Rm AREA CODE	OCCUPANCY	OCCUPANCY'S	SMOKE DETECTORS	NO. BLDGS. WITHIN BLDG.	AREA	FIRE ORIGIN	NO. BLDGS. WITHIN BLDG.	SPECIAL USE			
00	00	00	00	00	00	00	01	2	31	42	99	99	46	1	15	1	1	1	1	51	1	1	1	1	0	2	

ADDITIONAL INFORMATION: NUMBER: 1, STREET NAME: World Trade Center, TYPE: OFFICE, BUILDING: 110, AREA: 300x300, NAME OF OCCUPANT: Mr. Barnelli, F.S.D., EQUIPMENT INVOLVED IN IGNITION: YR., ROOM, APT. NO.: 130, MAKE, MODEL, SIN, POWER

UPON ARRIVAL AT BOX 808A, FOUND FIRE IN AIR CONDITION DUCT AND FILTERS ON 108 FLOOR

Eng. 10 Used house line, and extinguished fire.

Lad. 1 Overhauled and checked for extension.

B.C. James J. McKenna BN. 0900 D.C. _____ PAGE 1 OF 1
 TYPE FULL NAME _____ TIME OF ARRIVAL _____

REPORT - STRUCTURAL FIRE

BF-24 (1/80)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME		ALARM RECEIVED		DURATION		INCIDENT		HIGHEST ALARM		BOX LOCATION		REPORT		COS. RESP.	
1 01		5 006 0113		04 47 81		0918 01 30 7 1 2		1 1 1		8084 0145 01 196		09 3							
COM. BOARD		COMPANY		MONTH		DAY		YEAR		HOUR		MINUTE		HOURS		MINUTES		INITIAL ALARM	
1		5 006 0113		04		47		81		09		18		01		30		7	
ADMN		BLOCK		NUMBER		STAIRS		EQUIP INVOLVED		MATERIAL TYPE		MATERIAL FORM		MATERIAL TYPE		MATERIAL FORM		MATERIAL TYPE	
1		5 006 0113		0113		31		20 00 00		50 1 15 1 1		07 36 09		00 01 0 9					
ENACTED		FIRST AID		INJURED		KILLED		UNFURNISHED		CODE		SPINNED		STANDPIPE		LINES USED		SPINNED	
99		00 00 00		5 00 01		3 31 20 00 00		50 1 15 1 1		07 36 09		00 01 0 9							
AIDED AND CASUALTIES		EXTINGUISHMENT		IGNITION		STRUCTURE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE							
99		00 00 00		5 00 01		3 31 20 00 00		50 1 15 1 1		07 36 09		00 01 0 9							
CIVILIANS		KILLED		UNFURNISHED		CODE		SPINNED		STANDPIPE		LINES USED		SPINNED		MANNER OF OCCUPANCY		AREA FIRE ORIGIN	
1		5 006 0113		0113		31		20 00 00		50 1 15 1 1		07 36 09		00 01 0 9					
STREET NAME		TYPE		ROOM, APT. NO.		BUILDING		AREA		LEFT IN CHARGE									
World Trade Center		1		104 106		126		130		99		300x300		Bill Sarnelli P.S.D.					

UNIT	PTS.	ITEM
5 010 10	5 006 10	5 007 10 7 001 10 7 015 10

OPERATIONS

Upon arrival at box 8084, was informed by PA police of fire in MER room on the 7th floor with smoke condition on 7 thru 11 floors, transmitted 2nd alarm.

Eng. 10 Masks, rolledups, responded to 7th floor, hooked up to standpipe, extinguished fire in air condition unit in MER room.

Eng. 6 Masks, rolledups, responded to 7th floor, stood fast.

Eng. 7 Masks, rolledups, responded to 7th floor, stood fast.

Lad. 1 Masks, responded to 7th. floor, V.S.O. air condition unit, checked for extension in AC duct.

Lad. 15 Masks, Vented and searched floors 8 thru 13, checked for extension in AC duct.

Lad. 6 Masks, under direction of BO Moffet, Ba. 4 searched floors 13 thru 18.

B.C. _____ BN. _____ D.C. _____

TYPE FULL NAME _____ TIME OF ARRIVAL _____

PAGE 1 OF 1

ADMINISTRATIVE COMPANY

REPORT — Additional Data

Structural Fire, Transportation Fire, Non-Structural Fire or Emergency

FOR FIRE RECORDS USE ONLY		DATE AND TIME ALARM RECEIVED				ALARM	
TYPE REPORT	MONTH	DAY	YEAR	CD. NO.	HOUR	MINUTE	BOX NUMBER
1	04	17	8	2	09	18	8084

COMPANIES	TYPE	NO.	SECT.	FIS.

OPERATIONS continued

Rescue 1 Masks, searched floors 18 thru 23.

2nd. alarm units:

Engs. 24, 15, 55, 9, 241, and Marine 1 were ordered to stand fast at there assigned locations.

Div. 1, D.C. DeCaprio responded and supervised operations
 Chiefs Gormley, Bishop, and Farrell also on scene.

P.A. personell reported evacuation of aprox, 1,500 persons from floors 9 thru 23.

F.C. unit on scene
 F.P. 2 on scene.

	TIMES
Box	0918
2-2	0928
U/C	0959

Peter Costello 1 D.C.

TYPE FULL NAME	TIME OF ARRIVAL	TYPE FULL NAME	TIME OF ARRIVAL	DIV.	PAGE
Peter Costello	0920	Angelo DeCaprio		2	2

ADMINISTRATIVE COMPANY

REPORT - STRUCTURAL FIRE

BF-24 (1/80)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT		COS. RESP.																	
1	04	5	010	12	13	82	2038	00	30	6	1	0	1	8093	0102	01	150	043	2	45									
AIDED AND CASUALTIES		EXTINGUISHMENT		IGNITION		STRUCTURE		AREA FIRE ORIGIN		FIRE EXTENSION		SPECIAL USE																	
EVAQUATED	FIRST AID	INJURED	KILLED	UNINJURED	COPE	SPRINKLER	STANDPIPE	STAGE	EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	FACTORY	CONSTRUCT.	STATUS	BIDS DAMAGE	FLOOR CODE	AREA CODE	OCCUPANCY	MANNER OF	OCCUPANCY'S	NO. BLOSS	SMOKE DETECTORS	1	2	3				
00	00	00	00	5	00	01	3	98	00	99	75	00	1	15	1	0	0	98	18	54	00	00	0	0	0	0			
ADMIN. COMPANY		BLOCK NUMBER		YEAR		MONTH		DAY		HOUR		MINUTE		BOX NUMBER		BOX LOCATION		REPORT NUMBER		FILING BATTALION		ADDRESS		STREET NAME		STREET TYPE			
1		104		105		World Trade Center		126		130		99		BUILDING		200x200		AREA		Fire Safety Dir. Niedmeier		LEFT IN CHARGE		YR.		ROOM, APT. NO.			
EQUIPMENT INVOLVED IN IGNITION		MAKE		MODEL		S/N		POWER		YR.		MAKE		MODEL		S/N		POWER		YR.		MAKE		MODEL		S/N		POWER	
5		010		05		7		001		05		188		194		200		206		212		217		187		187		187	

OPERATIONS

Upon arrival box 8093 found following conditions at B-1 level, fire in dumpster and also on loading platform, Units operated viz: E-10 stretched line from standpipe and extinguished fire L-1 did necessary overhauling and venting

B.C. Joseph L. Barracato DIV. 1 D.C. 1 PAGE 1 OF 1

Joseph L. Barracato TYPE FULL NAME

2038 TIME OF ARRIVAL

ADMINISTRATIVE COMPANY

REPORT - STRUCTURAL FIRE

BF-24 (1/80)-175M-608551 (B3)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME		ALARM RECEIVED		INCIDENT DURATION		BOX LOCATION		REPORT	
1	01	05	01	04	-84	1625	00:20	01	00	1	8084	0028	01 572 03 2
COMMUNITY BOARD		COMPANY		YEAR		HOURS		MINUTES		BOX NUMBER		REPORT NUMBER	
FIRST AID		KILLED		UNFORMED		SCAFFOLD		EXTINGUISH		STRUCTURE		AREA FIRE ORIGIN	
EVAQUATED		INJURED		CODE		SCAFFOLD		MENT		STATUS		FIRE EXTENSION	
AIDED AND CASUALTIES		CIVILIANS		MATERIAL TYPE		MATERIAL TYPE		FACTORY		CONSTRUCT		WITHIN BLDG.	
												NO. BLDGS.	
												OCCUPANCY	
												MANNER OF	
												OCCUPANCY	
												RM AREA CODE	
												FLOOR CODE	
												CONT'S DAMAGE	
												STATUS	
												RIG DAMAGE	
												BUILDING	
												110	
												200x200	
												AREA	
												FSD Noroia	
												LEFT IN CHARGE	

363
=10

00	00	00	00	05	00	01	30	40	60	75	00	15	10	15	57	50	00	00	00	00	00
46	57	56	81	86	86	72	77	82	88	88	85	85	85	85	85	85	85	85	85	85	85

ADDRESS	STREET NAME	TYPE	ROOM, APT. NO.
1	World Trade Center		130
110	200x200		

NAME OF OCCUPANT	EQUIPMENT INVOLVED IN IGNITION	YR.	MAKE	MODEL	SIN	POWER

UNIT	PTS.	ITEM	194	200	206	212	217
5	010	05	7	010	05		
188							

OPERATIONS

Upon arrival at box was informed of fire in service elevator room on the 15th floor. Engine 10 extinguished fire. Ladder 10 checked for extension and overhauled. one sprinkler head was released.

B.C. Kenneth P. Markgraf BN. 1628 DIV. 1 D.C. 1628 TIME OF ARRIVAL _____

REPORT - STRUCTURAL FIRE

BF 24 (1) 79 125M-62851 (9-02)

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME ALARM RECEIVED		INCIDENT DURATION		HIGHEST ALARM		BOX LOCATION		REPORT		CAS RESP.	
1	04	01	01	05	17	00	55	01	01	00	00	01	075	03	2
AIDED AND CASUALTIES		EXTINGUISH MERT		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE		MATERIAL TYPE	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EQUIPMENT INVOLVED IN IGNITION		STREET NAME		ROOM, APT. NO.		YR. MAKE		MODEL		AREA		LEFT IN CHARGE		POWER	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPERATIONS		STREET NAME		ROOM, APT. NO.		YR. MAKE		MODEL		AREA		LEFT IN CHARGE		POWER	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OPERATIONS

Responded to EMS alarm, report of smoke in building. As units were responding informed by dispatcher of numerous reports of smoke from 50 to 55th floor. After searching found cause of smoke to be comic from NEH ft room on 55th floor. Fire was caused by welding operation resulted heat caused insulatic to ignite inside of fan room. Units operated viz:

- Engine Co. 10 - Stretched line from standpipe on 55th floor and extinguished fire.
- Ladder Co. 10 - Searched, overhauled, checked for extension.
- Ladder Co. 1 - Searched, checked for extension.
- Engine Co. 6 - Searched, maned command post.

AC: *Rudolph* - Quatreno
 DIV. 1st b.c. 17:51
 TIME OF ARRIVAL 17:51
 TIME OF ARRIVAL 17:51
 FULL NAME Rudolph
 FULL NAME Rudolph
 PAGE 1 OF 1

ADMINISTRATIVE COMPANY

TYPE REPORT				INCIDENT LOCATION				DATE AND TIME				ALARM RECEIVED				INCIDENT DURATION				BOOK LOCATION				REPORT				DOWNFALL			
COMMUNITY BOARD	ADDRESS	CITY	STATE	ZIP	YEAR	MONTH	DAY	HOURS	MINUTE	SECONDS	MINUTES	HOURS	MINUTES	SECONDS	BOX NUMBER	ALARM NUMBER	REPORT NUMBER	REPORT DATE	REPORT TIME	REPORT MINUTE	REPORT SECOND	DOWNFALL DATE	DOWNFALL TIME	DOWNFALL MINUTE	DOWNFALL SECOND						
1	01	5	01	0	04	28	89	2	55	00	45	10	10	10	1	809	049	0	0	0	0	0	0	0	0						
AIDED AND CASUALTIES				EXTIN. GUISHTION				STRUCTURE				FIRE ORIGIN				FIRE EXTENSION				DAMAGE				DETECTOR							
ENCOUNTERED	INJURED	KILLED	CIVILIANS	UNFURNISHED	DOOR	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND							
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00							
BAND				STREET NAME				FLOOR				FLOOR				FLOOR				FLOOR											
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
EQUIPMENT INVOLVED IN IGNITION				EQUIPMENT INVOLVED IN IGNITION				EQUIPMENT INVOLVED IN IGNITION				EQUIPMENT INVOLVED IN IGNITION				EQUIPMENT INVOLVED IN IGNITION				EQUIPMENT INVOLVED IN IGNITION											
UNIT	PTS	ITEM	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR	MAKE	YEAR							
5	007	10	5	010	02	7	010	10	7	011	05	200	200	200	200	200	200	200	200	200	200	200	200								

expanded to WTC Complex and upon arrival found fire in 1WTC, 21 level in location of a private reception office
 confined to lockers Nos. 151-152-153-154. Co's operated via...
 -7 stretched 2 1/2" line to fire and extinguished all fire, washed down and...
 -10 assisted E7 in stretching line and then stood fast
 -10 found fire, performed necessary VES, forced entry into lockers, made primary and secondary stretches
 in fire room negative, overhauled and then up
 -15 checked 21 above for extension (Negative), also checked adjacent rooms, negative clear and then up

OPERATIONS
 Joseph L. Barabada
 2302
 TIME
 TIME

TYPE REPORT		INCIDENT LOCATION		DATE AND TIME		ALARM RECEIVED		INCIDENT DURATION		HOW REPORTED		BOX LOCATION		REPORT		COMPANIES RESPONDING		HAZ MAT		SPECIAL USE		
COMMUNITY BRD	ADJCN	MONTH	DAY	YEAR	HOURS	MINUTE	MINUTE	HOURS	MINUTE	WIRE ALARM	HIGHEST ALARM	BOX NUMBER	REPORT NUMBER	INCIDENT NUMBER	PLNG BATTALION	ENG SO	LADERS	OTHERS	CLASS	AMOUNT	REMARKS	
1	01	12	07	89	1313	01	00	01	00	17	1	8084	0104	0231	01	296	07	09	08	00	000	0

AIDED AND CASUALTIES		EXTINQUISHMENT		IGNITION		STRUCTURE		FIRE ORIGIN		DAMAGE		DETECTORS	
ADULTS	CIVILIANS	STK	COND	MATERIAL	TYPE	STATUS	USE	AREA	ORIGIN	WATER	SMOKE	FLAME	PERFORMANCE
0	0	0	0	0	0	0	0	0	0	0	0	0	0

STREET NAME		AREA		DEFECTIVE-DETECTOR	
STREET	NUMBER	WIDTH	LENGTH	BRAND	SERIAL NO.
World Trade Center	99	450	450		

EQUIPMENT INVOLVED IN IGNITION		LEFT IN CHARGE	
YR	MAKE	F.S.D.	NAME
			Gene Raggio

OPERATIONS	
PTS	ITEM
10	500702
15	00602
7	01010
7	01510

Upon arrival to box 8084 found the following conditions. Light smoke condition in lobby and reported. Fire on the 7th floor. E10 officer transmitted 10-76 for fire in High Rise Building. Fire was confirmed on 7th floor in Machinery Equipment Room in air filters of air handling room. Cos. operated VIZ; E10 stretched 2 1/2" line to air handling room and operated on fire, washed down and then took up. E-7 assisted E10 in stretching first line to fire floor and then stood fast, then took up. E-6 responded to 6th floor with roll ups and stood fast and then took up. E-10 operated on 7th floor performed necessary search and notifications, searched 10th, 9th, 8th, floor results negative overhauled on fire floor and then up. E-15 made search of 7th and 8th floor, performed necessary VISA and then up.

Charles Callahan
 Robert J. Blume
 Robert J. Blume

F-24A (12/86) REPORT - ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER		FUELING METHOD		IGNITION SOURCE		STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION			
MONTH	DAY	YEAR	HOUR	MINUTE	STORY	BOX NUMBER	INCIDENT NUMBER	FUELING METHOD	CAUSE OR INSTR.	CAUSE INVENTED	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USP	STORY	AREA CODE	OCCUPANCY	AREA CODE	MANNER	OCCUPANCY	RETIRED REPORT
6	12	87	13	13	1	8054	0231														

ADDRESS		NUMBER - (INCL. HYPHEN)		SUBJECT		APPLIED DIRECT		STREET NAME				TYPE		CITY SECTION	
1	1							WTC							

DAMAGE		DETECTORS	
SPK PERFORMANCE	FLAME	SMOKE	WATER
PRELUDE	TYPE	POWER	PERFORMANCE

OCCUPANT (Driver)		ROOM/APT.	

BUILDING		STORIES		AREA	
WIDTH	LENGTH				

IF MOBILE PROPERTY		TYPE		YR.		128		MAKE		143		MODEL		158		VIN.		LICENSE		STATE	

7		008		10	
UNIT	PTS.				

OPERATIONS

L-8- search floors 9-40 results negative and then up.
 B-6- established operations post on 6th floor., then went to 7th floor MER and directed operation of units. Supervised E10, E6, E4 and L15.
 B-4- supervised operations of L15, L10, an L8 on floors above fire units conducted primary and secondary search of floors above, results negative.
 Times 10-76 1314 - E10
 Under control 1340 - Div 1
 Injured Civilians - [redacted] - smoke inhalation
 [redacted] smoke inhalation
 taken to St. Vincents Hospital
 [redacted] - smoke inhalation
 [redacted] smoke inhalation
 taken to Beekman
 EMS Chief Cervo directed operations for EMS
 PA operations Commander on scene Capt. Stinner.

bc. Charles Callahan 1
 Charles Callahan 1317
 TYPE FULL NAME TIME ARRIVED

bc. Robert J. Blume 1
 Robert J. Blume 1330
 TYPE FULL NAME TIME ARRIVED

PAGE 2 OF

REPORT — STRUCTURAL FIRE

BF-24 (12/86) 1 1.0-10000

TYPE REPORT	1	INCIDENT LOCATION	808	DATE AND TIME ALARM RECEIVED	11 94	INCIDENT DURATION	00 10	BOX LOCATION	808	REPORT NUMBER	01	REPORT DATE	01 23	REPORT TIME	00 00	HAZ MAT	1	SPECIAL USE	2
-------------	---	-------------------	-----	------------------------------	-------	-------------------	-------	--------------	-----	---------------	----	-------------	-------	-------------	-------	---------	---	-------------	---

BF-24

AIDED AND CASUALTIES	00	EXTINGUISHMENT	00	IGNITION	00	STRUCTURE	00	FIRE ORIGIN	00	FIRE EXTENSION	00	DAMAGE	00	DETECTORS	00
----------------------	----	----------------	----	----------	----	-----------	----	-------------	----	----------------	----	--------	----	-----------	----

UNITS INVOLVED	W	1	884	872	271	281	290	286
----------------	---	---	-----	-----	-----	-----	-----	-----

NAME OF OCCUPANT	P.A.	ROOM/APT.	212	MAKE	212	LEFT IN CHARGE	E.S.D. NARCIA	MODEL	239	SERIAL NUMBER	244	POWER	264
------------------	------	-----------	-----	------	-----	----------------	---------------	-------	-----	---------------	-----	-------	-----

STREET NAME	WTC	STAIRS	99	WIDTH	0.200	LENGTH	0.200
-------------	-----	--------	----	-------	-------	--------	-------

OPERATIONS

Upon arrival at box 8087, 2 WTC found rubbish fire in shaft on the 94th floor. Signal 10-76 was transmitted. Units operated as follows:

- E6-Stretched line from standpipe, stood fast, then up.
- E4-Operated house line out of stairway "B" on the 94th floor and extinguished fire in utility shaft, then up.
- E7-Assisted L10 in search of upper floors, then up.
- E24-Stood fast at Lobby Command post, then up.
- E5-Stood fast at Lobby Command post, then up.

BC	1	BN	01	DC	David M. Coleman
----	---	----	----	----	------------------

WHITE-FIRE RECORD	YELLOW-BATTALION	PINK-REFERRAL	GOLD-ADMINISTRATIVE COMPANY
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24A (12/86) 150000001 (10/00)

REPORT — ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INDUSTRY NUMBER	BUILDING NO.	IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION			
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	BUILDING NO. CONT. ON REVERSE			EQUIP INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE	NUMBER	OCCUPANCY
6	08	11	94	13	17	1	8087	0254	00												

ADDRESS	NUMBER (INCL. HYPHEN)		STREET NAME		TYPE	SUPER OCCUPANCY
	57	66	89	93		
1	2		WTC			

SFX PERFORMANCE		DAMAGE		DETECTORS	
46	53	84	113	114	123

IF MOBILE PROPERTY		TYPE		MAKE		MODEL		V.I.N.		LICENSE		STATE DM											
180	185	201	207	213	218	225	231	247	254	261	273	279											
5	224	02	5	024	07	5	028	02	5	003	02	7	010	20	7	001	20	7	015	20	7	008	20
7	101	10	7	003	07	7	005	07	7	018	07	1	001	20									

OPERATIONS

E3-Stood fast at the Lobby Command Post, then up.
 E55-Stood fast at Lobby Command post, then up.
 L10-Operated on the 107th floor, opened various walls and doors, finding no fire or extension, then up.
 L15-Assisted R1 in opening up a wall exposing fire in shaft, made necessary search and exam from 94 thru 99th floor (Termination point of shaft) Negative.
 L8-Made necessary search and exam of floors 100 thru 106, found negative.
 L5-Stood fast at the Lobby Command Post, then up.
 L18-Stood fast at the Lobby Command Post, then up.
 L101-Searsh 75, 91 and 92nd floor, found negative, then up.
 L1-Made necessary search and exam of floors 104 thru 106, then up.
 E224-Stood fast at the Lobby Command Post, then up.
 R1-Used Thermal-Imaging camera and located fire in shaft on the 94th floor.
 Batt4-Supervised operation on the fire floor, then up.
 Batt8-Supervised operations on 107 and 74 floors, then up.
 Batt2-Stood fast, then up.
 FCU-Monitored handi-talkie circuit, progress reports, then up.

DC. Lawrence M. Byrnes 01 B.N. 13:21
 Lawrence M Byrnes TYPE FULL NAME TIME ARRIVED

DC. David Corcoran 1 DIV. 13:25
 David Corcoran TYPE FULL NAME TIME ARRIVED

PAGE 2 OF 2

REPORT -- STRUCTURAL FIRE

BF-24 (1/2) Rev. 5-30-88/26 N

TYPE REPORT	INCIDENT LOCATION	DATE AND TIME	ALARM RECEIVED	HOW REPORTED	INITIAL ALARM	BOX LOCATION	REPORT NUMBER	INCIDENT NUMBER	RATINGS	ADDITIONAL INFORMATION	COMPANIES RESPONDING	HAZ MAT	SPECIAL USE
1	015010	082999	074701	0081	171	8084	0320	0126	01	021	050201	0000	0000

REPORT	REVISOR REPORT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT	HAZ MAT
1	2	3	4	5	6	7	8	9	10	11	12	13	14

STRUCTURE	STATUS	COMPLEX	FLOOR CODE	OCCUPANCY	AREA OF ORIGIN	MANNER	OCCUR	NO. BLDG.	FIRE EXTENSION	DAMAGE	DETECTORS
159	881	5	0	1	11	6	1	1	1	1	1

STREET NAME	STREET NO.	CITY	STATE	ZIP
WORLD TRADE CENTER	146	NEW YORK	NY	10048

PORT AUTHORITY	ROOM/MAPT	MAKE	MODEL	LEFT IN CHARGE	BOWSE	POWER	FSD
211							

UNIT	PTS	ITEM	276	277	278	279	280	281	282	283	284
W	7	0	10	5	0	1	0	7	0	1	1
R	1	0	1	0	1	0	1	0	1	0	1

OPERATIONS

Upon arrival at box 8084 found rubbish fire in utility shaft at the B-1 level which dropped down to the B-4 level. Units operated as follows:
 L-10 Gained access to the B-1 level, performed search, found fire in shaft, performed overhauling.
 E-10 Took hydrant, stretched line to siamese, stretched line from standpipe to utility shaft, extinguished fire at the B-1 level.
 L-1 Assisted L-10, performed search of areas above and adjacent to fire, found fire in the shaft at the B-4 level, gained access for stream operation, performed overhauling.
 E-7 Took hydrant, assisted E-10 in stretching line on the B-1 level, stretched line from standpipe on B-4 level and extinguished fire that had dropped down from fire on B-1 level.

B.C.	01	D.C.		PAGE	1	OF	2
William Dehm	07:51	N/A		TIME OF ARRIVAL	00:00		

E-24A (12/86) 15M2-861531-9028-N

REPORT -- ADDITIONAL DATA
 STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED				BOX LOCATION		INCIDENT NUMBER	BUILDING NO.	IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION		REVISED REPORT	
MONTH	DAY	YEAR	HOUR	MINUTE	BOROUGH	BOX NUMBER	CONC. ON ARRIVAL			EQUIP. INVOLVED	HEAT FORM	MATERIAL TYPE	MATERIAL FORM	CONSTRUCTION	USE	STATUS	FLOOR CODE	OCCUPANCY	AREA CODE		MANNER
6	08	29	99	07	47	18	0843	0128	00												
ADDRESS		BOYD NUMBER (INCL HYPHEN)		SUFFIX PREFIX DIRECT		STREET NAME										TYPE	SUFFIX DIRECTION				
11						WORLD TRADE CENTER															
SPK. PERFORMANCE		DAMAGE		DETECTORS		OCCUPANT (Driver)										ROOM/APT.		BUILDING			
48		53				94										113		114		123	
IF MOBILE PROPERTY		TYPE YR.		MAKE		MODEL		V.I.N.		LICENSE		STATE		DM							
189		195		201		207		213		219		225		231							
237		UNIT PTS.		243		249		255		261		261		273		279					

OPERATIONS

E-6 Took hydrant, assisted E-7 in stretch.

B.C. William Oehm 01
 B.N.
 William Oehm 07:51
 TYPE FULL NAME TIME ARRIVED

D.C. _____
 DIV. _____
 N/A 00:00
 TYPE FULL NAME TIME ARRIVED

PAGE 2 OF 2

Appendix H SIGNIFICANT FIRES IN WTC 7

Significant fires occurring in WTC 7

Significant Fire	Incident Date	Fire Location	# sprinklers activated	# standpipes activated	Cause of fire	Material Ignited
1	5/20/88	Construction shanties on floor 3	Multiple, # not listed	1	Suspicious	Shanties

REPORT - STRUCTURAL FIRE

TYPE REPORT	INCIDENT LOCATION	DATE AND TIME ALARM RECEIVED	INCIDENT DURATION	HOW REPORTED	BOX LOCATION	REPORT NUMBER	INCIDENT NUMBER	FILING NUMBER	EXT. SO NUMBER	LADDER NUMBER	COMPANIES RESPONDING	SPECIAL USE
1	01 5 010 05 20 88	01 30 32 1 2 1	0084	10256	0008	01 075	13 11	08	62	55	1 2 3	

BOAID AND CASUALTIES	EXTIN. GUSHMENT	STRUCTURE	FIRE ORIGIN	FIRE EXTENSION	DAMAGE	DETECTORS
AIDED CIVILIANS INJURED KILLED UNINJURED FIRST AID	SFTY FTR SFTY FTR SFTY FTR	TYPE CONSTRUCTION USE	MATERIAL TYPE HEAT SMOKE EQUIP INVOLVED NO OF ARRIVAL CODE	INFLDGS CAVEN NO OF LOS OCCURANCE WIND DIRECTION OCCURANCE FLDR CODE NUMBER	BLENK FLAME BLENK FLAME BLENK FLAME	FOR INVESTIGATION TYPED TYPE PRESS TYPE PRESS

BF-24

ROAD NO	NUMBER (INCL. HYPERM)	STREET NAME	ROAD DIR	TYPE
17	43	4400	0400	0400

ROAD NO	NUMBER (INCL. HYPERM)	STREET NAME	ROAD DIR	TYPE
152	177			

LEFT IN CHARGE	Sec 4 Officer	NAME	VR	MAKE	MODEL	SERIAL NUMBER	POWER

UNIT	PTS	ITEM	200	204	208	212	216	220	224	228	232	236	240
5	10	20	30	40	50	60	70	80	90	100	110	120	130

NAME OF OCCUPANT	ROOM NO	PT	212

OPERATIONS

Upon arrival at Box 84 found fire in construction shanties on the 3rd floor. Transmitted 10:26 am. 10:41-1. Units operated. VIZ:
 E10-Stretched line from standpipe and extinguished fire.
 E10-Found sprinklers and in operation. Shut down sprinklers and made necessary search, ventilation and overhauled as required.
 E7-assisted E10.
 E4-Stretched line to 4th floor. Stood fast.
 E6-assisted E4.

BF-24A (12/86) 15112-861531-PC2B-N

REPORT — ADDITIONAL DATA

STRUCTURAL FIRE, TRANSPORTATION FIRE, NON-STRUCTURAL FIRE OR EMERGENCY

TYPE REPORT		DATE AND TIME ALARM RECEIVED					BOX LOCATION		INCIDENT NUMBER	BUILDING NO	IGNITION				STRUCTURE		AREA OF ORIGIN		FIRE EXTENSION			
1	2	3	4	5	6	7	8	9			10	11	12	13	14	15	16	17	18	19	20	
6		05	20	88	00	35	1	0064	0008	3	9E	97	97	97	1	501	1	03	50	39	00	99

ADDRESS	NUMBER (INCL. HYPHEN)		SUFFIX PREFIX DIRECT		STREET NAME	TYPE	SUFFIX DIRECTION
	57	68	69	70			
1	7				WTC		

SPR. PERFORMANCE		DAMAGE			DETECTORS				
46	47	% DAMAGED	FLAME	SMOKE	WATER	PRESENT	TYPE	POWER	PERFORMANCE
1	1	6	6	1	1	2	1		

OCCUPANT (Driver)		ROOM/APT.	
94	113	114	123
		48	0400

IF MOBILE PROPERTY		TYPE		YR.	128	MAKE		143	MODEL		158	V.I.N.		LICENSE		STATE
189	195	201	207	213	219	225	231									
7	010	20	72001	20	7	008	20									

OPERATIONS

Operations as follows;
 L8-Assisted L10 Made primary and secondary search of 5-10,11,12. Then up.
 L1-Made search and examination of the 4th floor. Then assisted L8 in the examination of upper floors. Then up.
 Batt 4-Supervised E10 and L10 on fire floor.
 Batt 2-Supervised E4 and E6 and L1 on floors above fire.
 FCU- SOP
 MSU- SCP
 E3- Stood fast.
 Batt 6- Stood fast.

B.C. Rudolph B. Quatrone Bn-1
 B.N. _____ DIV. _____ PAC
Rudolph B. Quatrone 0043
 TYPE FULL NAME TIME ARRIVED TYPE FULL NAME TIME ARRIVED

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Appendix I
EXTRACTED PAGE FROM PACO REPORT ON SPRINKLER PROGRAM

PACO 2002 Report: World Trade Center General Description of All Building Systems and the Capital Program. Extracted page.

Miscellaneous Life Safety Improvements and Sprinklerization Program

12: Miscellaneous Life Safety Improvements and Sprinklerization Program

12.1 Description of the Program

The initial base building provided for Fire Standpipe (FSP) protection in the Towers and Plaza Buildings and no sprinkler system installation (except in the sub-grade Levels). In response to the enactment of Local Law 5 and other NYC Building Code Local Law enactments related to the fire protection of high rise office towers built after 1973 the Port Authority voluntarily retrofitted the WTC complex to comply with the new NYC Building Code Requirements supplemented by PA imposed life safety requirements unique to the WTC. These requirements provided tenants the option of achieving fire protection compliance by a compartmentalization or a sprinklerization option. The Scope of miscellaneous life safety and sprinkler system upgrades/improvements, other than certain fire alarm, concourse circulation and blast recovery improvements discussed elsewhere, included but was not limited to:

12.2 Scope of Fire Life Safety Improvements

Architectural Modifications - On all floors:

- Upgraded core wall construction to provide for a 2 hour rated fire separation from one side of a tower floor to the opposite side (Where core wall were already 2 hour rated, such as in elevator shafts, upgraded where not previously required).
- Installed a double acting set of rated HM fire doors in the core corridors where the above 2 hour rated fire separation crossed the corridor (This enabled one half of a typical tower floor to serve as a horizontal fire refuge for the other.) Doors included special magnetic hold open hardware and closures linked to smoke detectors in floor return air ducts.
- Restored all ceilings in corridors and lobbies affected by fire protection installations.
- Provided slab-to-slab 1hour fire rated walls to enable a maximum of 10,000 gross square foot compartmentalization on each side of the 2 hour rated fire separations.

Sprinkler System Installation

- The entire WTC complex was fully sprinklered. The Sprinkler System was installed in three basic phases. Phase 1: Sub-grade areas for the initial building construction; Phase 2: Sprinkler riser/main installation throughout 1 & 2 WTC including the sprinklerization of corridors, storage rooms, lobbies and certain tenant/PA spaces in 1976 in compliance with Local Law 5 to provide tenants with a compartmentation or sprinkler fire protection option; Phase 3: The full sprinklerization of the entire complex for all remaining places from 1983 to the 2001 (including 1993 blast recovery and ongoing up-upgrades/improvements and replacements).
- The Tower sprinkler systems were fed in the various zones from the gravity feed fire reserve tanks located on the 20th, 41st, 75th and 110th Floors through a 4" vertical sprinkler riser located in the Janitor Closet on each floor of each building in the WTC complex.

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