U.S. Fire Administration/Technical Report Series

Apartment Complex Fire, 66 Units Destroyed

Seattle, Washington

USFA-TR-059/September 1991

FEMA

U.S. Fire Administration Fire Investigations Program

The U.S. Fire Administration develops reports on selected major fires throughout the country. The fires usually involve multiple deaths or a large loss of property. But the primary criterion for deciding to do a report is whether it will result in significant "lessons learned." In some cases these lessons bring to light new knowledge about fire--the effect of building construction or contents, human behavior in fire, etc. In other cases, the lessons are not new but are serious enough to highlight once again, with yet another fire tragedy report. In some cases, special reports are developed to discuss events, drills, or new technologies which are of interest to the fire service.

The reports are sent to fire magazines and are distributed at National and Regional fire meetings. The International Association of Fire Chiefs assists the USFA in disseminating the findings throughout the fire service. On a continuing basis the reports are available on request from the USFA; announcements of their availability are published widely in fire journals and newsletters.

This body of work provides detailed information on the nature of the fire problem for policymakers who must decide on allocations of resources between fire and other pressing problems, and within the fire service to improve codes and code enforcement, training, public fire education, building technology, and other related areas.

The Fire Administration, which has no regulatory authority, sends an experienced fire investigator into a community after a major incident only after having conferred with the local fire authorities to insure that the assistance and presence of the USFA would be supportive and would in no way interfere with any review of the incident they are themselves conducting. The intent is not to arrive during the event or even immediately after, but rather after the dust settles, so that a complete and objective review of all the important aspects of the incident can be made. Local authorities review the USFA's report while it is in draft. The USFA investigator or team is available to local authorities should they wish to request technical assistance for their own investigation.

This report and its recommendations were developed by USFA staff and by TriData Corporation, Arlington, Virginia, its staff and consultants, who are under contract to assist the USFA in carrying out the Fire Reports Program.

The USFA greatly appreciates the cooperation and information received from officials of the Seattle Fire Department, most particularly Chief Claude Harris, Assistant Chief Steve Bailey and Fire Marshal B. L. Hansen.

For additional copies of this report write to the U.S. Fire Administration, 16825 South Seton Avenue, Emmitsburg, Maryland 21727. The report is available on the USFA Web site at http://www.usfa.dhs.gov/

Apartment Complex Fire, 66 Units Destroyed Seattle, Washington

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FEMA

Department of Homeland Security
United States Fire Administration
National Fire Data Center

U.S. Fire Administration

Mission Statement

As an entity of the Federal Emergency Management Agency (FEMA), the mission of the U.S. Fire Administration (USFA) is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination, and support. We serve the Nation independently, in coordination with other Federal agencies, and in partnership with fire protection and emergency service communities. With a commitment to excellence, we provide public education, training, technology, and data initiatives.

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Apartment Complex Fire, 66 Units Destroyed Seattle, Washington September 21, 1991

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OVERVIEW

An accidental fire started in a first floor unit of the 96-unit Villa Plaza apartment complex in Seattle, Washington, and spread to 66 units before it was stopped. Virtually all of the other units received some damage, too. The fire started at about 2115 on a Saturday night and spread rapidly due to the extensive use of cedar siding, decorative screens and walkway ceilings. It became a five alarm fire and required three task forces from neighboring jurisdictions. This was one of Seattle's largest residential fires in 20 years. (See Appendix A for Floor Plans and Building Elevation Drawings and Appendix B for Site Diagram.)

There were no fatalities despite the need for several occupants to jump or be dropped two or three stories to escape. A combination of Seattle Fire Department rescue efforts and tenants helping each other averted injuries.

The availability of three (emergency) ways out from each unit, the absence of interior hallways, and the occurrence of the fire while most residents were awake cut the toll of injuries.

The fire could have been prevented if the woman who started it had exercised reasonable care in using a candle for light. The fire would not have spread as rapidly if there were fewer wood surfaces on the exterior exit walkway and façade or if there had been sprinklers.

SUMMARY OF KEY ISSUES

Issues	Comments
Fire Origin	Careless use of candles by woman whose power was cut off.
Fire Spread	Use of combustible cedar siding, walkway ceilings, and 4-story decorative/security screen.
Fire Reporting	Estimated 15 minute delay before residents reported the fire. Delay a combination of non-reporting by woman who started it, attempts to fight fire, and assumption that others reported it.
Building Fire Protection	No sprinklers. Hand-pulled alarm worked but was largely not believed; no automatic alarm to fire department. Detectors worked but were a minor factor.
Staffing Levels	Three (versus four) person crew on first-in engine delayed start of water attack by eight minutes because of need to rescue a woman.
Losses	$3.9 Million
Casualties	No deaths, eight civilian injuries.
Escape	Many people were able to escape from walkways, windows and balconies. Fire department rescued eight.
Multiple alarms	Fire was in extreme southeast corner of city; it took a considerable time to build up a large firefighting force.
Interagency Cooperation	Very good.
Incident Command System	Worked very well, but short of enough chiefs in early stages.

Citizens in the complex delayed calling the fire department by 15 to 20 minutes after the fire started, and many did not believe the building alarm and failed to react due to many prior false alarms at the site. First in firefighters found a 40-foot wide swath of flames four stories high.

The Seattle Fire Department made some excellent tactical decisions that saved part of the complex.

Staffing levels on the first three responding units may have affected the level of damage. Also, the fact that the fire occurred in the southeast corner of the city far from the center where the mass of fire-fighting units are concentrated meant that it was difficult to assemble the needed army of firefighters quickly, which delayed extinguishment efforts.

Losses were estimated at $3.9 million. One building was totally destroyed and two others were heavily damaged and had to be razed; two more were moderately damaged. Thirty-one cars were damaged or destroyed. There were eight civilian casualties, two serious, and two firefighter casualties, neither serious.

THE BUILDING COMPLEX

The fire occurred in the Villa Plaza apartment complex located at 9111 50th Avenue South in the Rainier Beach district in southeast Seattle. The complex was built in 1968 and consisted of five 4-story, wood-frame buildings in a U-shape configuration. The open end of the U faced north. The overall complex measured 200 feet by 234 feet. The common courtyard had a pool and small pool building. The lowest story of each building was partly below ground. The square footage of the five buildings were:

	Area Sq Ft	*Damage*
Building A	21,000	Moderately damaged
Building B	22,600	Heavily damaged and razed
Building C	26,100	Destroyed
Building D	22,600	Heavily damaged and razed
Building E	21,000	Moderately damaged

Exit Paths – Exterior covered walkways running the length of each building provided access to each apartment unit. The walkways connected between buildings. There were five stair towers: one in the northeast corner of the complex, one in the northwest corner, and three evenly spaced across the south building (C). There were also two passenger elevators on either end of the south wing, adjacent to the covered parking areas. A small, short hallway stub led from the walkway to each pair of apartments. Most of the apartments also had a balcony facing the interior side of the complex. Occupants thus had three potential ways to escape: 1) through their front door down the short hallway, then along the exterior walkways in either direction to a staircase; 2) through a bedroom window directly to the walkway; and 3) from their rear balcony or rear window.

The ceiling of the exterior walkways on Floors 1-3 was an exposed tongue-and-groove cedar surface supported by 4 inch by 8 inch cantilevered wood beams. The walkways consisted of concrete covered by outdoor carpet. Fire doors had been retrofitted at intervals along the walkways.

The exterior facades of the walkways on the fronts of the buildings were 4-story high decorative lattices comprised of 2 inch by 6 inch vertical cedar boards approximately on 9-inch centers. (The space between the vertical cedar boards was about seven inches.) The lattices had 10-foot widths separated by 5-foot brick fascia. These lattices were both for aesthetics and security. The wood had been covered with oil-based stain. The wood had dried out in approximately 30 days without rain prior to the fire.

In other words, *the exit paths on Floors 1-3 were encased in highly combustible wood on three sides.*

Construction – The apartment complex was of ordinary wood construction, with no special hazards. It had a flat, hot tar roof over dimensional lumber which helped slow the spread of fire on the top floor; the roof did not have trusses. The siding was beveled cedar over waterboard (like plasterboard), which helped slow the fire penetration but not the lateral spread. The water- board helped save the two north buildings (A and E) from penetration of the exposure.

Windows on the units were single pane glass, which quickly broke in the fire. Interior walls had plasterboard, which held up quite well.

Fire Protection Systems – There were no sprinklers in the apartment complex. A manual pull alarm was retrofitted in 1981. It was interconnected throughout the 5-building complex, with the added feature of having an alarm bell in every unit. Pulling any alarm handle set off the alarms in the whole complex. In the building of origin, there were 10 manual pull stations. An alarm panel was in the office adjacent to the main entrance on the east side of the complex.

Every apartment unit also had a battery-operated smoke detector furnished by the owner. It was the responsibility of the tenants to maintain them. The detectors were not interconnected. The building of origin had 17 rate of rise detectors.

There were dry standpipes in every stairway, but no hoselines for tenants to use. Fire extinguishers were hung in appropriate places as required by code.

Codes – Seattle uses their own modified versions of the Uniform Building Code and the Uniform Fire Code. They are called the Seattle Building Code (SBC) and the Seattle Fire Code (SFC). The Villa Plaza Apartments were built in 1968, according to the 1956 SBC then in effect. Table 1 contrasts the current code requirements to those used in the building. If built in 1991 the complex would have had some key safety features that almost certainly would have made a major difference in the outcome of the fire: the residential units would have been sprinklered, and the complex would have a central station automatic alarm linked to the fire department. The sprinkler operations would have caused a signal to be sent to the fire department and led to earlier fire department response. The fire damage most likely would have been contained to the apartment of origin if the complex were built to current code.

Inspections/Violations – The building complex had had five minor maintenance violations since 1990, and they were not thought to matter in the fire. The building was inspected annually, with additional cursory reviews every two weeks or so. The fire alarm system was certified annually, and worked.

Occupancy -- At the time of the fire there were approximately 260 people living in the complex, in 96 units, 18 on the first floor and 26 each on the higher floors.

Social Environment – Most of the residents were from low income households, some on welfare. Many were immigrants. The apartment complex had been a known haven for drug dealers and users. There had been many police calls to the complex. The apartment complex had a new manager who had made good progress in evicting problem tenants and reducing the drug trade, but had not been totally successful.

Table 1 – Seattle Code Requirements for Multi-Family Dwellings

Feature	Requirements in 1968 (Based on 1956 UBC)	Requirements in 1991 (Based on 1988 UFC & UBC)[1]
Class 1 Fireman's	Required	Required
Standpipe (4") in stairs		
Class II Tenants Standpipe/Hose Cabinet	Not Required	Not Required (because of sprinklers)
Automatic Sprinklers — Residential Type	Not Required	Required
Automatic Sprinklers — Complete Coverage	Not Required	Not Required (Total) (Residential Units Required)
Fire Alarm	Not Required, but Installed in 1981	Required
Central Station/ Automatic Fire Department Alarm	Not Required	Required
Max. Allow. Area per Building Division	31,500 square feet Actual: 21,000-26,100	31,500 square feet

continued on next page

[1]The 1988 Model Uniform Fire Code was adopted by Seattle in December 1990, with some modifications.

Feature	Requirements in 1968 (Based on 1956 UBC)	Requirements in 1991 (Based on 1988 UFC & UBC)[1]
Area Separation	2-hr. (Class D)	2-hr. with 1-1/2-hour door
Construction	20 minute – on drawings	
Exterior Balcony Construction	3-inch thick wood decking or 2-inch fire retardant wood with weather protection.	Non-combustible or 1-hour construction or heavy timber
Smoke Detectors	Not Required (installed in units retroactively to meet State code)	Required in units; Not required elsewhere if sprinklered.

SBC = Seattle Building Code SFC = Seattle Fire Code

Security – The residents had hired a security guard who was going to move in the week after the fire. He was to patrol the halls at night, and could have made a difference in both detection and evacuation.

FIRE ORIGIN

The fire started about 2115 – 2120 by a candle in the first floor apartment #115 on Saturday, September 21, 1991. (See Floor Plan in Appendix A.) The tenant, a 22-year old mother of three children under age seven, had had her electricity shut off ten days earlier. She "borrowed" electricity several times from a neighbor using an extension cord, but on the night of the fire the neighbor refused and the mother resorted to using a candle for light after coming home with her children to a dark apartment.

The candle was placed in a plate on a dresser in her bedroom. As the candle burned down, the mother kept the fire going by feeding it with some paper envelopes. When the fire flared up, she tried to blow it out, which caused flaming debris to scatter. A piece of flaming paper fell behind the dresser and ignited something on the floor – probably clothing or the rug. (Clothes were scattered about the floor, and remnants were found by the dresser.)

The tenant tried to extinguish the fire with water unsuccessfully for a period of time, then brought her three children out to her car. She called out to people in the parking lot outside her apartment that there was a fire and to get some water. At least one man tried to fight the fire with a bucket of water. She did not call the fire department. After the fire blew out the bedroom window, she drove off in her car, almost out of control. She struck a car in the parking lot several times but continued. A search by police and fire officials found her two days later hiding with relatives. She described how the fire started to investigators.

FIRE DETECTION AND REPORTING

The apartment where the fire started was dark because of the lack of electricity, which made it relatively easy for people standing in the parking lot, level with the apartment's window to notice the dancing flames as they grew. One eyewitness said she saw the flames low on the floor and then they got higher. The onlookers' concern was reinforced when the tenant fled the apartment, saying there was a fire. Her detector was alarming at this time.

A man carried a bucket of water into the apartment of origin and shouted that it was a fire "for real." There was growing commotion from people becoming aware of the fire.

A 17-year-old boy came out of apartment #216, above the apartment of origin, and saw and heard the man shouting. He ran in, had his mother call the fire department and then ran out banging on doors and yelling, "Fire, fire for real, get out, get out."

His mother was the first to call the fire department. *It was estimated by the fire department's reconstruction of the timeline of events that this first report occurred about 15-20 minutes after the fire started.* Several of the people who initially knew about the fire did not call the fire department because they assumed others had already called.

The manager of the unit, who happened to live on the third floor almost directly above the apartment of origin, came down to see what the commotion and shouting were about. She started calling to people to get out, and then went to the apartment complex office to call the fire department. Her call was the second to come in.

The 17-year-old boy proceeded to pull the manual alarm, which set horns off in every unit. About this time the window of the bedroom where the fire started blew out, and heavy flames rolled out.

At first, few people responded to the alarms. The apartment complex had had many false alarms in the past, and most people thought this was just another one. Even when people believed there was a fire, it seemed far enough away from their unit to not be an immediate worry. While some people did leave their apartments, many did not until they were directly threatened by smoke or flames. There were many close calls of people just getting out or jumping from balconies or windows to escape the flames throughout the incident.

The smoke alarm in the apartment of origin was inconsequential. Many other smoke alarms also went off; in some cases they helped convince people that there was a real fire – something not usually mentioned as a benefit of detectors.

FIRE SPREAD

Once the fire broke out of the apartment of origin, it spread extremely rapidly – so fast that fire officials considered the fire suspicious at first and called in the Federal Alcohol, Tobacco and Firearms (ATF) Bureau to investigate.

The fire occurred at the end of an unusually hot end-of-summer day. The sun had shone all day on the south end of the building where the apartment of origin was. The entire preceding month also had been unusually dry. The wood was dry.

A light breeze was blowing, which aided the spread of the fire.

The fire coming out of the broken front bedroom window initially impinged on the base of the brick decorative fascia that separated segments of the cedar screen running up the face of the balconies. The screen was comprised of vertical 2 by 6's. It soon ignited and acted as a path for the fire to quickly extend vertically up the entire 40-foot face of the screen, and also horizontally across the screen. The fire also quickly ignited the cedar siding and cedar underside of the walkway ceilings. The fire spread both east and west on the face of the building.

The fire continued to spread throughout the event along the cedar screens, walkway ceilings and the siding. Units were ignited primarily by radiation through their windows rather than through the walls of neighboring units or through ceilings between units.

As units became involved in the building of origin, fire spread through them from the front to the rear of the building – the pool-side interior of the complex. It spread along the rear (courtyard) side as well as the front side. The fire spread from Building C to Buildings B and D.

One tenant (Ms. Hall-Austin) was quoted in the Seattle newspaper as seeing smoke "curling like a tornado" when she opened her front door to the short hallway. As she carried her 5-year-old to the stairway and ran down, "flames exploded along the wall." Another tenant expressed disbelief that flames could spread that fast. "It just went swoosh," said Claudette Williams.[2] She then caught a 5-6-year-old boy who was dropped to her from a second floor balcony.

ESCAPE

Tenants had choices in their escape routes, and exercised them. One tenant quoted in a Seattle newspaper said that when he got to a stairway he found it engulfed in flames. He led his wife to the opposite end of the hallway, then went back to ensure his neighbors escaped.

Though the tenants did not believe the fire even existed at first and then did not react quickly, once they did decide to move *they took care of their children*. This was a significant difference from many fatal fires where children are left behind. Neighbors helped each other as well as their own families. Children were dropped into waiting arms. People assisted each other in climbing down balconies or finding alternative escape routes.

FIRE DEPARTMENT DISPATCH AND INITIAL OPERATIONS

The first call on the fire was received by the police 9-1-1 communications center at 2135. (See Appendix C for a complete timeline.) The call was passed to the fire department at 2136. The first alarm response was dispatched 2137. It included three engines (Engines 33, 28, 36), two ladders (Ladders 12 and 7) and a battalion chief (BC 5). This was the standard response to an apartment complex fire in the residential area of the city.

There elapsed five minutes from the first call to 9-1-1 to arrival of the first unit, Engine 33, at the scene. The engine pulled up on the east side of the complex at its southeast corner, close to a hydrant, as planned. The lieutenant ordered the crew to connect to the hydrant and to lay a manifold and a 2-1/2-inch line, which they started to do.

As the lieutenant rounded the southeast corner of the building to get to the south side where the flames were, the sight was almost overwhelming: flames extended in a 40-foot wide swath from the ground floor over the top of the building. The full extent of the fire was not visible from the front (flames were spreading from front to back of the initial units and then out and up the courtyard side of the structure).

A woman on the second floor of the east side of Building D (on 50th Avenue South) started to prepare to jump.

The first-in engine company had one officer plus two firefighters. They could not both assist in a rescue and continue to lay and advance a line (each a 2-person job). They opted to assist the woman in imminent peril, raised a ground ladder and rescued her and her dog. As a result, they were not able to get water on the fire until about eight minutes after they arrived. By that time the fire was well beyond the control of a single line.

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[2] *Seattle Times*, September 23, 1991.

The next units in were Engine 28 and Ladder 12, arriving together from the station they shared about one and a half to two minutes after Engine 33. As they approached the fire and saw a large column of smoke, the engine company officer called for an immediate *second alarm*, which doubled the complement on its way to the fire and added the deputy chief and support units.

The ladder truck pulled in behind Engine 33 on the east side. The ladder company officer reported that at this time almost the entire outside of Building C was burning – about 150 feet horizontally. Neither they nor the engine could drive to the south side of the building because of the way the complex was laid out. The structure of the complex was such that cars had to drive through a low overhang to get access to the south parking lot – and fire vehicles could not get through. (Had they been able to park the vehicle where they would have preferred, it almost surely would have been destroyed, since all cars in the area were destroyed.) The ladder company started to raise its aerial and take off a ground ladder to meet the burgeoning demand for rescues from all levels and several sides of the complex.

Ladder 12 arrived with one officer plus three crew. They were short one person, who had been detailed to the engine company in their station (Engine 28) to fill its complement to three.

While the aerial was being raised, the ladder truck temporarily lent a man to assist Engine 33's lieutenant in resuming actions to get a line into play. However, by this time the ropes and rubber gaskets of the manifold that had been dropped on the south of the building by Engine 33 had started to smolder from radiant heat, and the line had to be used in a fog pattern to protect the officer and the lines while a monitor was set up on the south side. The loaned aerial man went back to his primary duty on the aerial as soon as it was raised, leaving the lieutenant on his own with the first line on the fire.

Engine 28, the second-in engine company from the first alarm response, pulled in on the west side of the complex. They saw heavy smoke coming across the top of the building from the south side, and many people climbing down exterior balconies, with four trapped on the top balcony. They were able to lay a manifold for two 1-3/4-inch handlines and to initiate rescue operations in parallel.

Engine 28 had been short because their rookie had been detailed to a fire watch for the president of South Korea who was in town that day. However, the rookie asked permission to attend the fire and arrived with the first arriving aid unit; he was able to immediately assist his engine company, which made a material difference in their being able to lay a line while also effecting a rescue. They estimate that his fortuitous addition allowed them to put water on the fire several minutes earlier than they otherwise would have been able to do. This is thought to have ultimately helped save Building A.

The third-in engine, Engine 36 (an extra manpower unit with five firefighters) and the second ladder of the initial response arrived within 10 minutes of the call to 9-1-1, about five minutes after the first responding unit.[3] By then people were climbing down from balconies, jumping off balconies, dropping children from windows, and scrambling to safety on all sides of three buildings. Hundreds of people were gathering in the streets to watch.

[3] Part of the initial dispatch was a "manpower" squad with one officer and four crew. However, because of short staffing citywide, the nearest fully staffed manpower unit was Engine 36, not the closest one to the scene. Dispatching policies are under review in light of continuing reduced staffing levels.

The first-in battalion was headed by an Acting Battalion Chief, (Captain Molly Douce), the highest ranking female firefighter in Seattle. She arrived about 5-7 minutes after the first arriving engine company and found flames "visible from floors 1-4 and approximately the entire length of the building." She immediately called for a third alarm and had the third-in company (E-36) lay exposure lines into the east exposure building.

SECOND PHASE OF OPERATIONS

The second alarm dispatch had been for Engines 26 and 27 and Ladder 3.

The streets on the east and west side of the complex were deadends, impeding access and placement of the additional vehicles.

Most of the first and second alarm crews were assisting with rescues. Several handlines and monitors were deployed. The fire department made at least seven rescues of people in imminent danger and assisted many others during the course of the fire.

At 2153 the Acting Deputy Chief (Donald Taylor, Battalion 1) arrived at the scene, about 16 minutes after the first units were dispatched. He found the south wing of the complex (Building C) fully involved with the fire "raging out of control." The southwest wing (Building B) was heavily involved, and the fire was progressing toward the southeast section, under a southwesterly wind. Ladder 12 and Ladder 3 were rescuing victims from the east wing. He requested a fourth alarm within a minute after arriving. Engine 36 was positioned on the north side of Building C in the courtyard and attempted to stop the fire from spreading to the east building. Another company was designated to cover houses across from the south exposure of the complex (and did so successfully).

Within 40 minutes of the first call, the fire was made five alarms, Seattle's highest category. Units continued to be added after this.

It was apparent by this time that it would not be possible to undertake a meaningful attack on the fire in the main building, and that the available water and room to attack the fire would be better used as a defensive operation to save Buildings A and E, and to salvage as much of Buildings B and D as possible. After initially being the focus of the attack, Building C was left to burn.

Interior attacks were made on each floor of Buildings B and D, and from the apartments on the south ends of Buildings A and E on every level, and from the exterior with monitors. The battle switched to a defensive fight.

The acting chief of the department at the time of the fire, Deputy Chief Steven Bailey[4] arrived at about 2155 and took over the Incident Command System (ICS) which had been established by the first-in Battalion Chief, and passed to the Acting Deputy Chief (Battalion 1).

The ICS worked well in this incident. As the size of the force and complexity of the operation increased, two branch commands were established: Branch A on the south side of the building, and Branch B on the north side.

Throughout the incident, couplings and manifolds had to be hosed down to keep them from igniting from radiant heat.

[4] Bailey is now Assistant Chief, Operations.

The fire department was under great pressure from the media and public during this operation. The fire was being televised while the inhabitants watched the fire spread toward new areas of the buildings.

The fire department saved almost all of two buildings (A and E) and half of two more (B and D) though the latter two were ultimately razed. The fire was brought under control at 0156 on Sunday and extinguished except for spot fires at 0357, almost six hours after it started.

LOGISTICS

The location of the fire caused numerous logistical problems. It was in the southeast corner of the city, far from most units. (See Appendix F for map of Seattle station locations.) It took a long time to build up the army of firefighters needed to handle the situation. Most cities would face a similar problem. Higher fire alarms were called in more rapid succession than was usual to provide adequate staffing and relief. But the delay in getting adequate forces on the scene undoubtedly caused some apartments to be lost that could have been saved had more manpower been available.

To add manpower, three task forces of five units each were called under mutual aid agreements from neighboring jurisdictions on the north, east, and south of Seattle. Two were used at the scene and one to fill in for units at the scene.

The total force used at the fire included three-quarters of all Seattle units plus the three task forces. (See Appendix D.) The firefighting involved: 20 engine companies, six ladder companies, five battalion chiefs, over 125 firefighters. Counting relief units and returns of second shifts of the same unit, there were many more.

In reviewing logistics after the fire it is important to know when each unit had arrived. A number of units at this incident did not immediately report in their arrival to dispatchers. In some cases the dispatchers had to infer units had arrived from radio traffic. This had no impact on operations on this incident but it could have, and it did make the post-mortem analysis more difficult.

The Seattle Police had to call out a tactical response to provide officers to deal with the several hundred people who fled the fire or came to help or to watch. The crowds impeded access of vehicles on the narrow, dead-end streets.

INTERAGENCY RELIEF COORDINATION

This fire had the attributes of a small disaster. It left 224 people temporarily homeless, most of whom were low income minorities and immigrants. Translators from within and outside the fire department were needed to speak in six languages to understand the problems of the fire victims and to question them as to whether all had gotten out. The languages needed were Russian, Greek, Vietnamese, Spanish, Chinese and Ethiopian.

The agencies involved in the relief effort were the Red Cross, Salvation Army, Seventh Day Adventists, Division of Emergency Management (part of the City's Department of Administrative Service), the Department of Human Services, and the State's Department of Social and Health Services. In addition, a rented team of dogs were used briefly to check the rubble for victims (none were found).

The Red Cross sent a response team to the scene. In the absence of a formal relief coordinator on the scene, they became the de facto coordinator. The Red Cross focused on immediate shelter and mass feeding. The Seventh Day Adventists focused on providing clothing and, later, furniture. The

Salvation Army helped feed firefighters and other emergency workers on the scene. The Department of Human Services provided personnel for case work. The Office of Emergency Management, besides getting the Red Cross to the scene, helped arrange for cranes to search for victims in the rubble and screen meshes needed to sift the rubble for clues as to the origin.

The Red Cross representative said they were overwhelmed at first by the rush of people seeking help, many of whom were immigrants. The Red Cross used a local high school as a shelter and base. They served over 1,500 free meals. Food vouchers were given to victims to use at a local grocery store. Up to three days at local hotels and motels were made available to 120 residents who applied for it. About 20 people stayed in the high school gym.

Some people who did not live in the complex turned out to receive emergency benefits. The service agencies did only a cursory screening; they were more concerned that the needy were served than that a few others snuck in. The resident manager and neighbors were able to help vouch for most people seeking help.

The State's Department of Health and Human Services had a number of special problems to deal with. Victims needed a variety of assistance:

- Temporary immigration papers
- Temporary drivers licenses for those needing them to work
- Food stamps and free health care documents for those on welfare
- An interim address to which welfare checks could be sent
- Tools for people who depended on them for their jobs
- Transportation to jobs and relatives
- Medication
- Dentures

Homeless victims needed long term housing arranged beyond the temporary help provided by the Red Cross. About 35 families had been receiving Federal assistance for housing; ironically, they could be relocated more quickly than those not on assistance.

CASUALTIES AND LOSSES

Civilian Injuries – Rather incredibly, only eight civilians were injured, two seriously. This is a tribute to the fire department and to rescue efforts by residents and neighbors. One woman jumped or slipped while trying to climb down from a third story balcony before the fire department arrived in force, and one was overcome with smoke. Four people were released after treatment for smoke inhalation. There were two other minor injuries.

It took three days to confirm that there were no fatalities. The fire department compiled a list of survivors with the help of the building manager. But despite their efforts and pleas on television and radio, some of those who fled never returned or notified the authorities. (There were some with criminal records, some involved with drugs, and many immigrants among the survivors; not all wanted their whereabouts known.) The woman who started the fire was not located until two days after the fire; she was living with her sister.

Firefighter Injuries – Two Seattle firefighters suffered elevated blood pressure from exertion and exposure to heat. These were the only injuries, an excellent record for a fire of this magnitude – but there was a close call. Part of a balcony railing collapsed and fell on three firefighters in the interior courtyard of the complex, but they were quickly cleared of the debris and continued working. Their outfits protected them. This was another win for the new generation of protective clothing, even though they are hot to wear. The Seattle Fire Department calls higher alarms more rapidly than a decade ago and rotates crews more often to deal with exertion from wearing the new outfits and from having smaller crews.

Property Damage – Total direct losses had been estimated at $3.9 million. Of this, $3.5 million was losses to the structures, $.12 million was estimated losses to cars and trucks, and $.32 million estimated losses to contents. Out of 96 units 66 were destroyed or razed (though some lasted long enough for some personal property to be saved). All of the remaining units received smoke, water, or firefighting damage. The surviving units required rehabilitation and were still vacant six weeks after the fire.

Thirty-one vehicles in the parking lot on the south side of the buildings were destroyed by radiant heat and flaming debris. The cars seemed to explode in flames, though not from gas tank explosions. They spread shrapnel and debris as they exploded.

The houses surrounding the apartment complex on the south side sustained minor damage to windows and from smoke. Properties on all other sides were undamaged due to the successful defenses of the exposures. All of the surrounding buildings had been evacuated when it was not clear how far the fire would spread. The property had been appraised at $3.5 million in 1985 and had $4.3 million insurance coverage.

FIRE INVESTIGATION

Seattle used its entire complement of fire investigators to determine the cause and development of this fire (two officers, six fire investigators, plus two police detectives). The Seattle Fire and Police Departments teamed to find the tenant who started it. In addition, ATF was immediately called to the scene and rapidly responded with a 20-member quick response team that quickly sifted through the debris, took samples and arranged for lab tests. (See Appendix E for Seattle Fire Department Investigator's Report, ATF Laboratory Report and Police Department Incident Report.) The ATF tested carpet, carpet pads, concrete, a melted plastic jug and charred debris. Based on the testimony of the woman who admitted starting the fire, eyewitnesses standing outside her unit at the time of the fire, and failure of any tests to turn up accelerants, the fire was determined by the Seattle Fire Department to be an accidental fire started by a candle.

LESSONS LEARNED

1. **Local legislators and power utility officials need to have pointed out to them the potential fire safety impact of cutting power to low income households.**

   Many fires such as this one have been started by low income families resorting to open flames for light or using stoves, ovens and open flames for heat when their power is cut off.[5] Cutting

[5] For another example besides this fire, see Four House Fires That Killed 28 Children, United States Fire Administration (report #020), 16825 South Seton Avenue, Emmitsburg, Maryland 21727.

power also can disable hard-wired detectors and alarm systems. These results of cutting power often are not considered by utilities. Local welfare agencies should give assistance for electric power as high a priority as shelter. In some communities, the local power company will provide a lower current, minimal service to power heat and light but not use washers, dryers, TVs, etc., if payments are stopped. (See Appendix G for description of Delaware program utilizing load limiter devices and model notice to delinquent account customers.)

2. **Public fire education programs need to make special efforts to reach low income families, including the hard-to-reach.**

   It is often difficult to get safety messages to people who have low education, no stable job, drug problems, etc. But the effort needs to be made on getting across the basics. If power is cut off, the power company should either deliver safety messages to the household involved or alert other agencies who may then do so. Misuse of candles, portable heaters, and stoves are common problems.

   Another path for reaching low income families is through their children in school. Kids can be taught the basics of fire safety and the importance of getting out quickly and calling 9-1-1 immediately – even in preschool or kindergarten.

3. **Many people – perhaps most – still need to be taught how fast fire and smoke can move.**

   Many people in the apartment complex did not think they were in danger even after they knew there was a fire because they had no idea how fast flames could travel.

4. **People need to be encouraged to report a fire to the fire department unless they are sure someone else is doing it.**

   Part of the reporting delay in this fire came from people not calling the fire department because they assumed others had done so.

5. **People in apartment complexes need to be advised to tell their children about the seriousness of false alarms. Schools should also preach that kids who cause false alarms are doing harm.**

   People in this fire disregarded the alarms at first because of frequent previous false alarms.

6. **Codes requiring sprinklering of multi-family low income dwellings need to be coordinated with housing subsidy rules.**

   If built under current Seattle code, the Villa Plaza apartments would have sprinklers in every unit. The fire department would have been called up initiation of sprinkler water flow monitored by a central station service. This fire in all likelihood would have been confined to the unit of origin. There were no flammable liquids and no unusual fire loading here, yet the fire spread very rapidly. Local fire departments should continue to press for requirements to have all multi-family dwellings sprinklered retroactively.

   There is a major problem in low income buildings; however, if the apartment complex had been required to be upgraded, it may have charged higher rents and might no longer have been considered housing suitable for subsidized families! One does not want to have a policy that eliminates housing stocks for low income people or only protects the rich.

7. **In addition to sprinklers, and certainly where sprinklers do not exist, passive measures should be taken to slow flame spread.**

   Ironically, the apartment complex did take what they thought was such a measure: the installation of fire doors in the open walkways. But they proved largely ineffective since the fire could and did breach them around the open side of the grill, and by burning through the wood ceiling of the walkway and the wood siding of the building.

8. **Having four-person engine companies instead of three-person engine companies in outlying residential areas can be critically important when they have to operate on their own for a time.**

   It is difficult to say for sure how the first-in engine company would have acted if they would have had a four-person crew instead of the three they had, but they would have had at least a chance to make a major difference in the outcome. The training chief of Seattle, who was one of the ICS branch commanders at the scene, felt that a 2-1/2-inch line applied right after arrival could have checked or slowed the spread of flames along the exterior in at least one direction and made a material difference.

   The first-in three-person engine company started to lay a line, stopped to affect a rescue, then continued laying a line. If they had four people they could have done both operations simultaneously. Or, if it had been necessary, they could have made a second rescue.

   As a second point of evidence, the second-in engine company was the first to arrive on the west side of the complex. They did have a fourth crew member and were able to do both a rescue and set up a 2-1/2-inch line for an interior attack simultaneously. This is thought to have helped slow the fire enough to ultimately save Building A.

   Also, if the first arriving ladder company (L-12) had its full crew of five instead of being one short, they might have been able to leave one person with the engine lieutenant to start fighting the fire. Consideration should be given to providing companies in remote areas with higher staffing levels than companies that can get backup quickly.

9. **Firefighters need to be massed quickly for a large residential fire; current deployment and staffing need to be rethought.**

   This fire illustrated the difficulty in getting an adequate number of units to a high-life hazard occupancy in a corner of a city. A deployment with more companies located further from the Central Business District (CBD), in a way that still allows them to converge quickly toward the center but also to be more available to the residential areas, should be considered. An alternative is to send fewer units to fires in the CBD on first response to allow higher staffing levels on remote units, in light of the need to send an army in most cases should the first three units not suffice.

   The number of crew per company, the deployment of companies, the number of units sent on first alarms, and the timing and size of second alarms needs to be reconsidered. This has already taken place in some cities abroad such as London and is being now debated by the National Fire Protection Association's Urban Forum.

   The strategic deployment of most fire departments is largely dictated by a save-the-CBD philosophy driven by business and insurance pressures. That should be rethought in an era of increas-

ing built-in fire protection in the CBD while the majority of fire deaths occur in residential areas.

A full discussion of deployment is beyond the scope of this report, but this fire points up the dangers of conventional (traditional) deployments strategies.

10. More chiefs need to be sent in early for the Incident Command System at a significant fire.

The ICS was used almost from the start and kept the fire department command and control effective.

Additional battalion chiefs and higher chiefs could have been used earlier in this fire. The operation had to accelerate quickly into a full-blown ICS with branches and divisions, and there weren't enough chiefs who came in on the early alarms. Rapid response of chiefs is almost as important as line companies when the ICS is used for a large incident.

11. An agency should be designated to coordinate relief efforts at the scene and at a shelter following a major incident.

A relief-oriented version of the Incident Command System – an Incident Relief Command – might be worth considering, as an ICS branch headed by an appropriate, local, welfare-oriented department.

The Federal Emergency Management Agency and/or State agencies play a coordinating role in large incidents involving thousands of victims, but coordination for major local incidents involving hundreds should also be considered. In the aftermath of this incident the local Red Cross representative in Seattle suggested that the City Human Services be the relief coordinator at such incidents, with the Red Cross serving as the "branch" relief coordinator for shelter.

The relief efforts at this incident involved at least six agencies: two city relief agencies, one State agency, and three private organizations, in addition to the fire, police, and medical emergency services.

The first night was consumed with providing shelter and food, and accounting for Villa Plaza residents. The second day saw the start of coordinating other services for victims. These might have started earlier if there was immediate coordination.

12. Having multiple ways out of an apartment unit can mean life or death.

Many modern apartment buildings have only one practical way out for people to escape from their unit: the front door. If that path is blocked by fire or smoke, they are trapped. In the Villa Plaza, occupants had three ways out of their units.

Because every apartment unit had three ways out, and because more people were out of their unit they could flee in either direction to a staircase down, or at least get out on a balcony or out of a window, all were rescued. Nevertheless, local officials believe that if the fire had started a few hours later on that Saturday night, when some people would have been asleep or under the influence of alcohol or drugs, there could easily have been many fatalities.

13. A new, side benefit of smoke detectors was noted: verifying the existence of a real fire.

At least some people did not believe the bells ringing from the pull alarm system, but got moving when they heard smoke detectors going off.

14. If the buildings had had a truss roof with vents, all five buildings might have been lost.

The fire was slowed by the solid "old fashioned" roof, which was effectively divided into 16-inch compartments on its underside. That slowed the fire spread.

15. Consideration should be given to having a second alarm response that is larger than the first alarm in residential areas.

Many departments essentially double the first alarm response on a second alarm. Sometimes the second alarm is smaller than the first, as in Seattle.

Because of the slow response of second alarm units to many remote residential locations, consideration should be given to having a larger second alarm response to ensure that some get there quickly.

Also, rapid moveups in the direction of the incident should be considered for large working fires in remote areas as soon as they are confirmed by the first-in unit, to provide faster response on higher alarms.

16. Interpreters need to be able to be located quickly for many languages.

There is often an emergency need to speak to victims to determine if anyone is left inside. On a somewhat slower timescale, their needs for assistance must be determined. Communities should be able to locate translators from within or outside the fire and police departments to cope with the languages of new immigrants, as well as established ethnic groups.

17. Fire departments need to remind crews of the importance of reporting in when they arrive on the scene.

Whether reporting arrival on the scene is by radio or by electronic button pushing (Automatic Vehicle Locators), crews need to be reminded of the need to report in. This information is needed by dispatchers, senior officers monitoring the incident, and for post-mortems. Often the crews are thinking about what action they will take and may not remember to do this simple act.

18. A security guard would have cut the time of reporting the fire and aided in the evacuation.

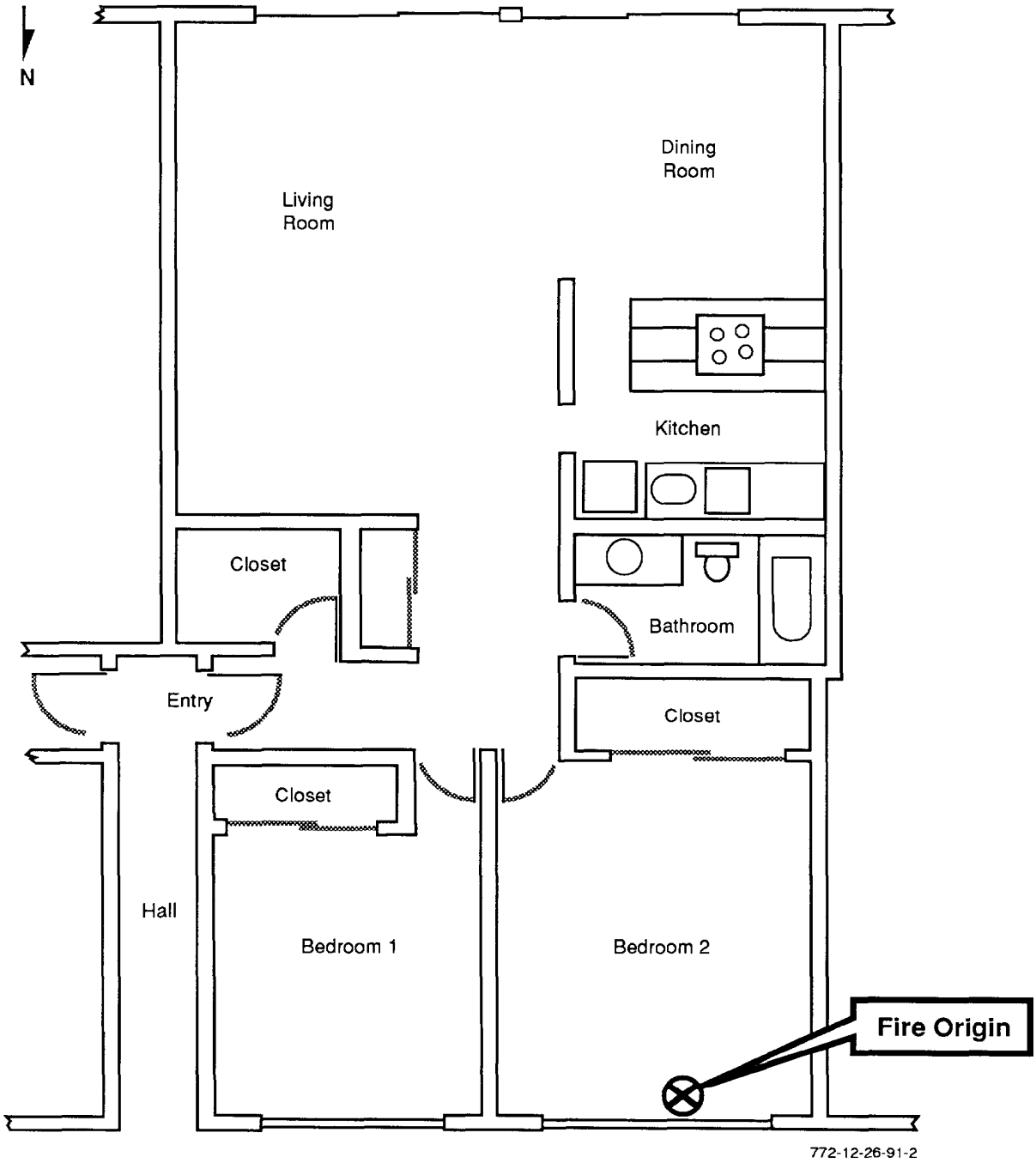
Ironically, the residents of the complex had planned to start using a security guard the week after the fire occurred. The guard would have been able to report the fire more quickly, serve as an authority figure in telling people there was a fire, and assist in the evacuation.

19. Some tactical lessons/questions:

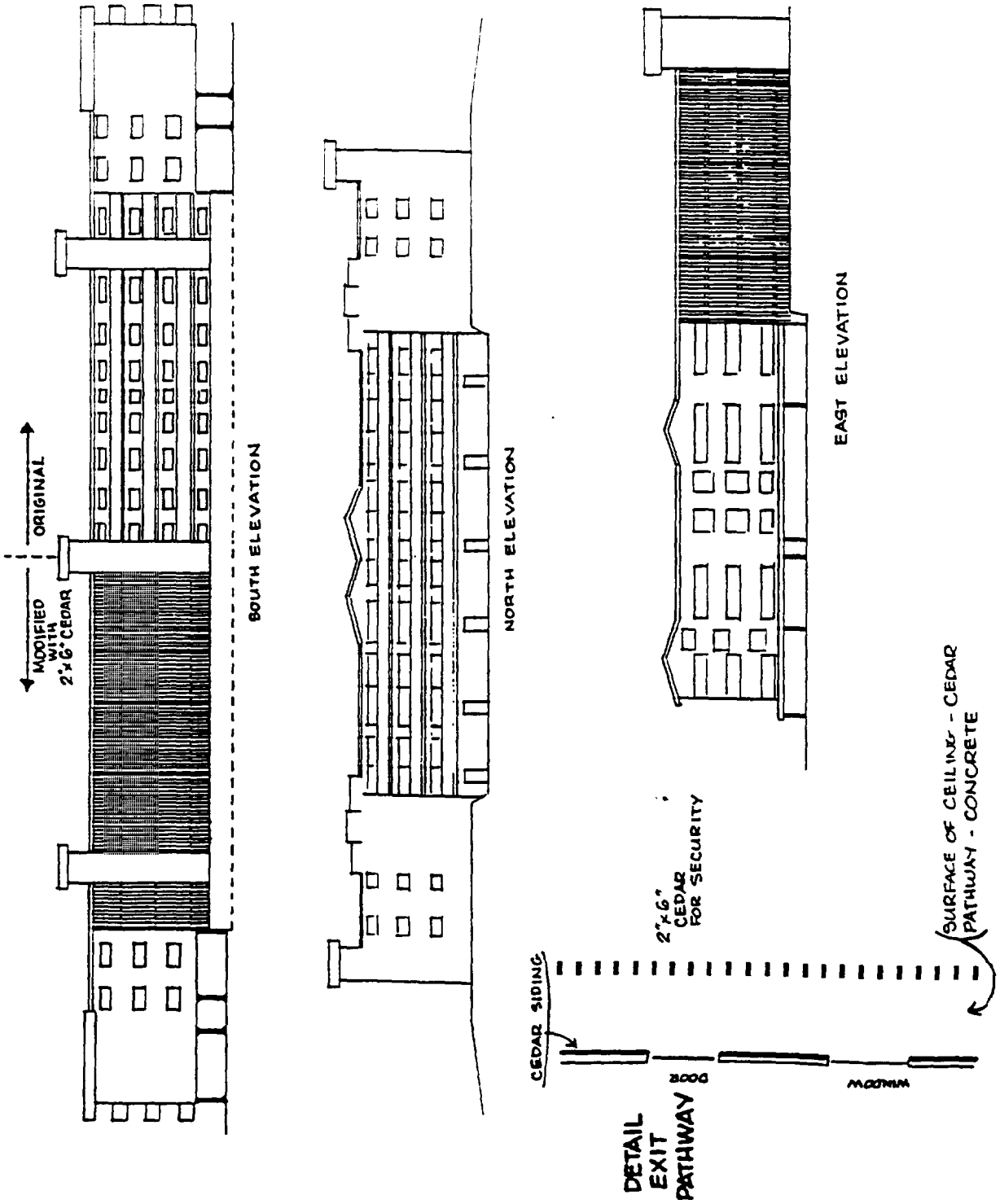
- One of the most critical decisions in the fire was taking water off the building of origin and using the available water to stop the spread in the wing buildings and the spread to the northern two buildings.
- Pre-connected deluge monitors might have made a difference. It took considerable time to wrestle the monitors down from the top of the engines to the ground and connect them. Low staffing on engine companies made this harder and slower.
- The spray from modern nozzles had difficulty penetrating this fire. Solid-bore old-fashioned nozzles or solid stream add-ons to modern spray nozzles were thought to be better to reach the base of the fire compared to spray nozzles stopped down to their most solid stream. This is an old issue.

APPENDIX A

Floor Plan of Apartment of Fire Origin and Building Elevation Drawings

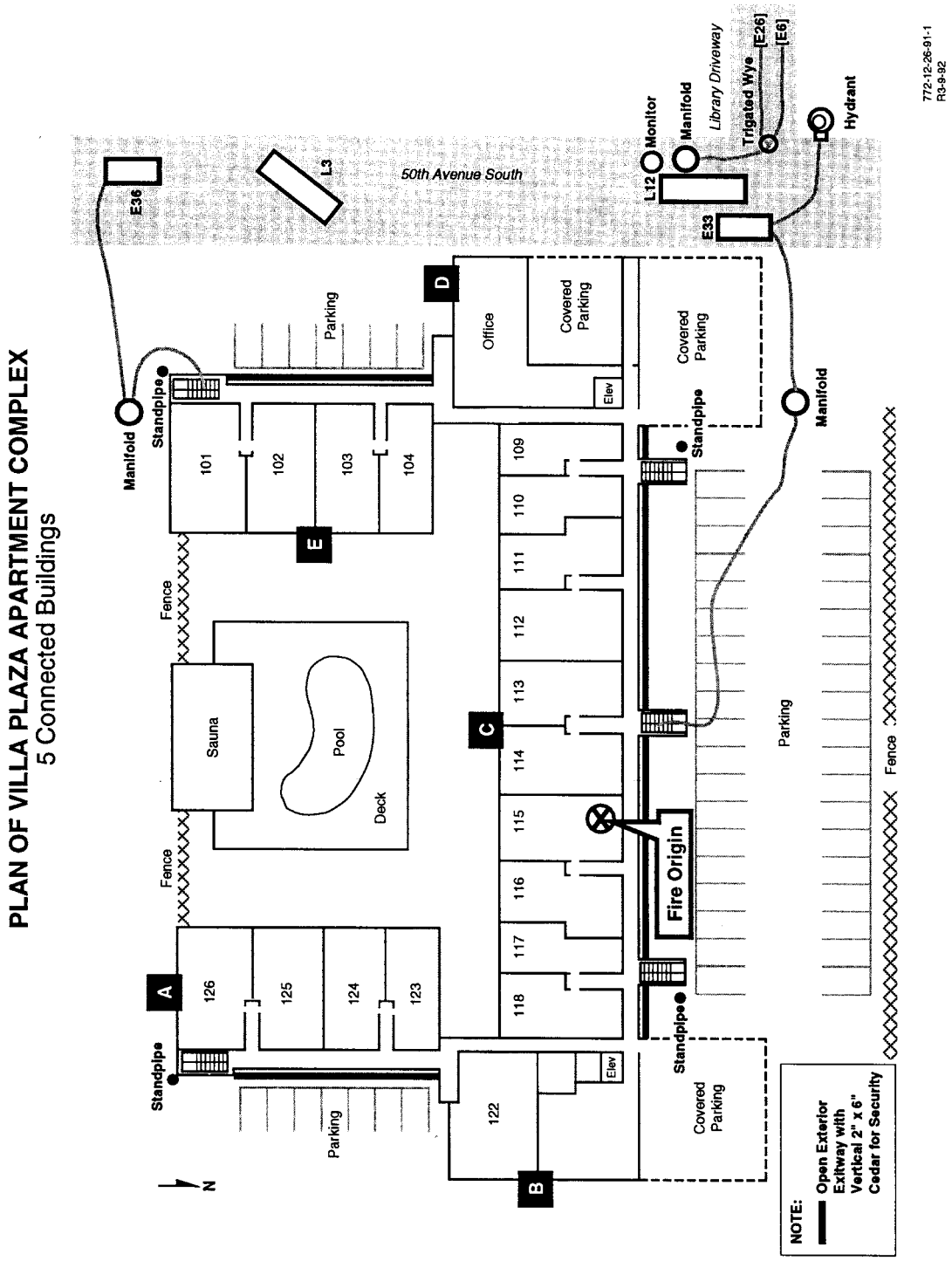


Appendix A (continued)



APPENDIX B

Site Diagram Showing First-in Response



APPENDIX C

Fire Department Operations Timeline

September 21, 1991	Event
21:20 – 21:25	Estimated time of fire origin.
21:35:28	First call received by 9-1-1/Seattle Police Communications (from Apartment Unit 216).
21:36:20	Fire dispatcher answers the relayed call from 9-1-1.
21:37:10	Dispatcher hits computer keys to dispatch units.
21:37:50	Units dispatched by computer; bells start ringing in stations.
21:38:32[1]	Dispatcher reads units dispatched on the air. (Engines 33-28-36, Ladders 12-7, Battalion 5, Aid 14-28, Air 32).
21:40:46	Engine 33 arrives on the scene (first arriving unit).
21:42:05	**SECOND ALARM REQUESTED** (by Engine 28).
21:42:35	Second alarm dispatched (E27-26, L3, Air 26).
21:44	Ladder 12, Aide 28 arrived on scene. E22 dispatched.
21:47:20	Battalion 5 arrives; establishes 50th Avenue Command.
21:48:35	**THIRD ALARM REQUESTED** by Battalion 5.
21:49:25	Third alarm dispatched (E30, L11).
21:50	Engine 36 has arrived by this time.
21:51	By now the second alarm units have arrived.
21:52:20	Aide 31 dispatched.
21:53:15	Medic 10, Aide 32 dispatched.
21:53:45	Battalion 1 (Acting Deputy Chief of Operations) arrives and takes over command.
21:54:10	**FOURTH ALARM REQUESTED** by Command.
21:54:54	Fourth alarm dispatched (E6-37, L10).

[1]Automatic computer entry. The later times were entered by the dispatcher based on direct radio messages or inferences from monitoring radio traffic.

Appendix C (continued)

21:57:20	Engine 32 and Medic 16 dispatched.
21:59:50	Aide 5, Battalion 7 dispatched (Command requested additional chief).
22:09:40	Two Expanded Response System (ERS) Units requested (5-person engine companies).
22:11:10	E10 dispatched.
22:12:18	E2 dispatched.
22:13:54	**FIFTH ALARM REQUESTED** by Command.
22:40	East County Task Force ordered.
22:43	South County Task Force ordered.
22:45	Southwest County Task Force ordered.

Note: Arrival of times of second alarms and higher alarm units not recorded.

September 22, 1991

01:50	Fire controlled.
03:51	Tapped fire, working on spot fire.

September 27, 1991

10:58	Last unit leaves the scene.

APPENDIX D

Units Used at Scene

(in approximate order of arrival)

Engine Companies	
33, 28, 36	First Alarm
27, 26	Second Alarm
22	Added
30	Third Alarm
6, 37	Fourth Alarm
32, 10, 2	Added
29	Fifth Alarm
13, 34, 9, 25, 8, 17, 11, 21, 294, 245, 246, 38, 24, 292, 16, 35, 40, 20, 21, 5, 39, 18	Added
Ladder Companies	
12, 7	First Alarm
3	Second Alarm
11	Third Alarm
10	Fourth Alarm
4	Fifth Alarm
6, 312, 303	Added
Air Units	
32	First Alarm
26	Second Alarm
9	Added
Chiefs	
Battalion 5	First Alarm
1	Second Alarm
7	Added
2, 6, 4, Assistant Chief, Fire Chief	Fifth
Medical Units	
Aid 14, 28	First Alarm
Aid 31, 32, 5, Medic 10, 16, 1	Later

APPENDIX E

Seattle Fire Department Investigator's Report, ATF Laboratory Report and Police Department Incident Report

DATE: 9-21-91	SFD INC# 91-427563
TIME: 2137hrs	SPD INC# 91-32991

SEATTLE FIRE DEPARTMENT
FIRE INVESTIGATOR'S SCENE REPORT

INC CLASSIFICATION: Accidental	NO of alarms: 5-11
INC LOCATION: [redacted]	CENSUS: 117
BUILDING/PREMISE NAME: [redacted]	
OCCUPANT: Parker, Michelle	
PHONE HM: WK:	INS INFO:
OWNER: [redacted]	
OWNER ADDRESS: [redacted]	
PHONE HM: [redacted] WK: [redacted]	INS INFO: Farmers Ins $4,300,000

EST LOSS PREMISES: 3,520,000 CONTENTS: 320,000 OTHER: 124,000

INJURIES: 4	DEATHS: None	TOTAL LOSS: $3,964,000

DESCRIPTION OF PREMISES:
Villa Plaza is a 96 unit apartment complex of woodframe construction with exterior walkways and flat roofs. The complex consists of 5 separate buildings in a "U" configuration.

INCIDENT SUMMARY:
Based on the facts and observations noted in the body of this report, it is the opinion of the investigators that this is an accidental fire. It originated in apartment #115 in the east bedroom. The fire was a result of a tenants attempt to light the room with use of a candle due to disconnected electrical service to the apt. Paper was placed on dwindling candle in an attempt to provide a better light. This flame exceeded it's intended purpose and an attempt was made to blow it out. This attempt resulted in blowing burning paper debris onto the floor and behind the dresser igniting available combustible items.

PRIMARY INV	SERIAL	UNIT	INV	SERIAL	UNIT	APPROVING OFFICER
Inv S. T. Brooks	0014	997	Lt G. Owens	0013	997	A/C [illegible]

FORM 107 REVISED 9/91 SEATTLE FIRE DEPARTMENT

Appendix E (continued)

SFD INC# 91-427563
SPD INC# 91-32991

FIRE INVESTIGATOR'S SCENE REPORT CONT.

On September 21st 1991, a fire of unknown origin destroyed a major portion of the Villa Plaza Apartments, a 96 unit apartment complex located at 9111 50th. Avenue South in Seattle. At the time of the response numerous occupants of the apartment complex were unaccounted for.

GENERAL:

The Villa Plaza Apartments are located at 50 Avenue South and South Director Street. This is located in a lower middle socio-economic neighborhood.

The four story apartment complex is situated in a "U" configuration with the opening to the north with a common courtyard in the center of the complex. The fire was reported by occupants and the manager of the apartment complex at 9:37 PM on September 21. When the fire was first discovered it was in apartment 115, on the ground floor of the (south) wing connecting the two wings forming the legs of the "U". Fire conditions progressed rapidly. First responding fire companies noted flames extending from the ground floor to over the roof on the south wing, Initial response was committed to search and rescue of residents.

One occupant was seriously injured when she jumped/fell from a third floor balcony while attempting to escape the fire.

'he fire destroyed 64 units located in the south wing and southern as of the east and west wings.

CONSTRUCTION:
The Villa Plaza Apartments were built in 1968 as a 96 unit apartment complex. The three primary wings are four story ordinary wood frame construction with light weight concrete floors and a flat hot tar roof.

Primary access to individual units is off common semi-enclosed breezeways. These breezeways are along the exterior perimeter of the complex on all four floor levels. The 1st. floor breezeway includes a concrete stem wall approximately five feet in height. Stair towers are located on the west side of the north west corner of the west wing, the east side of the north east corner of the east wing, and three stair towers approximately evenly spaced along the south wall of the south wing dividing this wing into quarters.

PRIMARY INV SERIAL UNIT	INV SERIAL UNIT	APPROVING OFFICER
Inv S. T. Brooks 0014 997	Lt. G. Owens 0013 997	[illegible] 03 29 1997

Appendix E (continued)

SFD INC# 91- 427563
SPD INC# 91- 32991

FIRE INVESTIGATOR'S SCENE REPORT CONT.

Access to the upper floors was also provided by passenger elevators on either end of the south wing adjacent to the covered parking areas. These covered parking areas are off the apex of the intersecting wings. The complex office is located on the ground floor in the intersection of the south and east wings.

The complex was serviced with normal electric and water service. No natural gas or propane service was provided. Electric service vaults with base mounted transformers were located on the ground floor in the intersections of the west and south wings. Electrical service was distributed throughout the complex through BX flexible cable.

The exterior wall of the breezeways consisted of a five foot wide brick facia separated by a ten foot wide 2" X 6" vertical dimensional lumber lattice facade. The facia and lattice are continuous extending form the stem wall to the roof. The painted 2 X 6 members are perpendicular to the stem wall and are on approximate nine inch centers.

The breezeway wall of the individual units are painted cedar siding over ordinary wood frame construction and includes single pane windows for each unit room adjoining the breezeway. The floor of the breezeways were finished with indoor/outdoor carpets. Access to the individual units is by way of alcoves which each service two units. Units opening onto the common courtyard included patios and balconies accessed by sliding patio doors.

The south wing is approximately 300 feet long (east to west). The east and west wings are approximately 200 feet long.

WITNESS REPORTS:

[redacted] was occupied by [redacted]. [redacted] was occupied by [redacted]. [redacted] is vacant. Witnesses report that electric service to [redacted] has been terminated for approximately twelve days.

Witnesses statements indicate that Ms. Parker arrived at her apartment at approximately 9:00 PM. Due to no utilities in her apartment, Ms. Parker attempted to obtain permission to run an extension cord from apartment 116, which has been a previous practice. Although home, Jenkins did not respond to Parker when

PRIMARY INV	SERIAL UNIT	INV	SERIAL UNIT	APPROVING OFFICER
Inv S. T. Brooks	0014 997	Lt G. Owens	0013 997	[illegible] 0324/997

Appendix E (continued)

SFD INC# 91- 427563
SPD INC# 91- 32991

FIRE INVESTIGATOR'S SCENE REPORT CONT.

she knocked on the door. Parker stated that she lit a candle for light and went to her bedroom (the southeast corner room of her apartment) to gather some clothing. According to Parker the candle was on a plate which she placed on a dresser in her bedroom. Parker stated that she noted that the south wall of her bedroom was warm to the touch when she looked out her window when she noticed that she had left her car lights on. According to Parker, when she returned from taking care of her car lights she discovered flames coming from under the wall of apartment 114 into her bedroom.

According to witness statements, the smoke detector in apartment 115 sounded for approximately 15 - 20 minutes before anyone took action. At 9:36 PM the occupant of apartment 216 called "911". Shortly after this call was placed the local fire alarm system was manually activated. At 9:38 PM fire units were dispatched and at 9:41 PM the first fire suppression unit arrived at the scene finding flames on the south side of the south wing extending from the ground floor to the roof. First arriving fire units were dedicated to search and rescue operations.

Several witnesses indicated that Ms. Parker attempted to fight the fire for a period of time before alerting neighbors of the fire and asking for help.

Prior to the arrival of the fire department, Michelle Parker fled the scene driving in a reckless manner striking or running several vehicles off the road.

According to Ms. Parker no flammable liquids are in her apartment.

No witnesses report any threats or hostile comments being made by Ms. Parker before or after the fire.

SCENE PROCESSING:

Scene examination by the Western Region National Response team and the Seattle Fire Department began on the afternoon of September 23. Custody and control of the scene was maintained from the time of the fire until, and throughout the scene investigation by the Seattle Police Department. Entrance onto and search of the scene was conducted under the authority of a King County Superior Court Criminal Search Warrant.

PRIMARY INV	SERIAL	UNIT	INV	SERIAL	UNIT	APPROVING OFFICER
Inv S. T. Brooks	0014	997	Lt G. Owens	0013	997	[illegible] 0029/997

Appendix E (continued)

SFD INC# 91- 427563
SPD INC# 91- 32991

FIRE INVESTIGATOR'S SCENE REPORT CONT.

The South wing of the apartment complex had been completely destroyed by fire. The general area of most severe damage was slightly west of the center of the wing. Most or all of the structural members of apartments 116, 115, 114, 113, and 112 were totally consumed.

Examination of the electrical service vaults determined that no fire extended into this area of the building. Apartment units were individually metered, The meters for units 114 and 115 were identified by markings on the meter bases as well as by Seattle City Light employees. These meters were equipped with plastic boots over the male plugs making it impossible for current flow to these two units.

Debris was removed from the areas of apartments 113, through 110 with heavy equipment in search of missing and/or unaccounted for fire victims. Search of this area failed to reveal any victims. Eventually during the scene investigation, all missing persons were accounted for by off scene investigators.

Debris of the upper floors over apartments 115 and 114 was removed by utilization of heavy equipment. Debris from the first and second floors was layered using hand tools. All debris from apartments 114 and 115 was removed and the slab was washed.

The surviving ends of the wall studs in apartment 115 were examined. This examination indicates that fire travel was from the master bedroom of this unit. The corner base plates of walls between the master bedroom and the front door of the apartment were rounded off indicating the direction of fire travel to be from the master bedroom, Examination of the doubled wall base plates between units 114 and 115 indicate that fire could not have extended at floor level between apartments 114 and 115 as was stated by the occupant.

Excavation of the debris of apartment 115 failed to produce any electrical or gas appliances in the area of the master bedroom. A dinner plate was found in the area of the dresser where the occupant indicated the candle had been placed.

During excavation of the entrance closets a strong odor believed to be those of a volatile substance were noted and samples were taken form this area. A concrete sample was also taken in an area of unusual floor burn inthe living room of the apartment.

PRIMARY INV	SERIAL UNIT	INV	SERIAL UNIT	APPROVING OFFICER
Inv S. T. Brooks	0014 997	Lt G. Owens	0013 997	A/L R L Hatfield USCG 1991

Appendix E (continued)

SFD INC# 91- 427563
SPD INC# 91- 32991

FIRE INVESTIGATOR'S SCENE REPORT CONT.

Examination of the floor in apartment 114 revealed similar unusual burn patterns indicating that the burns were the result of mastic adhesives, carpet, or fall-down. Examination of the contents of the closet were the suspect samples were obtained indicates that there was no fire in this room and the flammable/combustible liquids that may have been in this area did not contribute to the initial spread of the fire.

SUMMARY:

No electrical service was available to apartments 114 and 115.

Fire did not communicate between apartments 114 and 115 at or near floor level.

There is no heat source or electrical service in the south walls of apartments 114 or 115.

No indication of criminal intent has been revealed during the interview phase of the investigation.

CONCLUSION:

This fire originated in the master bedroom of apartment 115. The heat source was an open flame and involved the ignition of ordinary combustible materials.

Without any indications of criminal intent, this fire is being determined to be accidental in nature.

PRIMARY INV	SERIAL	UNIT	INV	SERIAL	UNIT	APPROVING OFFICER
Inv S. T. Brooks	0014	997	Lt G. Owens	0013	997	[illegible] 0024/997

Appendix E (continued)

DEPARTMENT OF THE TREASURY

Forensic Science Laboratory
BUREAU OF ALCOHOL, TOBACCO AND FIREARMS
355 North WIget Lane
Walnut Creek. CA 94598
510 486-3170
FTS 449-3170

Laboratory, Report

To:
Special Agent Dane A. Whetsel
Bureau of Alcohol, Tobacco and Firearms
818 Jackson Federal Building
915 2nd Avenue
Seattle, WA 98174

Date of Report: October 2, 1991

Lab Number: 91S0507K

Reference: 93370914539F
Villa Plaza Apartments
Type of Exam: Accelerants

The following evidence was delivered by Forensic Chemist Brad Cooper on September 27, 1991:

EXHIBITS

1. Gallon metal can containing charred debris
2. Gallon metal can containing charred debris
3. Gallon metal can containing melted plastic jug and liquid
4. Gallon metal can containing charred carpet, pad and wood
5. Gallon metal can containing carpet and pad (comparison)
6. Metal can containing concrete fragments

RESULTS OF EXAMINATION

No flammable or combustible liquids were detected in Exhibits 1, 2, 3, 4, 5 or 6.

Exhibit 3 contained the melted remains of an approximately 1 gallon plastic jug. The origin of this jug could not be determined at this time.

DISPOSITION OF EVIDENCE

The evidence will be returned to the Seattle Post of Duty by Certified Mail.

Bradley D. Cooper
Forensic Chemist

REVIEWED BY: William R. Dietz
William R. Dietz, Chief
Forensic Section

BDC/rcg

Accredited by The American Society of Crime Laboratory Directors

Appendix E (continued)

DEPARTMENT OF THE TREASURY
BUREAU OF ALCOHOL, TOBACCO AND FIREARMS
15355 Vantage Parkway West Suite 212
Houston, Texas 77032
September 26, 1991

To: Bill Haverstick
Group Supervisor
Seattle Arson Group

From: Western Region National Response Team

Through: Special Agent in Charge
Seattle District Office

Re: Origin and Cause Investigating
I/N 93370 91 4539 F

On September 23, 1991, the Western Region National Response Team responded to Seattle, Washington. A fire of unknown origin destroyed a major portion of the Villa Plaza Apartments, a 96 unit apartment complex located at 9111 50th. Avenue South in Seattle. At the time of the response numerous occupants of the apartment complex were unaccounted for.

GENERAL:

The Villa Plaza Apartments are located at 50 Avenue South and South Director Street. This is located in a lower middle socio-economic neighborhood.

The four story apartment complex is situated in a "U" configuration with the opening to the north with a common courtyard in the center of the complex. The fire was reported by occupants and the manager of the apartment complex at 9:37 PM on September 21. When the fire was first discovered it was in apartment 115, on the ground floor of the (south) wing connecting the two win s forming the legs of the "U". Fire conditions progressed rapid ly. First responding fire companies noted flames extending from the ground floor to over the roof on the south wing. Initial response was committed to search and rescue of residents.

One occupant was seriously injured when she jumped/fell from a third floor balcony while attempting to escape the fire.

The fire destroyed 64 units located in the south wing and southern ends of the east and west wings.

CONSTRUCTION:
The Villa Plaza Apartments were built in 1968 as a 96 unit apartment complex. The three primary wings are four ordinary wood frame construction with light weight concrete floors and a flat hot tar roof.

Appendix E (continued)

Primary access to individual units is off common semi-enclosed breezeways. These breezeways are along the exterior perimeter of the complex on all four floor levels. The 1st. floor breezeway includes a concrete stem wall approximately five feet in height. Stair towers are located on the west side of the north west corner of the west wing, the east side of the north east corner of the east wing, and three stair towers approximately evenly spaced along the south wall of the south wing dividing this wing into quarters.

Access to the upper floors was also provided by passenger elevators on either end of the south wing a adjacent to the covered parking areas. These covered parking areas are off the apex of the intersecting wings. The complex office is located on the ground floor in the intersection of the south and east wings.

The complex was serviced with normal electric and water service. No natural gas or propane service was provided. Electric service vaults with base mounted transformers were located on the ground floor in the intersections of the west and south wings. Electrical service was distributed throughout the complex through BX flexible cable.

The exterior wall of the breezeways consisted of a five foot wide brick facia separated by a ten foot wide 2" X 6" vertical dimensional lumber lattice facade. The facia and lattice are continuous extending form the stem wall to the roof. The painted 2 X 6 members are perpendicular to the stem wall and are on approximate nine inch centers.

The breezeway wall of the individual units are painted cedar siding over ordinary wood frame construction and includes single pane windows for each unit room adjoining the breezeway. The floor of the breezeways were finished with indoor/outdoor carpets. Access to the individual units is by way of alcoves which each service two units. Units opening onto the common courtyard included patios and balconies accessed by sliding patio doors.

The south wing is approximately 300 feet long (east to west). The east and west wings are approximately 200 feet long.

WITNESS REPORTS:

[redacted] was occupied by [redacted]. [redacted] was occupied by [redacted]. [redacted] is vacant. Witnesses report that electric service to [redacted] has been terminated for approximately twelve days.

Witnesses statements indicate that Ms. Parker arrived at her apartment at approximately 9:00 PM. Due to no utilities in her apartment, Ms. Parker attempted to obtain permission to run an extension cord from apartment 116, which has been a previous practice. Although home, Jenkins did not respond to Parker when she knocked on the door. Parker stated that she lit a candle for light and went to her bedroom (the southeast corner room of her

(2)

Appendix E (continued)

apartment) to gather some clothing. According to Parker the candle was on a plate which she placed on a dresser in her bedroom. Parker stated that she noted that the south wall of her bedroom was warm to the touch when she looked out her window when she noticed that she had left her car lights on. According to Parker, when she returned from taking care of her car lights she discovered flames coming from under the wall of apartment 114 into her bedroom.

According to witness statements, the smoke detector in apartment 115 sounded for approximately 15 - 20 minutes before anyone took action. At 9:36 PM the occupant of apartment 216 called "911". Shortly after this call was placed the local fire alarm system was manually activated. At 9:38 PM fire units were dispatched and at 9:41 PM the first fire suppression unit arrived at the scene finding flames on the south side of the south wing extending from the ground floor to the roof. First arriving fire units were dedicated to search and rescue operations.

Several witnesses indicated that Ms. Parker attempted to fight the fire for a period of time before alerting neighbors of the fire and asking for help.

Prior to the arrival of the fire department, Michelle Parker fled the scene driving in a reckless manner striking or running several vehicles off the road.

According to Ms. Parker no flammable liquids are in her apartment.

No witnesses report any threats or hostile comments being made by Ms. Parker before or after the fire.

SCENE PROCESSING:

Scene-examination by the Western Region National Response team and the Seattle Fire Department began on the afternoon of September 23. Custody and control of the scene was maintained from the time of the fire until and throughout the scene investigation by the Seattle Police Department. Entrance onto and search of the scene was conducted under the authority of a King County Superior Court Criminal Search Warrant.

The South wing of the apartment complex had been completely destroyed by fire. The general area of most severe damage was slightly west of the center of the wing. Most or all of the structural members of apartments 116, 115, 114, 113, and 112 were totally consumed.

Examination of the electrical service vaults determined that no fire extended into this area of the building. Apartment units were individually metered. The meters for units 114 and 115 were identified by markings on the meter bases as well as by Seattle City Light employees. These meters were equipped with plastic boots over the male plugs making it impossible for current flow to these two units.

Appendix E (continued)

Debris was removed from the areas of apartments 113, through 110 with heavy equipment in search of missing and/or unaccounted for fire victims. Search of this area failed to reveal any victims. Eventually during the scene investigation, all missing persons were accounted for by off scene investigators.

Debris of the upper floors over apartments 115 and 114 was removed by utilization of heavy equipment. Debris from the first and second floors was layered using hand tools. All debris from apartments 114 and 115 was removed and the slab was washed.

The surviving ends of the wall studs in apartment 115 were examined. This examination indicates that fire travel was from the master bedroom of this unit. The corner base plates of walls between the master bedroom and the front door of the apartment were rounded off indicating the direction of fire travel to be from the master bedroom. Examination of the doubled wall base plates between units 114 and 115 indicate that fire could not have extended at floor level between apartments 114 and 115 as was stated by the occupant.

Excavation of the debris of apartment 115 failed to produce any electrical or gas appliances in the area of the master bedroom. A dinner plate was found in the area of the dresser where the occupant indicated the candle had been placed.

During excavation of the entrance closets a strong odor believed to be those of a volatile substance were noted and samples were taken form this area. A concrete sample was also taken in an area of unusual floor burn in the living room of the apartment.

Examination of the floor in apartment 114 revealed similar unusual burn patterns indicating that the bums were the result of mastic adhesives, carpet, or fall-down. Examination of the contents of the closet were the suspect samples were obtained indicates that there was no fire in this room and the flammable/combustible liquids that may have been in this area did not contribute to the initial spread of the fire.

SUMMARY:

No electrical service was available to apartments 114 and 115.

Fire did not communicate between apartments 114 and 115 at or near floor level.

There is no heat source or electrical service in the southwalls of apartments 114 or 115.

No indication of criminal intent has been revealed during the interview phase of the investigation.

(4)

Appendix E (continued)

CONCLUSION:

This fire originated in the master bedroom of apartment 115. The heat source was an open flame, most likely a candle, and involved the ignition of ordinary combustible materials.

Without any indications of criminal intent, this fire is being determined to be accidental in nature.

(5)

Appendix E (continued)

SEATTLE POLICE DEPARTMENT
INCIDENT REPORT

☒ INCIDENT
☐ INCIDENT AND ARREST
☐ ARREST ONLY

INCIDENT NUMBER 91-427563

☐ DO NOT DISCLOSE ☐ NOT DISCUSSED ☐ DISCLOSE ☐ HAZARD TO OFFICER

I HEREBY DECLARE THE FACTS HEREIN REPORTED BY ME ARE TRUE AND CORRECT. I UNDERSTAND THAT BY FILING A FALSE REPORT I MAY BE SUBJECT TO CRIMINAL PROSECUTION. SFD 91-32991 ☐ DOMESTIC VIOLENCE

INT CLASSIFICATION: injury-fire	TOOL/WEAPON USED	METHOD OF TOOL/WEAPON USE
LOCATION: [redacted]	FIRM NAME: [redacted]	CENSUS: 118 / BEAT: S5
TYPE OF PREMISE (FOR VEHICLES STATE TYPE AND WHERE PARKED): multi unit apartment building	POINT OF ENTRY	
DATE/TIME REPORTED: 9-21-91 2137 hrs / DAY OF WEEK: Sat	DATE/TIME OCCURRED: 9-21-91 2137 hrs.	DAY OF WEEK: Sat

☐ EVIDENCE SUBMITTED ☐ FINGERPRINT SEARCH MADE ☐ FINGERPRINTS FOUND ☐ LAB EXAM REQUESTED

PERSONS/BUSINESS INVOLVED

CODE: C (PERSON REPORTING, COMPLAINANT) V (VICTIM) W (WITNESS) — INJURED — HAS USABLE TESTIMONY — DO NOT DISCLOSE

CODE	NAME (LAST, FIRST, MIDDLE)	RACE/SEX/D.O.B. (OPTIONAL)	HOME PHONE	HOURS
	ADDRESS / ZIP CODE	OCCUPATION (OPTIONAL)	WORK PHONE	HOURS
CODE: V	NAME (LAST, FIRST, MIDDLE): [redacted]	RACE/SEX/D.O.B. (OPTIONAL): [redacted]	HOME PHONE	HOURS
	ADDRESS: [redacted] / ZIP CODE: [redacted]	OCCUPATION (OPTIONAL)	WORK PHONE	HOURS

SUSPECT NUMBER 1

NAME (LAST, FIRST, MIDDLE)	RACE/SEX/D.O.B.	HEIGHT	WEIGHT	HAIR	EYES	SKIN TONE	BUILD
ADDRESS	HOME PHONE	WORK PHONE	WORK HOURS	OCCUPATION	EMPLOYER/SCHOOL		
CLOTHING, SCARS, MARKS, TATTOOS, PECULIARITIES, A.K.A.					RELATIONSHIP TO VICTIM		
JA/CIT. NO.	CHARGE DETAILS (INCLUDE ORDINANCE OR R.C.W. NUMBER AND CHARGE NARRATIVES)				☐ BOOKED ☐ Y.S.C. ☐ K.C.J. #2 ☐ CITED ☐ K.C.J. #1 ☐ K.C.J. #3		

☐ ADDITIONAL PROPERTY (PROPERTY FORM 5.37.1 MUST BE ATTACHED) ☐ NOTHING TAKEN ☐ UNKNOWN AT TIME OF REPORT ☐ VICTIM FOLLOW-UP LEFT

PROPERTY

ARTICLE TYPE	BRAND NAME	VALUE
☐ STOLEN ☐ RECOVERED / SERIAL NUMBER	OWNER APPLIED NUMBER	MODEL NUMBER
COLOR, SIZE, DESCRIPTION, CALIBER, BARREL LENGTH, ETC.		

1. ADDITIONAL PERSONS - CODE, NAME, RACE, SEX, D.O.B., ADDRESS, INJURY, HOSPITALIZATION, HOME AND WORK PHONES, HOURS, AND IF DISCLOSURE OF NAME IS PERMITTED.
2. ADDITIONAL SUSPECTS - DETAIL INFORMATION IN SAME ORDER AS SUSPECT BLOCK.
3. VICTIM'S INJURIES - DETAILS AND WHERE MEDICAL EXAM OCCURRED.
4. PROPERTY DAMAGED - DESCRIBE AND INDICATE AMOUNT OF LOSS.
5. PHYSICAL EVIDENCE - DETAIL WHAT AND WHERE FOUND, BY WHOM, AND DISPOSITION.
6. VEHICLE USED BY SUSPECT AND DISPOSITION.
7. NAME, ADDRESS, PHONE NUMBER OF JUVENILE'S PARENT(S)/GUARDIAN(S). NOTE IF CONTACTED AND IF INCIDENT ADJUSTED.
8. LIST STATEMENTS TAKEN AND DISPOSITION.
9. RECONSTRUCT INCIDENT AND DESCRIBE INVESTIGATION.
10. OUTLINE TESTIMONY OF PERSONS MARKED "HAS USABLE TESTIMONY" ON FRONT.

ITEM NO

1 (V) [redacted]

2 Both victims were transported to Harborview Medical Center via Seattle Fire Department aid units, the extent of injuries have yet ot be determined.

9 on 9-21-91 at 2137 hours a fire was reported from the apartment building at 9111 50th South. The victims were occupants of the apartment building and were injured in their attempt to flee the fire. The fire is under investigation by the Seattle Fire Department, Fire Investigation Unit.

INCIDENT NUMBER 91 427563

PRIMARY OFFICER	SERIAL	UNIT	SECONDARY OFFICER	SERIAL	UNIT	APPROVING OFFICER	SERIAL
Det. J.E. Lundin	3392	344					

DISTRIBUTION: PRECINCT — CRIMES AGAINST PERSONS — JUV — COURT UNIT — K-9 UNIT — PAGE OF

Appendix E (continued)

UNIT FILE NUMBER

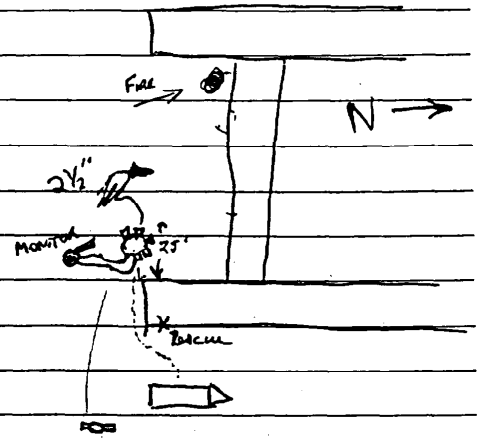
SEATTLE POLICE DEPARTMENT

INCIDENT NUMBER 91-427563

DATE 9-22-91 TIME 1730 PLACE 9111 50 AVE. S.

STATEMENT OF: LT. LARRY GREEN E-25 D2

OFFICER ON E-33 ON 9-21-91



ON ARRIVAL AT FIRE, FIRE WAS LOCATED IN S.W. CORNER OF So. connecting wing ~~of~~ EXTENDING FROM GROUND TO ROOF OF BUILDING APPROX. 40' IN WIDTH. OCCUPANTS WERE STREAMING FROM BLDG." E-33 MULTIPLE 2½" APT. FIRE LAYING 2½" MANIFOLD PARKED ON HYDRANT IN S.E. CORNER BLDG. LAYED MANIFOLD CROSS LOT TO REAR. LADDERED FRONT OF BLDG BY APPARATUS AND RESCUED WOMAN & DOG FROM 2nd FL. SE corner ~~FRONT~~ APT. OVERHAULED 200' 2½" TO MANIFOLD. FIRE HAD EXTENDED FROM S.W. CORNER ACROSS WHOLE SOUTH FRONT OF BLDG.. MANIFOLD AND SUPPLY LINE WERE BOTH ALREADY SMOKING (THREAD PROTECTOR ROPES BURNED OFF AND FIRST 20' OF 3½ SUPPLY OUTER JACKET SPLIT) HOOKED UP 2½" FOR WATER CURTAIN, SO MONITOR COULD BE LAID. PLAN WAS TO CUT BLDG IN HALF TO KEEP FIRE FROM

STATEMENT TAKEN BY: Capt. R. R. Risdon SIGNED: [signature] Capt FIA 0027

WITNESS: WITNESS:

Form 9.28 CS 21.122 Rev 11/76 PAGE 1 OF 1

Appendix E (continued)

SPREADING TO FRONT OF BLDG THUS MAKING E-33 POSITION UNTENABLE. APPROX. 15 MINUTES AFTER GETTING MONITOR HOOKED UP SMOKE PROOF STAIRWELL IN S.W. CORNER OF BLDG. COLLASPED OUTWARD.

THE FIRE ON THE SOUTH SIDE WAS A FIRE STORM. I HAVE NEVER SEEN A FIRE SPREAD SO FAST. SMOKE WAS ALREADY ENTERING APT ON 2ND FLOOR IN FRONT OF BLDG. WHERE I MADE RESCUE ON MY ARRIVAL. THIS UNIT WAS A CONSIDERABLE DISTANCE FROM ORIGIN OF FIRE.

Larry J. Nolan E-25 D2

Appendix E (continued)

UNIT FILE NUMBER

SEATTLE POLICE DEPARTMENT

INCIDENT NUMBER 91-427563

TE 9-22-91 TIME 1545 HRS. PLACE 50 AVE. S. & S. DIRECTOR ST (MARSHAL 5 VAN)

S. EMENT OF: DONALD R. TAYLOR (0468) B5C SEATTLE FIRE DEPT. BATTALION CHIEF

I AM DONALD R. TAYLOR, AND EMPLOYED BY THE SEATTLE FIRE DEPARTMENT. ON 9-21-91 I WAS ON DUTY AND ASSIGNED TO BATTALION ONE AS THE ACTING DEPUTY CHIEF. (I HOLD THE POSITION OF BATTALION CHIEF WITHIN THE FIRE DEPARTMENT). AT 2137 HOURS 9-21-91 3 ENGINE COMPANIES, 2 LADDER COMPANIES ONE MEDIC UNIT, ONE AID UNIT, ONE AIR UNIT AND ONE CHIEF OFFICER WERE DISPATCHED TO 9111 50 AVE. SO. THE FIRST ARRIVING UNIT, E33, REPORTED A LARGE AMOUNT OF FIRE INVOLVEMENT IN AN APARTMENT COMPLEX AND THAT THEY WERE USING A 2½" HOSE LINE. I IMMEDIATELY RESPONDED FROM STATION 10 AT 4AVE S. & S. MAIN ST. AND INFORMED THE DISPATCHERS OF SAME. E28, THE SECOND ARRIVING UNIT REQUESTED A SECOND ALARM AND INITIATED OPERATIONS IN THE REAR AREA (WEST) LAYING HOSE LINES AND RESCUING VICTIMS DIRECT FROM THE BUILDING. E28 REQUESTED A LADDER COMPANY TO ASSIST THEM IN RESCUE AND L-7 REPORTED TO E28'S AREA. B-5, ACTING CHIEF DOUCE, ARRIVED AND REQUESTED A 3RD ALARM. UPON MY ARRIVAL THE SOUTH WING RUNNING EAST AND WEST WAS FULLY INVOLVED IN FIRE AND RAGGING OUT OF CONTROL WITH A SOUTH WESTERLY WIND BEING INTRAINED. THE S.W. WING WAS HEAVILY INVOLVED IN FIRE AND THE RAGGING FIRE WAS PROGRESSING TOWARD THE S.E. SECTION. L-12 DIRECT WAS RESCUING VICTIMS FROM THE EAST WING UPPER FLOORS AND E33 HAD A 2½" HOSE LINE OPERATING ON THE SOUTH WING SECTION. L-3 ASSISTED WITH RESCUING VICTIMS FROM THE EAST WING. I REQUESTED A 4TH ALARM. E-36 LAID HAND LINE TO THE NORTH SIDE OF THE SOUTH SECTION AND POSITIONED TO CUT THE FIRE OFF FROM THE

STATEMENT TAKEN BY: IMW. C. H. Davis 0023/997 SIGNED: Donald R. Taylor

WITNESS: WITNESS:

Form 9.28 CS 21. 122 Rev 11/76 PAGE 1 OF 2

Appendix E (continued)

UNIT FILE NUMBER

SEATTLE POLICE DEPARTMENT

INCIDENT NUMBER 91-427563

DATE 9-22-91 TIME 1545 HRS. PLACE 50 AVE. S. & S. DIRECTOR ST. (MARSHAL 5 VAN)

STATEMENT OF: DONALD R. TAYLOR SEATTLE FIRE DEPT. BATTALION CHIEF EAST SECTION. I HAD AN ENGINE COMPANY LAY AN ADDITIONAL MANIFOLD SUPPLY LINE AT THE SE CORNER OF THE COMPLEX AND COVER THE HOUSES ON THE SOUTH SIDE FROM EXPOSURE. I HAD ADDITIONAL UNITS REPORT TO THE WEST SIDE WITH B-7 AND WERE DESIGNATED DIVISION C. I REQUESTED AN ADDITIONAL CHIEF OFFICER AND POSITION AT THE NORTH SIDE OF THE SOUTH COMPLEX AND DESIGNATED AS DIVISION D. I HAD ASSUMED COMMAND AND HAD B-5 OPERATING IN THE EAST SECTION AS DIVISION A. ADDITIONAL UNITS WERE POSITIONED AT EACH DIVISION WITH THE OBJECTIVES OF KEEPING THE FIRE OUT OF THE EAST, NORTH EAST, AND NORTHWEST WINGS. THE FIRE HAD INTENSIFIED AND LARGE STREAM APPLIANCES WERE DEPLOYED TO MEET THE OBJECTIVES. CHIEF BAILEY ARRIVED AND ASSUMED COMMAND. I WAS DESIGNATED AS THE OPERATIONS CHIEF AND WE REQUESTED A 5TH ALARM. THE STAFF OFFICERS ARRIVED AND WE SET UP A SOUTH AND NORTH BRANCH. THE FIRE DID PROGRESS INTO THE SOUTHEAST SECTION, PARTIALLY INTO THE SOUTHCENTER SECTION AND PARTIALLY INTO THE NORTHWEST SECTION BUT WAS HELD OUT OF THE NORTHEAST WING. THIS FIRE WAS RAGGING OUT OF CONTROL UPON MY ARRIVAL, COMPLETELY ENGULFING THE SOUTH WING AND THE SOUTHWEST WING AND PROGRESSING TOWARDS THE EAST, NORTHEAST AND NORTHWEST WINGS. I DIRECTED DIVISIONS TO CONTROL THE FIRE THROUGHOUT THE NIGHT AND FOLLOWING MORNING. THIS IS AN ACCURATE AND TRUE STATEMENT TO THE BEST OF MY KNOWLEDGE.

STATEMENT TAKEN BY: THO. C. M. Davill 0023/997 SIGNED: Donald R. Taylor

WITNESS: WITNESS:

Form 9.28 CS 21.122 Rev 11/76 PAGE 2 OF 2

Appendix E (continued)

INDEX	STATS.	BULL.
A/R	ADD'L	FILE
WA/ T	OTHER	

FOLLOW-UP REPORT

SEATTLE POLICE DEPARTMENT

PRESENT DATE	INCIDENT NUMBER
9-22-91	91-427563

TYPE OF INCIDENT: ARSON

DATE OF INCIDENT: 9-21-91

UNIT FILE NUMBER:

ORIGINALLY REPORTED AS: FIRE

LOCATION OF INCIDENT: [redacted]

VICTIM: [redacted]

ADDRESS: [redacted]

PHONE:

CASE DISPOSITION: CLEARED (ARREST—UNFOUNDED—REFERRAL JUVENILE CT.—EXCEPTIONAL CLEARANCE); AT LARGE WARRANT: ETC.

PROPERTY: RECOVERED ☐ ADDITIONAL STOLEN ☐ FURTHER DESCRIPTION ☐ [INDICATE ID MARKS—COLORS—SIZES—SERIAL NUMBERS—DISPOSITION—VALUE, ETC. AS FIRST ENTRY BELOW.]

ENTRY

COMMENCE EACH ENTRY WITH A NUMBER AND THE DATE AND TIME

SUSPECTS: INCLUDE NAMES, B/A NUMBERS, DESCRIPTIONS, DISPOSITION, CAN VICTIM IDENTIFY, ETC.
GENERAL: SUMMARIZE STEPS OF INVESTIGATION: INCLUDE PERSONS INTERVIEWED, ADD'L WITNESSES, RESULTS OF INTERROGATIONS, EVIDENCE, BUSINESS ADDRESSES AND PHONES, ETC.
CASE M.O.: INDICATE ADD'L M.O. FACTORS NOT INCLUDED ON OFFENSE REPORT.

1 9-22-91; 1130 HRS

THE FOLLOWING VEHICLES WERE IMPOUNDED BY COLUMBIA TOW FROM THE VILLA PLAZA APTS. PER SEATTLE FIRE DEPT.

Lic #	MAKE	STATUS
[redacted]	BUICK	ASH + HEAT
[redacted]	BUICK	"
[redacted]	T-BIRD	"
[redacted]	PINTO	"
[redacted]	VW	"
[redacted]	CHEV	"
[redacted]	CHEV.	TOTAL
[redacted]	CAD	"
[redacted]	OLDS	HEAT + ASH
[redacted]	CHEV	"
[redacted]	DODGE VAN	TOTAL
[redacted]	CHEV	"
[redacted]	T-BIRD	"
[redacted]	MATADOR	"
[redacted]	MAZDA	"

PG 1 of 2

INVESTIGATING OFFICER	SERIAL	UNIT	INVESTIGATING OFFICER	SERIAL	UNIT	APPROVING OFFICER
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Appendix E (continued)

Photo provided by Philip Schaenman

Close-up of the decorative cedar screen on the fronts of the buildings, which served a security purpose as well. Fire could race unimpeded up the wood 2 x 6'x. The photograph shows the screen as it passes the outdoor carpeted floor of the walkway above.

Appendix E (continued)

INDEX	STATS.	BULL.
A/R	ADD'L	FILE
WARRANT	OTHER	

FOLLOW-UP REPORT

SEATTLE POLICE DEPARTMENT

PRESENT DATE	INCIDENT NUMBER
9-22-91	91-427503

OF INCIDENT	DATE OF INCIDENT	UNIT FILE NUMBER
ARSON	9-21-91	

ORIGINALLY REPORTED AS	LOCATION OF INCIDENT
FIRE	9111 50th S

VICTIM	ADDRESS	PHONE
VILLA PLAZA	9111 50th S	

CASE DISPOSITION: CLEARED (ARREST—UNFOUNDED—REFERRAL JUVENILE CT.—EXCEPTIONAL CLEARANCE); AT LARGE WARRANT: ETC.

PROPERTY: RECOVERED ☐ ADDITIONAL STOLEN ☐ FURTHER DESCRIPTION ☐ INDICATE ID MARKS—COLORS—SIZES—SERIAL NUMBERS—DISPOSITION—VALUE ETC. AS FIRST ENTRY BELOW.

COMMENCE EACH ENTRY WITH A NUMBER AND THE DATE AND TIME

SUSPECTS: INCLUDE NAMES, B/A NUMBERS, DESCRIPTIONS, DISPOSITION, CAN VICTIM IDENTIFY, ETC.
GENERAL: SUMMARIZE STEPS OF INVESTIGATION: INCLUDE PERSONS INTERVIEWED, ADD'L WITNESSES, RESULTS OF INTERROGATIONS, EVIDENCE, BUSINESS ADDRESSES AND PHONES, ETC.
CASE M.O.: INDICATE ADD'L M.O. FACTORS NOT INCLUDED ON OFFENSE REPORT.

ENTRY

1 9-22-91; 1130 HRS

CONTINUATION

Lic #	MAKE	STATUS
UNK.	RENAULT	Total
UNK.	CHEV. celebrity	"
KHV-616	Toyota	Heat
QQP-386 (OR)	Hyundai	Heat
915-BIL	Buick	Heat
UNK.	CONTINENTAL	Total
UNK.	MERCURY	Total
UNK.	CADILAC	Total
UNK.	BUICK	"
UNK.	Escort	"
UNK.	CAPRICE	"
UNK.	citation	"
UNK.	ISUZA	"
UNK.	TAURUS	"
UNK.	CHEVELL	"

31 VEHICLES - 20 Total loss, 11 DAMAGED

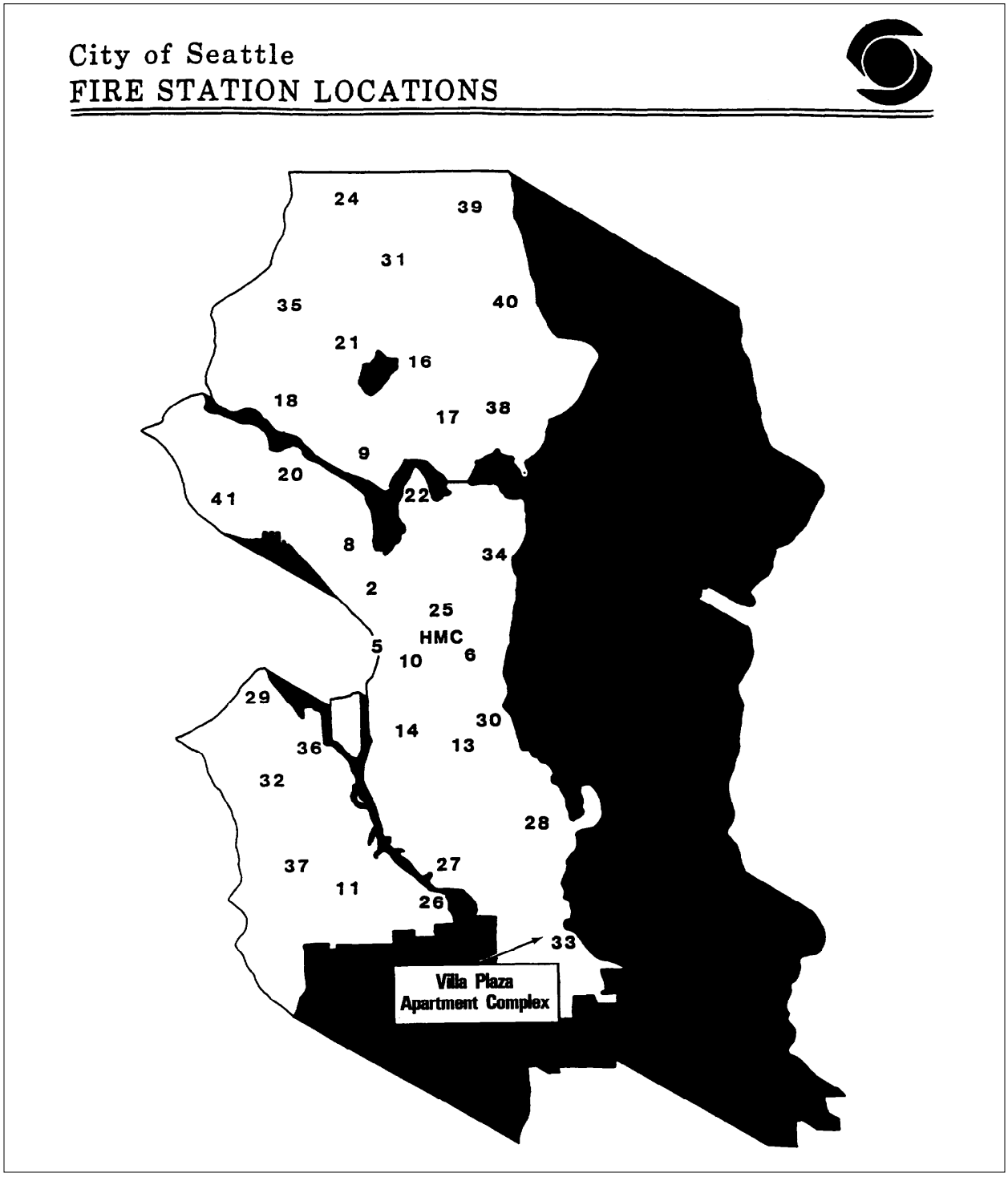
BOAT UNK CK Pg 2 of 2

INVESTIGATING OFFICER	SERIAL	UNIT	INVESTIGATING OFFICER	SERIAL	UNIT	APPROVING OFFICER
A. BAILY	5502	432	M. UNGER	5524	432	

DISTRIBUTION: RECORDS DETECTIVES PRECINCT COURT UNIT JUVENILE OTHER

APPENDIX F

Map of Seattle Showing Station Locations



APPENDIX G

Description of Delaware Program Utilizing Load Limiter Devices and Model Unpaid Customer Notice

DELMARVA Power and Light utilizes a Limiter Adapter service which encourages the payment of electric bills that are in arrears, while providing minimally adequate power. This helps prevent the use of candles and other open flames.

The following guidelines are used when a customer is past due on a payment.

1. The Ekstrom Service Limiter Adapter is installed by DELMARVA Power and Light when the residential account is 2 months past due.
2. The limiter remains for 7 days; if the electric bill is not paid, then the meter is pulled and electricity is turned off.
3. The limiter allows 10 Amps, which the company claims is enough for lights and refrigerator.

The information provided to the user gives him or her a chance to make arrangements for payments. DELMARVA Power is very clear on what appliances can and cannot be used. The concern over open flame for lighting is addressed in the handout.

(This information was provided by Edward C. McCormick, Jr., Fire Commissioner, Delaware State Fire Prevention Commission.)

Appendix G (continued)

ELECTRIC SERVICE LIMITED READ NOTICE BELOW

- You have not paid your bill despite efforts by us to collect the bill and to warn you that a shut-off was about to happen. Normally at this point, we would have disconnected your electricity.
- Instead, we have placed a load limiter that reduces the amount of electricity available for your use. Do not turn on anything until you have read this notice.
- To restore full electric service, you must pay your previous balance plus a restoration charge. Please call your distnict office to make these arrangements or to have any questions answered.
- The use of this limiter is temporary. If your bill remains unpaid, we have the right to remove the limiter and disconnect your electricity after seven (7) days.

HOW THE LOAD LIMITER WORKS

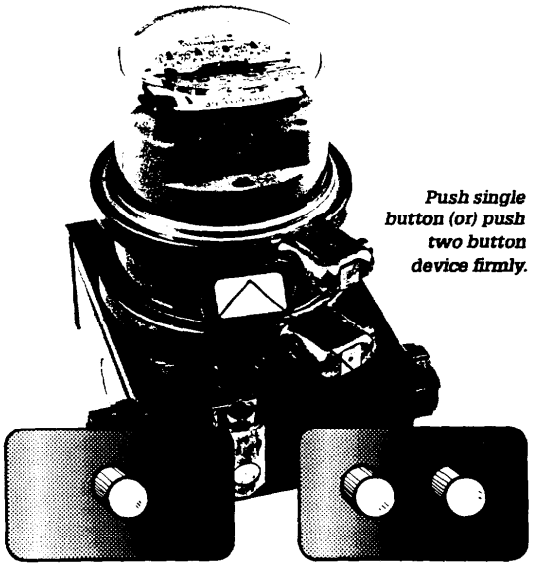
The Load Limiter should allow for enough electricity to operate a few lights, a heating system motor, and a refrigerator. If more electricity is used, a circuit breaker at the meter trips and electric power is disconnected.

IF THE CIRCUIT BREAKER TRIPS:

1. Shut off all lights, motors, and appliances.
2. Go outside to the meter and locate the push button(s) on the bottom of the device holding the meter.
3. For a single button device:
   To restore limited service push the button firmly until you hear it "click" in position.
   For a two button device:
   Either one or both of these buttons will pop out. To restore limited service, press the button that popped out back into the device. If both buttons have popped out. press both of them. When both buttons stay up in the device, your limited electric service is back on.
   (Do not attempt to tape the button(s) in place. The service limiter will fail and you will be totally without power. This action may also damage your motors.)

CAUTION

1. While your electric service is being limited, do not turn on a toaster or any large electric appliance such as a range, a hot water heater, a clothes washer/dryer, or a dishwasher. These appliances will automatically trip the circuit breaker.
2. If you have a large water pump motor, it also must be shut off while the service limiter is in operation.
3. Always have on hand a flashlight with fresh batteries. For your safety, never use candles or any other open flame lighting.



Push single button (or) push two button device firmly.

APPENDIX H

Photographs

Photo provided by Philip Schaenman

Typical exterior construction, brick facia with 2" x 6" slated security fencing.

Appendix H (continued)

Photo provided by the Seattle Fire Department

View from the southeast looking northwest.

Appendix H (continued)

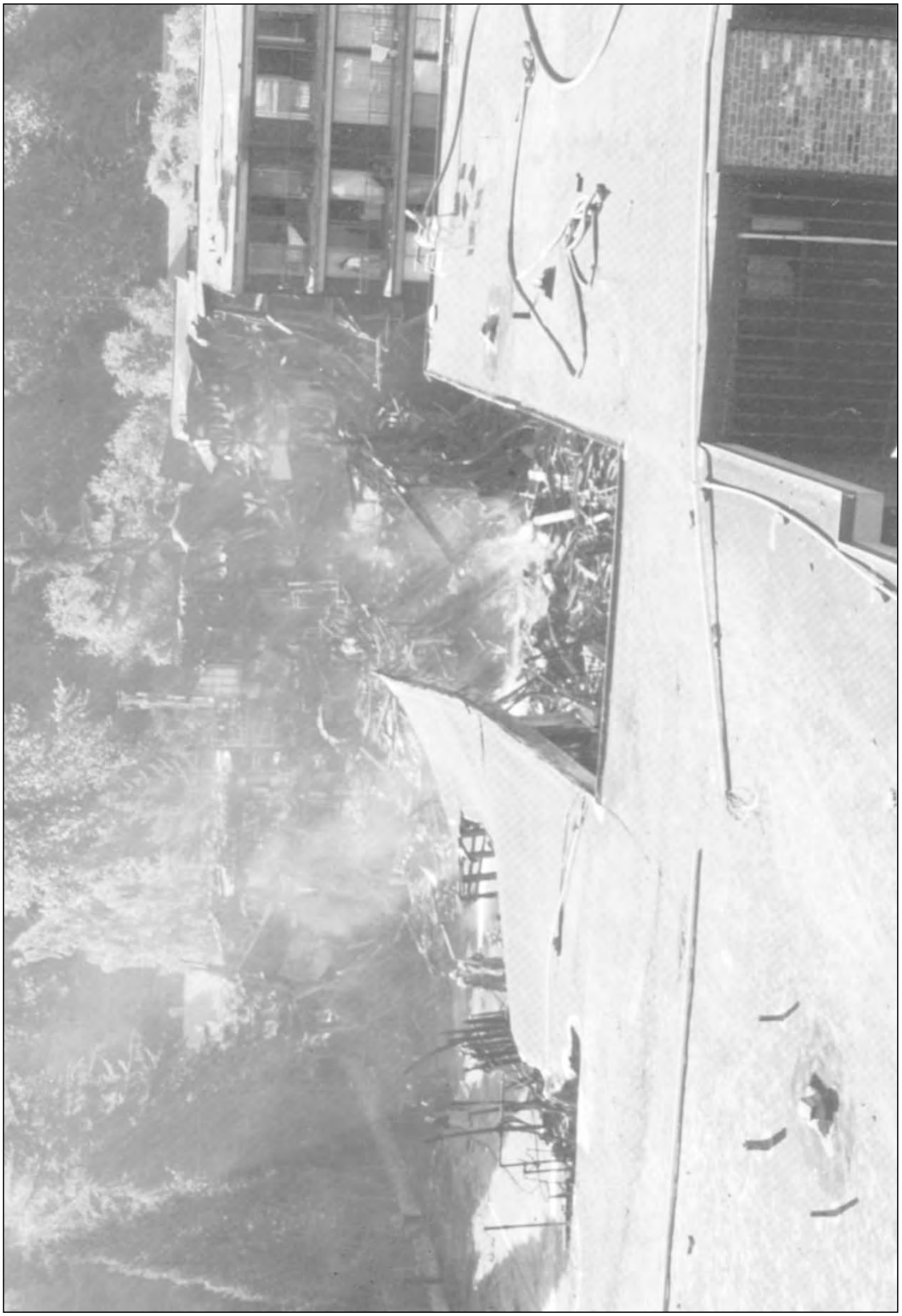


Photo provided by the Seattle Fire Department

Overview of south wing looking west.

Appendix H (continued)

Photo provided by the Seattle Fire Department

Easterly view showing stairwell enclosure that remained at the east end of the destroyed complex.

Appendix H (continued)

Photo provided by the Seattle Fire Department

Aerial view of area of origin (Unit 115).

Appendix H (continued)

Photo provided by the Seattle Fire Department

Slab of room of origin, southeast bedroom.

Appendix H (continued)

Photo provided by the Seattle Fire Department

Aerial view showing the unit of origin and adjacent unit on east and slab comparisons.

Appendix H (continued)

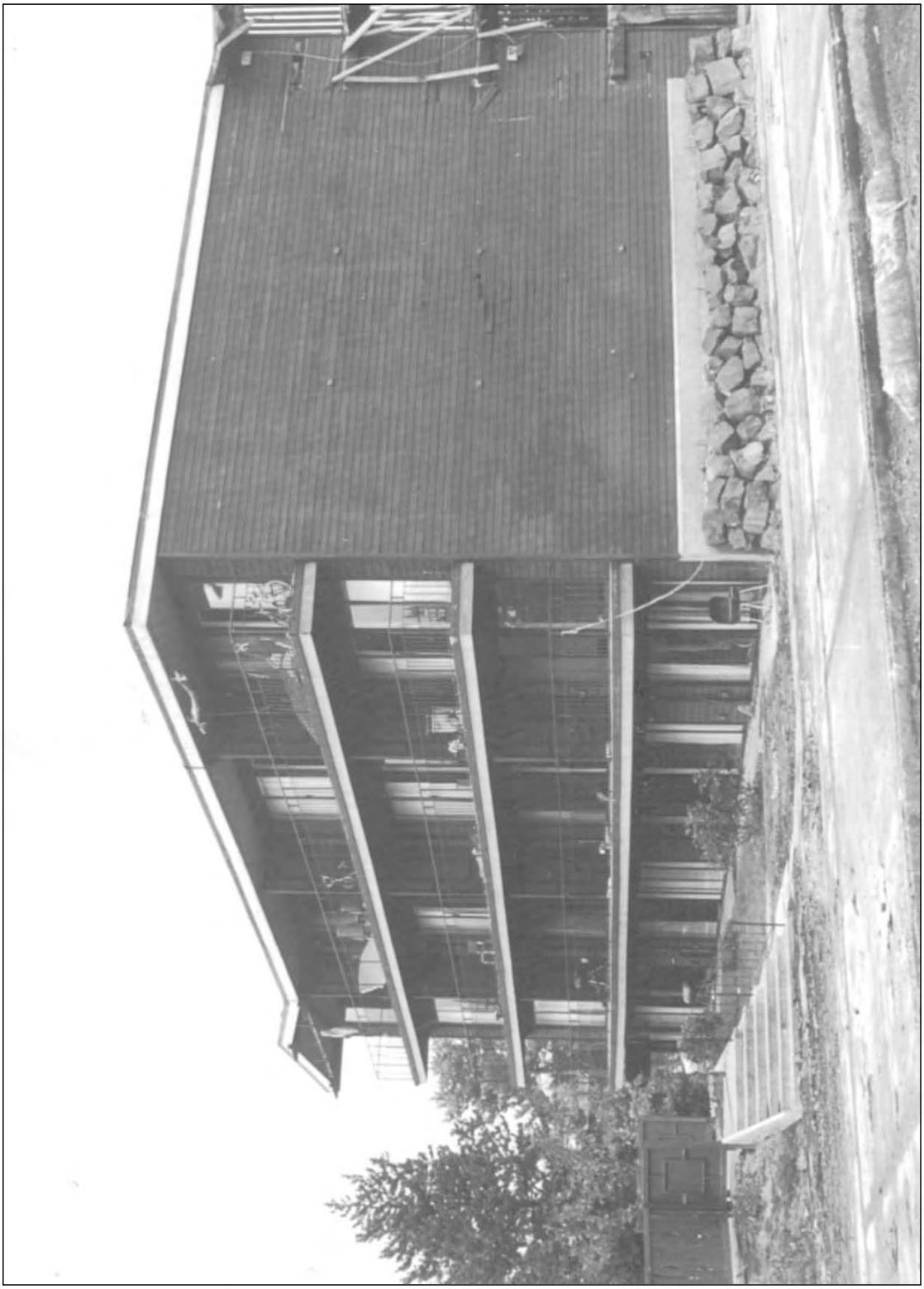


Photo provided by Philip Schaenman

South and west sides of Building E. Note that only a small amount of damage was done to this building, at its southeast corner.

Appendix H (continued)

Photo provided by Philip Schaenman

Closer view of damage of southeast corner of Building E. The wooden platforms jutting out on the right were part of the walkway attached to Building D, which was demolished.

Appendix H (continued)

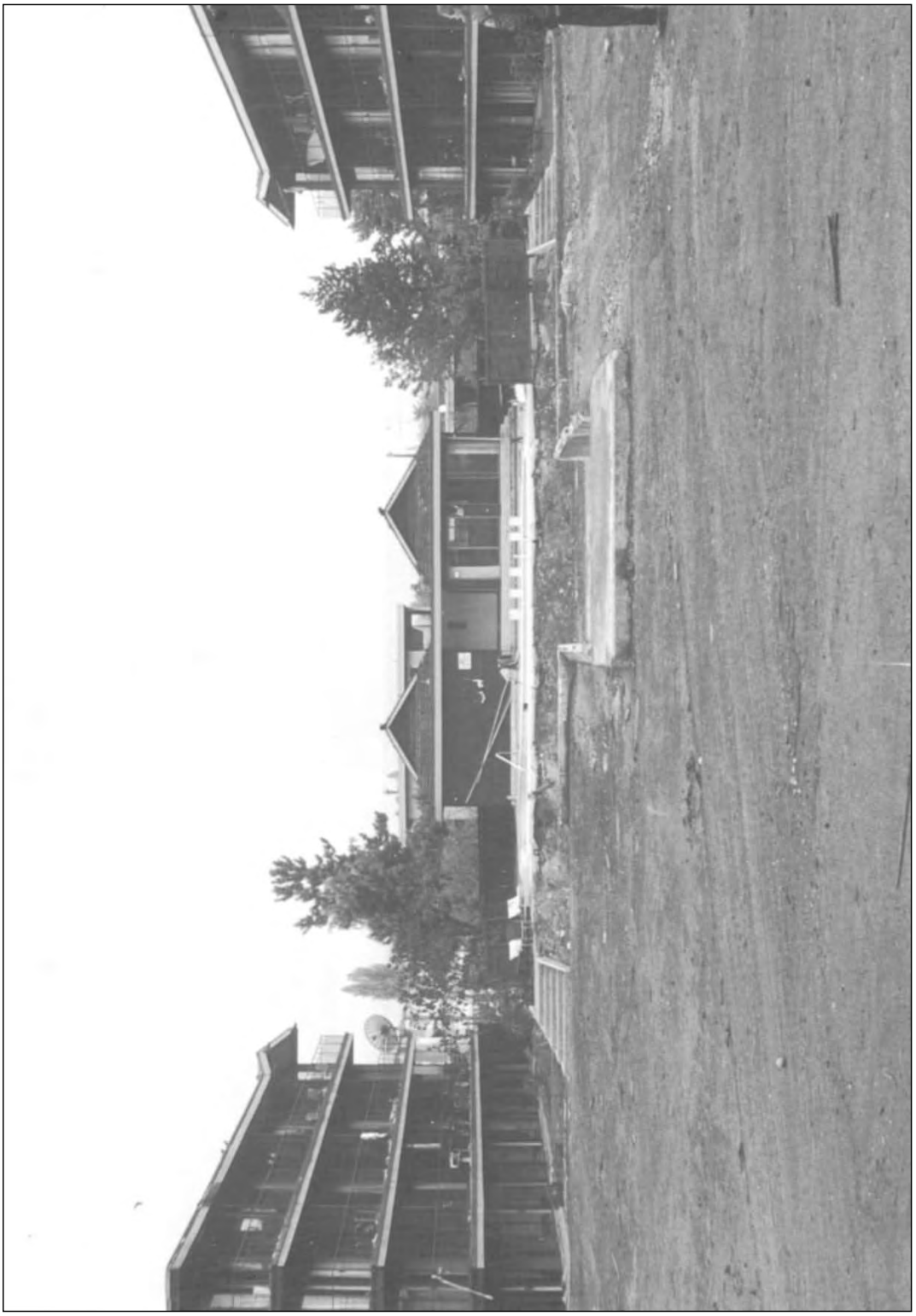


Photo provided by Philip Schaenman

View of complex from south. Building A is on left, Building E on right. The small central building was a pool clubhouse. Buildings B, C and D were demolished and occupied the front (now vacant) space in the bottom third of the photograph.

Appendix H (continued)

Photo provided by Philip Schaenman

View of complex from southeast corner, looking northwest. The fire officer in the foreground is standing on the building line of what was Building D. The fire officer on the left is standing about where the first line and monitor were put into service by the first arriving engine company.

Appendix H (continued)

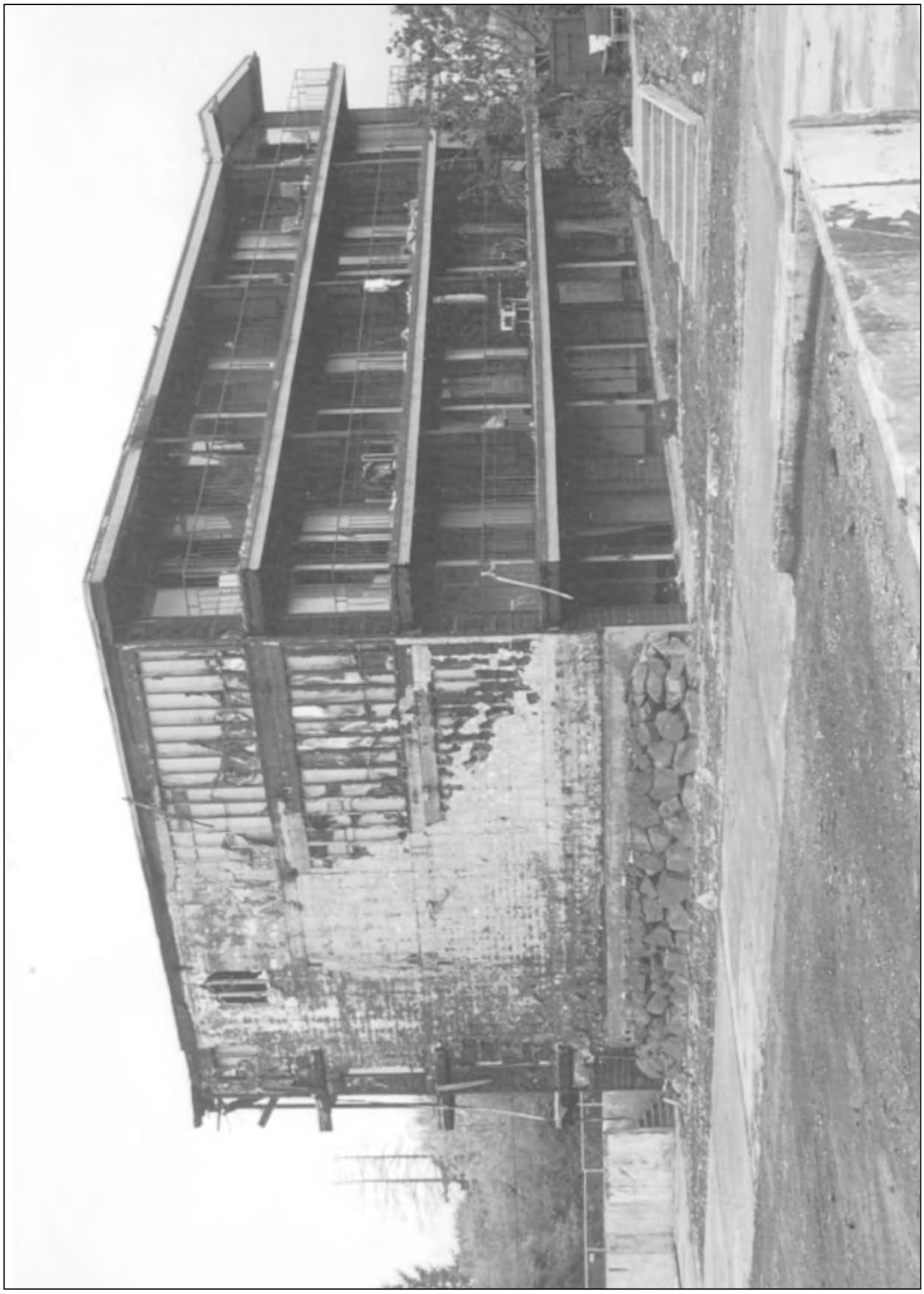


Photo provided by Philip Schaenman

South and east sides of Building A. This building was saved by an excellent exposure defense. Note that it was burning on both its southwest and southeast corners.

Appendix H (continued)

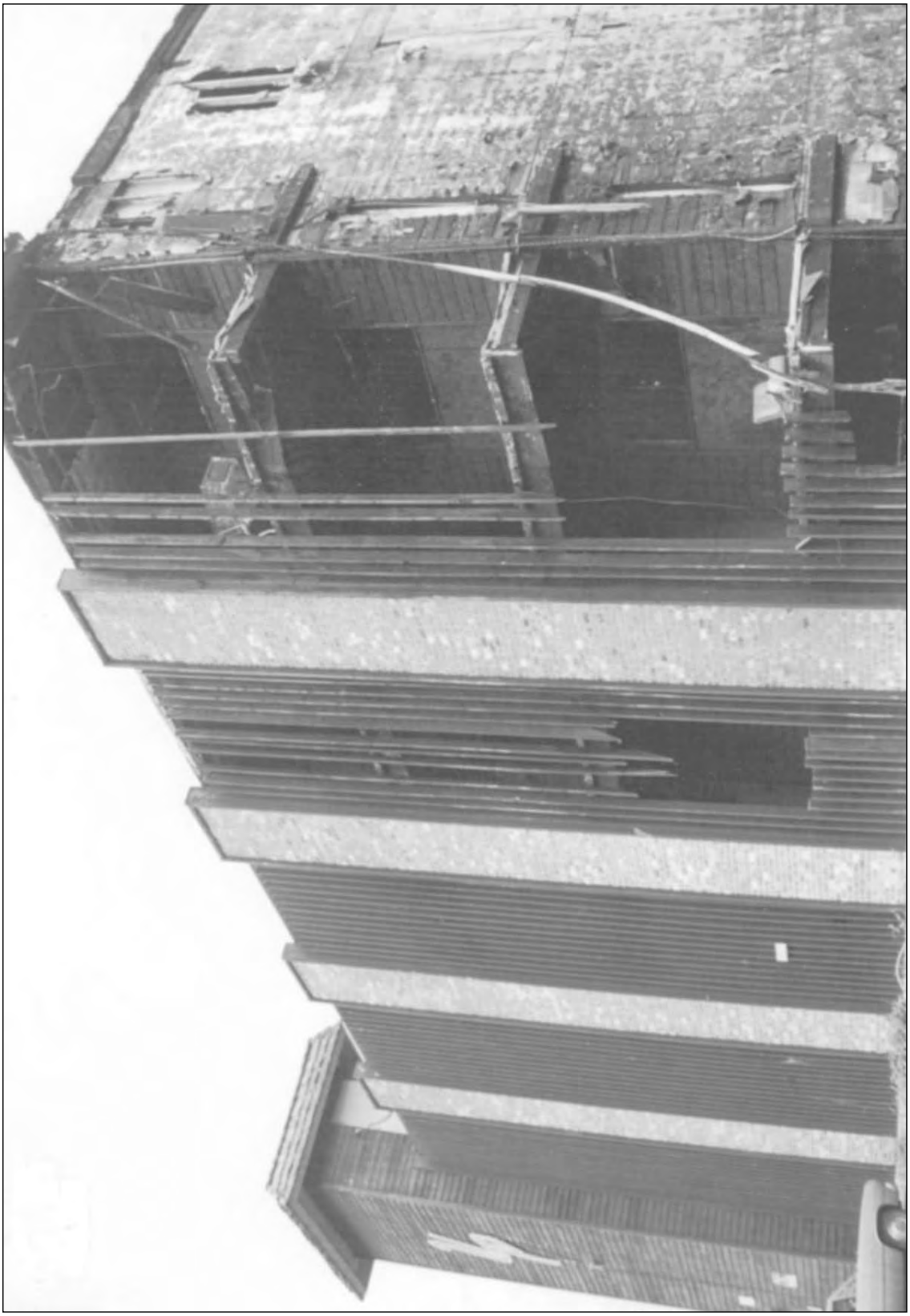


Photo provided by Philip Schaenman

Close-up of west facade of Building A; its southwest corner was damaged.

Appendix H (continued)

Photo provided by Philip Schaenman

Detail of southeast corner of Building A.

Appendix H (continued)

Photo provided by Philip Schaenman

Underside of walkway of basement level of Building E. The underside of all walkways on Floors 1–3 were similar and made of cedar. This was one of the avenues of flame spread.

Appendix H (continued)

Photo provided by Philip Schaenman

Close-up of the decorative cedar screen on the fronts of the buildings, which served a security purpose as well. Fire could race unimpeded up the wood 2 x 6s. The photograph shows the screen as it passes the outdoor carpeted floor of the walkway above.

Appendix H (continued)

Photo provided by Philip Schaenman

Top (fourth) floor walkway on western exterior of Building A. The ceiling of the fourth level was the only one not of cedar. The window shown is a bedroom window like the one that first blew out in the apartment of origin.

Appendix H (continued)

Photo provided by Philip Schaenman

Melted plastic containers behind the swimming pool. Firefighters were operating in this area during the initial stages of the attack.