



Saint Paul Fire Department  
645 Randolph Avenue  
Saint Paul, MN 55102  
(651) 224-7811

## Investigation Report

### Case

#### Case Details

|                            |                           |                              |          |
|----------------------------|---------------------------|------------------------------|----------|
| SPFD211020045888           | Blank, Joseph             | Closed                       | N/A      |
| Case Number                | Lead Investigator         | Status                       | Name     |
| Confidential               | Accidental                | Electrical System            |          |
| Confidentiality            | Disposition               | Fire Cause                   |          |
| 10/20/2021                 | 12:15                     |                              |          |
| Start Date                 | Start Time                | End Date                     | End Time |
| Saint Paul Fire Department |                           | Saint Paul Police Department |          |
| Primary Fire Department    | Secondary Fire Department | Law Enforcement              |          |

#### Case Narrative

The fire department was called to the report of a fire in a detached garage. Firefighters arrived to find a small interior fire burning in a garage and quickly extinguished the fire. The occupant states that in the area of origin there were no batteries on chargers and the air conditioner was not being used. The owner does admit to occasionally smoking in the garage. There were numerous lightning strikes in the area at the time of the fire with a thunderstorm rolling through. Study of the area of origin showed a V-pattern of fire damage below the level of a duplex electrical outlet on the interior east wall near the service door. Firefighters stated that there were numerous ignitable paper items such as magazines in this immediate area prior to moving objects out of the way during fire suppression.

Case Background

Case Synopsis

Investigation Comments

# Fire

## Ignition Sequence

|                   |                                          |  |  |
|-------------------|------------------------------------------|--|--|
| Electrical System | Vehicle storage area;<br>garage, carport |  |  |
|-------------------|------------------------------------------|--|--|

Fire Cause                      Area of Origin                      Equipment Power Source                      Equipment Portability

Area of Origin Comments

|                   |                                          |
|-------------------|------------------------------------------|
| Electrical arcing | Fiberboard, particleboard, and hardboard |
|-------------------|------------------------------------------|

Heat Source                      Material Ignited

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

Equipment Involved In Ignition      Equipment Make      Equipment Model      Equipment Serial Number

## Fire and Smoke Spread Information

|                                |  |
|--------------------------------|--|
| Confined to building of origin |  |
|--------------------------------|--|

Fire Spread Material                      Fire Spread Avenue

|  |  |
|--|--|
|  |  |
|--|--|

Smoke Spread Material                      Smoke Spread Avenue

|  |
|--|
|  |
|--|

Fire Comments

## Weather

|  |  |    |     |
|--|--|----|-----|
|  |  | 23 | ENE |
|--|--|----|-----|

Visibility                      Relative Humidity (%)                      Wind Speed (Mph)                      Wind Direction

|      |     |     |  |
|------|-----|-----|--|
| 55.0 | 0.0 | Yes |  |
|------|-----|-----|--|

Temperature (Fahrenheit)      Precipitation                      Lightning                      Information Obtained From Weather

|                     |
|---------------------|
| Heavy thunderstorms |
|---------------------|

Weather Comments

# Property Details (1 of 1)

## Property

N/A

Name

1015 Churchill Street

Address

Apt/Suite/Room

Saint Paul

Ramsey County

Minnesota

55103

City

County

State

Postal Code

\$30,000.00

\$3,000.00

\$10,000.00

Pre Fire Value

Content Loss Value

Structure Loss Value

Property Description

## Area

Structure

Urban

Area Type

Area Description

Area Quality

## Structure

|                                 |                        |                                  |                   |                 |
|---------------------------------|------------------------|----------------------------------|-------------------|-----------------|
| Parking garage, general vehicle |                        |                                  |                   |                 |
| Property Use                    | Structure Occupancy    |                                  |                   |                 |
|                                 | No                     |                                  |                   |                 |
| Alarm Type                      | Smoke Detector Present | Smoke Detector Performance       |                   |                 |
| None                            |                        |                                  |                   |                 |
| Sprinkler Standpipes            |                        | Sprinkler Standpipes Performance |                   |                 |
| 25                              |                        | 20                               | 1                 |                 |
| Structure Length (Ft)           | Structure Height (Ft)  | Structure Width (Ft)             | Number Of Stories | Number Of Units |
| Wood Frame                      | Type V                 | StructureMaterial_Wood           |                   |                 |
| Construction Type               | Structure Type         | Structure Material               |                   |                 |
| Slab                            | Wood                   | Pitched                          | Asphalt           |                 |
| Foundation                      | Exterior Covering      | Roof Type                        | Roof Material     |                 |

The interior study of the structure started on the south elevation. A large amount of personal belongings were stored along the interior surface of the overhead garage door. Entrance to the interior of the structure was made on the east elevation, through the service door.

Study of the interior showed increasing smoke and fire damage along the east wall. An electrical sub panel, on the north side of the doorframe showed no signs of smoke or fire damage and appeared in good condition. The main circuit breaker was found in the off position and it was learned that firefighters turned this circuit breaker off during fire suppression activities. A circuit breaker on the right side of the panel was not numbered but it was the third and last circuit breaker on that side of the panel. According to the index label this circuit breaker serviced the air conditioner which is in the area of greatest fire damage.

Approximately two feet to the north of the electrical sub panel, along the east wall was a "V"-shaped pattern. This pattern was in the area of greatest fire damage. The fire dynamics from around the "V"-shaped pattern indicated that the fire traveled upward along the east wall to the exposed roof beams and rafters of garage roof. The beams and rafters showed greater damage closest to the area of the "V"-shaped pattern below.

Potential fuel sources in this area included magazines, cardboard boxes and a wooden bed frame. Ignition sources in the area of the "V"-shaped pattern included a duplex outlet, a blue extension cord and an air conditioner plugged into the duplex outlet.

Study of the area of origin, around the "V"-shaped pattern revealed the following potential ignition sources: a duplex outlet, a blue extension cord, and a plugged in air conditioner window unit.

Study of the duplex outlet showed that the air conditioner unit was plugged in but not in the on position. There is no damage to the air conditioner plug prongs. The blue extension cord was reportedly found by firefighters on the floor but not plugged into the outlet. The blue extension cord also shows no signs of arcing or damage to the plug prongs and there is fire and heat damage to the face of the plug that was not protected during the fire.

Study of the duplex outlet showed fire damage to the interior of the plastic junction box and possible arcing and melting on the black wire connection that was not making good contact with the screw head of the outlet. Study of the black wire showed signs of melting closest to the screw head and possible metal on the surfaces around the screw terminal connection.

## Interior Exam

Study of the south elevation shows that firefighters cut a large opening to the overhead door during fire suppression activities. The wood siding was removed above the garage door toward the peak of the roof by firefighters during firefighting. Smoke and fire damage is visible on the western peak of the roof. Study of the west and north elevations did not show any signs of smoke or fire damage. Study of the east elevation revealed minor smoke damage around the

upper portion of the service door frame. The service door was removed by firefighters during firefighting operations. An air conditioner was on the east wall to the north of the service door. The window type air conditioner showed signs of moderate smoke damage to the exterior of the unit. A weather proof exterior duplex outlet, to the mounted to the wall to the south of the service door revealed no signs of smoke or fire damage.

Exterior Exam

### Alarm and Security Services

|                      |                         |                          |                  |
|----------------------|-------------------------|--------------------------|------------------|
| None                 | No                      |                          |                  |
| Sprinkler Standpipes | Smoke Detectors Present | Smoke Detector Locations | Fire Suppression |
| Closed And Unlocked  | Closed And Locked       |                          |                  |
| Doors                | Windows                 | Other Entrances          |                  |

Alarm Protection/Security Comments

### Utilities

|                   |                     |                                    |
|-------------------|---------------------|------------------------------------|
|                   |                     |                                    |
| Electrical Status | Electrical Entrance |                                    |
|                   | Natural             | Xcel Energy                        |
| Fuel Status       | Fuel Type           | Fuel Company                       |
|                   |                     | City of Saint Paul Municipal Water |
| Water Status      | Water Company       |                                    |

Telephone Status

Utility Comments

# Witness Statement (1 of 3)

## Witness Statement

|            |            |            |
|------------|------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
|------------|------------|------------|

Last Name

First Name

Middle Name

|            |  |
|------------|--|
| 911 Caller |  |
|------------|--|

Type

Employer

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Interviewed Date

Interviewed By

Interviewed By Other

|            |  |
|------------|--|
| [REDACTED] |  |
|------------|--|

Street 1

Street 2

|            |            |            |
|------------|------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
|------------|------------|------------|

City

State

PostalCode

|            |            |  |
|------------|------------|--|
| [REDACTED] | [REDACTED] |  |
|------------|------------|--|

|            |            |            |
|------------|------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
|------------|------------|------------|

Q: How did you first become aware of the fire?

A: So I came outside and I smelled fire. And then I looked over to Rochelle's garage and there was smoke.

Q: Did you come out the backside of your house?

A: Yeah.

Q: Where was the smoke coming from?

A: It seemed it was coming from the upper part. And then I called 911. And right after I called 911, I pounded on Rochelle's side door.

Q: Was there anything else you noticed when you walked over; could you see where the fire was?

A: Right away I knew it was going on inside the garage.

Q: Did the doors appear to be closed at that time?

A: Yes.

Witness Statement Comments

## Witness Statement

|                   |                |                          |
|-------------------|----------------|--------------------------|
| Stariha           | Rochelle       | A                        |
| Last Name         | First Name     | Middle Name              |
| Owner/Occupant    | Employer       |                          |
| Interviewed Date  | Interviewed By | Interviewed By Other     |
| 1015 Churchill St | Street 2       |                          |
| Street 1          | Street 2       |                          |
| Saint Paul        | Minnesota      | 55103                    |
| City              | State          | PostalCode               |
| White             | 05/14/1968     | Driver's Liscense Number |
| Race              | Date of Birth  | Driver's Liscense Number |

Q: Do you know if your garage is insured?

A: I don't know, my mother sold it to me and I didn't change anything but my husband took care of that stuff and he passed away four years ago.

Q: Is your house insured?

A: Yes, State Farm.

Q: Were the doors to the garage closed and locked?

A: The side door was closed but unlocked because I had been going in and out of there getting stuff ready for my house.

Q: Was the overhead door locked?

A: Yeah.

Q: Any problems with the garage or electrical items in the garage?

A: The outside outlet by the garage door stopped working. I used to plug my electric mower into it but now was using extension cords to plug it in inside the garage by the sub panel. I ran over two extension cords and my daughter ran over a third 100 foot extension cord with my mower but I fixed them.

Q: Were there any lightning strikes in your neighborhood?

A: I heard thunder in the neighborhood.

Q: Was the air conditioner running at all?

A: No. It's heated too but that wasn't on either.

Q: Were any of the extension cords plugged in?

A: None of them were plugged in. I have a shorter blue one that I would plug in and run it to the door and then plug one of the 100 foot cords to that.

Q: Any other problems in the garage, mechanical or electrical?

A: None that I'm aware of.

Q: What was along the east wall of the garage interior by the duplex outlet?

A: I had a couple of bunkbeds, a crib.

Q: Any ignition sources like batteries on charge?

A: No, in fact we got some of the tools we were going to need, some old Ryobi's, and took them in the house. There are some still on a work bench in the back of the garage that I don't know how to use [referring to the north side of the garage].

Q: Any candles in the garage?

A: No.

Q: Does anyone smoke in the garage?

A: You know, I work in the garage; I'm a smoker, I'll admit that. I don't usually smoke while I'm working because it's kind of hard to move things and do things. I'm not going to say I've never smoked in there but I don't when I'm working.

Q: Do you dispose of cigarettes on the floor of the garage?

A: You know what? I had a friend that I let put some of his, he's an electrician, and I let him and he really pissed me off because he would.

Q: Like stamp them out on the floor? [referring to the cigarette butts]

A: Yes.

Q: How long ago had someone smoked in the garage?

A: I probably did it just to look at it or show my kids cause they came to help me yesterday to winterize it. But like I said, normally I don't smoke out there at all when I'm working.

Witness Statement Comments



## Witness Statement (3 of 3)

### Witness Statement

|                    |  |  |
|--------------------|--|--|
| Captain Engine #22 |  |  |
|--------------------|--|--|

Last Name

First Name

Middle Name

|                 |  |
|-----------------|--|
| Fire Department |  |
|-----------------|--|

Type

Employer

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Interviewed Date

Interviewed By

Interviewed By Other

|  |  |
|--|--|
|  |  |
|--|--|

Street 1

Street 2

|            |           |  |
|------------|-----------|--|
| Saint Paul | Minnesota |  |
|------------|-----------|--|

City

State

PostalCode

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Race

Date of Birth

Driver's Liscense Number

Q: What did you guys see?

A: So we get here and these two guys [referring to his firefighters] were in there first. It looked like there was a box of paperwork on fire and on further investigation it looked like an obvious V-pattern coming from an outlet. There's a sub panel in the garage and we shut off the main and there's also a circuit breaker tripped. We pulled a preconnect but didn't use it; a light water put it out.

Q: It was all buttoned up?

A: The door was shut but unlocked. [referring to the east service door] The fire appears to have snuffed itself out because the trusses are charred but when we got here it was a very small fire.

Witness Statement Comments

# Conclusion

## Case Conclusion

After examination of the fire scene, observation of fire patterns of both movement and intensity and interviews conducted, it is my opinion the fire began within the interior of the garage along the east wall at a duplex electrical outlet. The ignition source was probably an electrical arc either from a power surge from a lightning strike or from a high resistance electrical connection. The first fuel ignited was plastic and fiberboard. The oxidant was atmospheric air. The action that brought these items together was either due to a lightning strike from a passing thunderstorm or from a high resistance connection at the duplex outlet. The classification of fire cause is accidental. This concludes my investigation and report.

## Signature

Blank, Joseph

Lead Investigator

Signature

Date Submitted

## Document Attachment List

Photo Log