UConn FD Case/NFIRS Incident #: 23-05373

UConn PD Incident #: 23-05374

Date and Time of Incident: January 20, 2023 at 0623 hours

Report Title: Whitney House Structure Fire

Location of Incident: The physical address of the structure is 1315 Storrs Rd, Storrs, CT 06269. The building resides on the UConn Storrs Campus, adjacent to CT Route 195 and Mirror Lake. The building has also gone by the following names historically: Whitney House, International House, Rainbow House, and House 4.

Reporting Method: 911 call to UConn University Safety Emergency Communications (USEC)

Date and Time of Investigation: January 20, 2023, at 0720 hours

Fire Marshal: Captain Steven Garvin, University Fire Marshal

Assignment(s): Lead Investigator: Lieutenant Daniel Volovski, Deputy Fire Marshal

Investigation Scope: To conduct an origin and cause investigation regarding the above incident.

Fire Investigative Team: The following team conducted and/or assisted in the investigative team as part of the initial investigation.

In addition to the initial investigation by the AHJ, a parallel investigation was conducted by NEFCO Fire Investigation under contract by the property insurance carrier, FM Global. The scene investigation was conducted on January 30, 2023, with the UConn Fire Department Fire Marshal Unit present. Per the lead investigator from NEFCO, Fire Analyst Sean Reddy will not be issuing a written origin and cause report regarding this fire.

- Lead Investigator: Lieutenant Daniel Volovski, Deputy Fire Marshal, UConn Fire Department FMU
- Assisting Investigator: Captain Steve Garvin, Fire Marshal, UConn Fire Department FMU
- Assisting Investigator: Fire Inspector Yves Poulin, UConn Fire Department FMU
- Assisting Investigator: Fire Inspector Derek Gaston, UConn Fire Department FMU
- Lead Law Enforcement Support: Officer Rene Rivera, UConn Police Department Patrol Division
- Law Enforcement Support: Detective Robert Blanch, UConn Police Department Detective Bureau
- Technical Assistance: Building Official David Houseman, UConn FMBIO
- ADC K9 Handler/Technical Assistance: Detective Jeffrey Bellavance, Connecticut State Police FEIU
- Scene Support: Captain Eric Colantonio, UConn Fire Department

Fire Department(s): The primary response agency was the University of Connecticut Fire Department, assisted by multiple mutual aid departments on the first and second alarm. The following departments responded: Windham Hospital ALS M31, Ashford FD, Columbia FD, Coventry Ambulance, Mansfield FD, Town of Coventry FD, North Windham FD, Tolland FD, Willimantic FD, Willington Hill FD.

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Police Department(s): The University of Connecticut Police Department provided initial investigative assistance, as well as scene security. The investigation team was also assisted by the Connecticut State Police, Fire and Explosion Investigation Unit for an accelerant detection canine.

Scene Security: Scene security was provided by University of Connecticut Police Department throughout the scene investigation.

Images: Photos were taken at the scene and during the follow up examination, as well as 360-degree photos from inside of the scene. Photo log is attached to this report.

Weather: The weather at the time the fire was reported included a temperature of 36 degrees Fahrenheit, a 6-mph wind in the North direction, and an alternating light drizzle. Historical weather information obtained from Weather Underground. The weather conditions are not believed to have influenced the cause or spread of the fire.

Description of Structure: The building is a two-story wood-framed structure, with a full walk-out basement and a full walk-up attic area. Based upon available records, the building is believed to have been constructed in 1769. The building has been owned by the University of Connecticut since 1918. At an unknown time, the building received a single-story addition coming off of Side C, which consisted of additional living space, a wood burning fireplace, and a small attic above. At the time of the fire, and for a significant time prior thereto, the building has not been occupied.

The front of the building faces the East direction and CT Route 195.

Side A- Faces East Side/Route 195

Side B- Faces South Side

Side C- Faces West Side/Mirror Lake

Side D- Faces North

Evidence: The following items were taken from the scene for the purposes of preservation and further examination. These items have been stored securely in the UConn Fire Marshal and Building Official Office at the Kennedy Building in Storrs, CT.

- (2) Chromalox CB 240 volt, 1500 watt wall mounted heaters. One was recovered from the 1st Floor bathroom and was closest to the area of origin. Due to overhaul functions, the fan was found laying in the exterior west side yard, and was recovered to prevent further damage. The second was taken as an exemplar and was located on the 2nd Floor bathroom, installed in a similar configuration.
- (1) Section of metallic armored (AC) cable with a junction box, serving the wall heater from the 1st Floor.
- (1) Nutone wall-mounted bath fan, white. A section of metallic armored (AC) cable was attached to the fan. This fan was located in the 1st Floor bathroom, near the area of origin.

Description of Firefighter Action Taken: The following info was provided as a narrative by the first arriving incident commander, Captain Robert Babcock of the UCFD.

Car 4 dispatched with Engine and Tower to a reported structure fire, smoke coming from the building in the area of RT 195 and Storrs Rd. Car 4 responded emergency to the scene. Car 4 arrived, found a two and a half story wood frame dwelling with heavy smoke under pressure showing from the 2nd floor windows A/B

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sides as well as visible fire extending from the C side division 2 windows. Car 4 established command and declared the working fire and to start the working fire assignment. Engine 1 directed into the scene and leave room for the Tower. Engine 1 arrived and began stretching 1.75" attack line to the B side. UC advised to contact TN to let them know we are using Tac 1. All units on fire ground switched to Tac 1. 360 of the building found a balloon frame historic wood structure with an addition off the C side and basement walk out access on D side. Building unoccupied. C side showed fire coming from the 2nd floor windows and 1st floor adjacent to C side.

Engine 1 charged the attack line and held position to determine best way in and Command held for 2 out to be in place. Engine 1 driver began stretching LDH to hydrant just south of scene. Tower 1 set up A side for vertical ventilation. Engine 1 made entry via B side doorway to the 2nd floor once 2 out (Mansfield) arrived and stretched the second line off Engine 1. Mansfield Squad driver assisted with making hydrant for Engine 1. Tower 1 crew split to perform vertical ventilation and search. Safety assigned to Car 107. Accountability took over by Mansfield Car 7. 2nd Alarm struck by command. All hands callback.

Car 2 responded to the scene, arrived, and performed a face to face. Command transferred to Car 2 with Car 4 assuming operations. Ambulance personnel from station arrived and staged away and proceeded up to the scene. Engine 1 crew making good progress on the fire on the 2nd floor fire. Backup line established by Mansfield and made entry via B side 1st floor to work on extinguishment. Primary searches negative.

Mansfield Squad fed by Engine 1 with 2.5" line for a third line to come off to the C side for exterior needs as fire was breaching the C side exterior walls.

RIT established by Willimantic and Columbia. Operations detailed crews to the basement to force door on D side and attempt to control utilities. Basement door forced and encountered hoarding conditions. Power secured at main breaker by Car 6 and Tolland Crew.

Crews made good progress on the fire on the 2nd and 1st floors. Crews cycled out with relief personnel routinely as incident progressed. Command set up rehab (Coventry Amb) just south of the scene. Air Cascade requested to the scene. Coventry and Tolland personnel cycled in for overhaul. Attic area wet down as smoke and heat was extending up around center support beam.

Majority of fire knocked down. Secondary searches negative. UConn personnel cycled back in for overhaul, metering, and checking for extension. RIT (Willimantic and Columbia) cycled into operations and backfilled RIT with UConn, Columbia, and Coventry.

Power secured by Eversource at pole across street. Par Checks completed regularly and personnel accounted for and sent to rehab.

Hot spots checked with thermal cameras and wet down. HCN high of 2ppm and CO of 50. PPV ventilation set up and awaited interior crews to approve starting. Ventilation complete. Mutual aid started to break down and be released. Engine 1 and Tower 1 began breaking down ladders and hose lines. No injuries to report.

Fac Ops / UConn Communications arrived on scene as well as media.

Interviews: In addition to the incident commander narrative, the first-in fire Lieutenant Anthony Nero of UCFD was interviewed informally at the scene. Lieutenant Nero indicated and confirmed that initial entry to the structure was made on the South "B" side entry door. The door was locked and forced open by first in

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crews but met with minimal resistance from hand tools. The initial line of attack was a 1 3/4" brought to the second floor which knocked down the majority of fire.

An interview with Captain Eric Colantonio from UCFD confirmed that the initial power cut to the building during suppression operations was conducted by him, using the 200 amp main disconnect at the panelboard in the basement, and that no other breakers were operated. Entry was made to the basement using the walk in door on Side D, which was locked and required forced entry.

There were no occupant interviews conducted as the building has been vacant for a significant period of time.

Description of Utilities: The building was maintained with power and domestic water services at the time of the fire. A further description of the utilities is below.

Electrical Service: The building had an active electrical service with an overhead drop entering at the Southeast corner. The building electrical service had overcurrent protection with a 200-amp service with a circuit panelboard in the Southeast corner of the basement. There is also a 100-amp subpanel in the 2nd Floor of the structure, however the directory of branch circuits served was not available or visible.

Gas Service: The building does not receive natural gas or LPG service.

Heat Service: The building did not have any active central heating due to the significant age. The building heat was maintained above freezing using a combination of electric baseboard heating and wall-mounted electric space heaters to maintain coverage in selected areas.

HVAC Service: The building does not have central HVAC as part of the heating service.

Fire Alarm System: The building did not have working smoke detection or an automatic fire alarm system installed at the time of the fire. In the first floor living room common area, there was a non-operational fire alarm manual pull station installed on the wall. This was identified as non-operational in the OSFM Legacy Report on 05/30/2007. As the building was not occupied, no smoke detection or fire alarm systems were required in this building.

Suppression Systems(s): The building is not equipped with an automatic fire suppression system.

Initial Fire Scene Description: The initial observations and photo documentation of the scene were conducted while the fire department was on scene performing overhaul.

Exterior Examination: The exterior scene examination began with observations of Side A, the East facing side, and continuing in a clockwise pattern around the structure. Side A presented with no observable fire or heat damage and all windows intact. At the time of investigation, the front door was open and the East facing plane of the gable pitched roof had a ventilation hole cut by fire department personnel.

At the corner of Side A and B, the overhead electrical service entry appeared to be intact, however it was verified by the incident commander that the fuse had been pulled at the street pole, and the service line was cut later into the incident by Eversource for building safety.

Continuing to Side B, the second story and attic areas of the original building had smoke staining on the exterior siding. One attic window and one second floor window were forced inward due to fire suppression and ventilation efforts. The first floor exterior was generally intact. The first floor Side B entry door was found open and used as the main point of entry for the fire department for interior attack efforts.

Continuing clockwise to Side C, including the building addition, presented with the majority of the physical damage. The first floor exterior area at the Northwest corner of the addition presented with the lowest area of smoke and heat damage, beginning down by the sill over the stone foundation, and extending upward and generally outward towards the original structure and into the second floor area. The heat and smoke damage appeared to have broken through the roof and exterior siding areas on both the addition and original structure in multiple locations, generally with the greatest amount of damage in the middle west area and in the addition corner area. Multiple windows and sections of wood clapboard siding were forced open due to suppression and overhaul actions by the fire department. On the ground outside of the Side C addition corner, I observed fire debris including metal components of appliances from the building; these appliances appeared to be removed from the stud wall at that corner and left in place.

The examination continued to Side D, which presented with smoke staining on the attic exterior area. No other heat or smoke damage was observed. One window closest to the Northwest corner was forced inward for ventilation efforts by the fire department. There was a walk-in door leading to the basement that was open and had been forced by the fire department.

In summary, the majority of the exterior damage observed was found in the center of Side C, facing in the West direction, with the greatest concentration in the addition area.

Interior Examination: The interior examination began with entry into the Side D door into the basement. The basement was generally intact with the exception of water pooling on the floor, but there was no smoke or fire damage observed. The area of the building under the addition is served by a crawlspace and does not have full access for inspection.

I continued to the electrical panelboard in the Southeast corner of the basement. The panel was a GE Powermark Plus service panel with a 200-amp main disconnect. The panel was generally physically intact and appeared to be properly labeled. The slots for circuits 25 and 27 had a double pole, non-GFCI 20-amp breaker installed, and this breaker was found in the tripped position. This breaker was labeled on the directory for Kitchen Heat. No other breakers were found in the tripped position. The only breaker found in the off position was for circuits 17-19, labeled for Heat Living Room West.

The first floor examination began by entering the Side C doorway that was also used for fire department initial entry. The entry door sustained a minor amount of toolmark damage consistent with fire department forcible entry hand tool use. The South living room area sustained light smoke and heat damage, but was overhauled around the chimney area walls, which had sustained heat damage and significant structural member charring within the walls themselves. There was no extension outside of the walls in these rooms. The brick fireplace in the living room had a light amount of smoke staining in the firebox, but no fuels were found in the box, and there was no apparent recent use of this fireplace. The fireplace, flue, and chimney were in generally sound physical condition in this area.

The examination continued to the front entry foyer, also known as the Side A entry. The front entry door and frame sustained a minor amount of toolmark damage consistent with fire department forcible entry hand tool use. The remainder of the front entry foyer had no notable smoke or heat damage.

The first floor North living space had no notable smoke or heat damage. The brick fireplace had no fuel in the firebox and does not appear to have recent use.

The first floor central living space connecting the kitchen, bathroom, and living spaces did not have any significant smoke or heat damage.

The first floor kitchen area did not have any notable smoke or heat damage. The cooking range burners and the oven were all in the off position at the time of investigation. The kitchen wall heater appeared to be on and in the minimum heat setting. This appliance did not have any indications of damage.

The first floor full bathroom had a significant amount of overhaul damage in both the ceiling and West side wall areas, but the areas of intact drywall in the bathroom interior had minimal smoke and heat damage. The damage within the wall cavity itself was substantial, with a significant level of charring of the structural members and on the West wall. Many of the wood studs had been overhauled onto the ground outside but had been burned almost completely through in the wall cavity. The heat damage was observed all the way to the lowest point of the stud bays on this wall, at the base of the sill. The damage continued all the way through the bays and continued upward and outward into the second floor area. There was no indication of firestopping wood or materials separating the first and second floors, which is consistent with balloon frame construction. Hanging down through this stud bay was a section of armored metallic cable (AC) and a junction box. There was an additional section of armored cable that traveled along the interior baseboards and came up in the stud bay that experienced the greatest amount of heat damage. The cables found appeared to match the installation locations of feeding the wall heater and bathroom wall fan found on the exterior.

The second floor area was entered by the interior stairs. At the top of the stairs in the common hallway, a large volume of smoke staining on all walls was observed, as well as high heat damage forming a line of demarcation approximately halfway down the wall closest to the rear of the building. The heat damage was intensified in the area closest to the two rear-most bedrooms in the second floor.

The front Northeast room in the second floor was not confined with doors and had only observable smoke damage with limited heat damage.

The front Southeast bedroom in the second floor was partially confined with one closed door, and had light smoke damage with no heat damage observed. The door confining it from the rear of the house and common hallway area sustained a higher level of smoke and heat damage.

The rear Southwest bedroom in the second floor contained a large amount of smoke and heat damage throughout, with the highest concentration focused on the rear of the building, closest to the center of the structure. A significant amount of wallboard had been overhauled by the fire department,

allowing view of the attic loft in the addition as well. The wood studs and structural members were significantly charred in these areas, however depth of char was less concentrated than the wood studs in the first floor bathroom stud bays. The roof and siding of the structure had partially burned away due to heat damage in areas closest to the rear and the addition. There were no observable competent ignition sources observed in this room on the second floor level. The floor areas closest to the rear of the building were noticeably deteriorated and unstable for further examination.

The second floor bathroom had an entry door that appeared to be open at the time of the fire. The bathroom was observed as having smoke damage only, with no heat damage observed. Some of the walls had been overhauled open by the fire department. The wall heater in this bathroom matched the exact make and model of the one in the area of origin, and was removed for inspection as an exemplar.

The rear Northwest bedroom in the second floor had primarily moderate smoke damage observed in the main structure, with the majority of the wallboard removed through overhaul by the fire department to expose the view of the addition attic area. The addition area beyond this area had a significantly greater concentration of smoke and heat damage, including charring of studs and structural roof rafters and members. The majority of this damage was above the area of origin on the first floor, closest to and above the bathroom area. There were no observable competent ignition sources observed in this room or in the attic area above.

Fire Characteristics:

Fuel Load: The fuel load in the building was limited as there were limited contents in the vacant building at the time of the fire. The fuel load is primarily limited to the building combustible structural components, with incidental fuels from remaining items that were left in the building.

First Material Ignited: The first material ignited cannot be specified definitively but appears to be consistent with insulation and wood structural studs within a wall cavity. The specific area in which this ignition occurred is within a stud bay in the West wall of the bathroom.

Competent Heat Source and Ignition Scenario: The most probable competent heat source is within the electrified armored cable, in the two locations where cable failure or "blowout" occurred. These two locations on the cable consist of the suspected points of origin. While the breaker serving this cable did trip, the presence of two blowout arcs is indicative that at least some portion of time passed with the sustained temperatures of approximately 2000-2500 degrees Fahrenheit. This can be proven with the melting damage observed on both the copper conductors and the steel cable. The building materials typical to a structure of this age included wood studs and some form of insulation, as well as the paper sheetrock sheathing layer on the interior side and wood clapboard siding on the exterior side, all of which are combustible in the presence of sustained heat. Temperatures of this consistency in the presence of these combustible material are a reasonable explanation for ignition and fire spread.

Additional Investigation Actions: For additional follow-up within the area of origin and the fire scene as a whole, the Connecticut State Police, Fire and Explosion Investigation Unit was contacted and responded to the scene with an accelerant detection canine and to assist with the technical aspects of the investigation. Detective Jeffrey Bellavance and ADC David conducted a walkthrough of the scene. The accelerant

detection canine did not alert to the presence of ignitable liquids within the structure or the area of origin. A copy of the report has been attached as supplemental material to this report, under CSP Case Number 23-00026273.

Building Official David Houseman Jr. from the UConn Fire Marshal and Building Officials Office provided scene support and facilitated electrical inspection and investigation assistance within the components observed in the area of origin. A summary of his investigation is attached to this report.

A nearby exterior surveillance camera video was supplied by the UConn University Safety Emergency Communications Center. The camera angle was from South of the fire on Route 195 from approximately 100 yards from the building. Approximately twenty to thirty minutes prior to the fire department notification, there was smoke and a small glow of flame from the rear and second floor of the fire building. The view of the fire building was obscured by darkness, weather, and viewing distance, however there were no indications from the video that any human interaction with the scene may have caused or influenced the fire spread.

Research Conducted: The make and model of the wall heater closest to the point of origin was researched for potential recalls. There were no recalls found for the heater in question. The exact model is no longer manufactured as of this time.

Injuries: There were no fire service or civilian injuries reported for this fire incident.

Area of Origin: The area of origin was within the first floor West wall of the bathroom area, within the stud bay between the first and second floors. The exact point of origin was one of two points on the armored cable in which electrical cable failure or "blowout" occurred.

Cause: The cause of the fire was the electrical cable failure or "blowout" within the area of origin, leading to the ignition of building materials in the stud bay. The exact circumstances leading to the blowout failure cannot be further determined through the scope of this investigation, however the electrified cable provided a competent ignition source to ignite and sustain the fire.

There are no other observable competent ignition sources within the area of origin that would have encountered a similar scenario leading to fire development. It is not hypothesized nor reasonably possible that human intervention caused this ignition scenario to occur.

Classification: The fire classification is **ACCIDENTAL**. This fire will not be referred for any criminal litigation or follow-up.

Status: This fire case will be **CLOSED** as of February 24, 2023. This investigator reserves the right to reopen the investigation upon the receipt of any additional information or knowledge that was not previously available pertaining to the cause and origin of this fire.

ire investigation - Origin and Cat

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Attached Documents Supporting this Report: The following support material is included with this report. Additionally, full resolution photos are on file with the Fire Marshal Unit and available upon request.

- Sketch of Fire Scene
- Photo Log and Contact Sheets of Scene Photos
- Photo Log and Contact Sheets of Follow-Up Examination Folders
- Investigative Supplement from CSP FEIU authored by Detective Jeffrey Bellavance
- Investigative Supplement from UConn FMBIO Inspector David Houseman Jr.
- Posting of Imminent Danger from the UConn FMBIO for the structure

The undersigned, an investigator duly appointed, deposed and says that: I am the writer of the above report pertaining to this incident number that the information contained therein was secured as a result of (1) my personal observations and knowledge; or (2) information relayed to me by other members of my fire marshal's office and or another fire marshal's office; or (3) information secured myself or another member of a police department from the person(s) named or identified therein. As indicated in the attached report. That the report is an accurate statement of the information so received by me.

Lead Investigator: Lieutenant Daniel Volovski, Deputy Fire Marshal

Don Ville

Peer Reviewed by: Fire Inspector Derek Gaston

Approved by: Captain Steven Garvin, University Fire Marshal

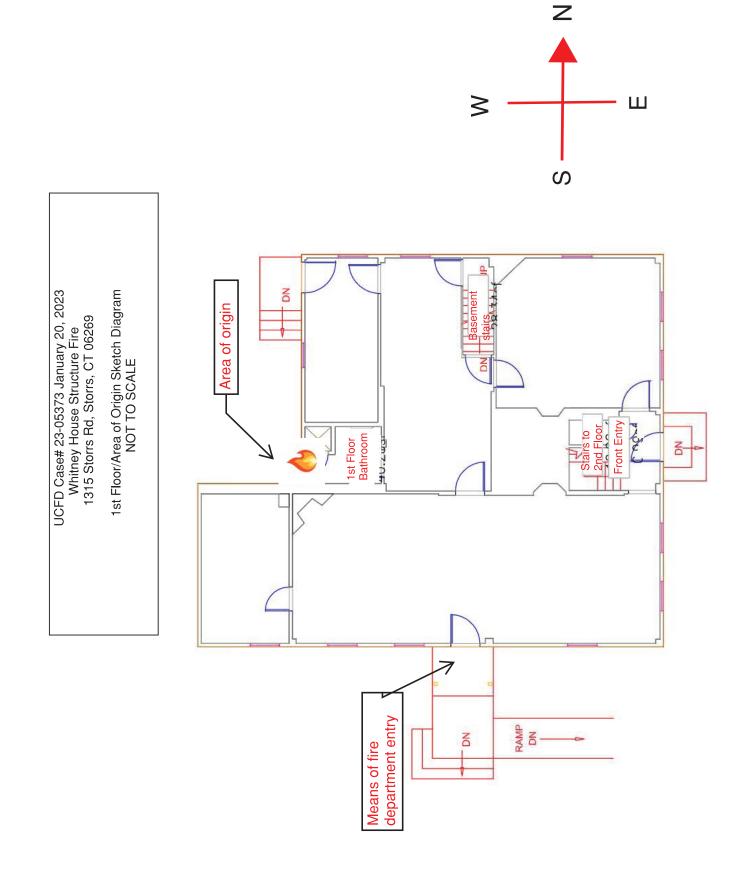
Steven

Garvin

Digitally signed by Steven

Date: 2023.02.24 13:22:41

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UCFD Form FM22-FIR-PL Rev. 11/2020



UConn Fire Department Fire Marshal Unit

Photo Log Sheet Supplement to Evidence Report

FMU Case Number:	23-05373
NFIRS Incident Number:	23-05373

Date & Time of Photos:	January 20, 2023 at 0720 hours	Incident Description:	Whitney House Structure Fire
Location:	1315 Storrs Rd, Storrs, CT 06269	Photography Team:	Lieutenant Daniel Volovski, Deputy Fire Marshal
Type of Camera Used:	Canon EOS 90D DSLR	Recording Medium:	SD Card

Photo File Name	Photo Notes
IMG_0078	Building exterior facing West
IMG_0079	Building exterior facing Northwest
IMG_0080	Building exterior facing North
IMG_0081	Building exterior facing North
IMG_0082	Building exterior facing Northeast
IMG_0083	Building exterior facing East
IMG_0084	Building exterior facing East
IMG_0085	Building exterior facing Southeast
IMG_0086	Building exterior facing Southeast
IMG_0087	Building exterior facing Southeast
IMG_0088	Building exterior facing South
IMG_0089	Building exterior facing South
IMG_0090	Building exterior facing Southeast
IMG_0091	Building exterior facing West
IMG_0092	Building exterior facing North
IMG_0093	Building exterior service line entry
IMG_0094	South Side B entry door
IMG_0095	Exterior shot of wall heater appliance
IMG_0096	Exterior wall West side
IMG_0097	Wall fan West exterior
IMG_0098	Wall heater West exterior
IMG_0099	Wall heater West exterior
IMG_0100	Exterior wall West side
IMG_0101	Exterior wall West side
IMG_0102	Main circuit panelboard basement
IMG_0103	Main circuit panelboard basement
IMG_0104	Main circuit panelboard basement
IMG_0105	Main circuit panelboard basement

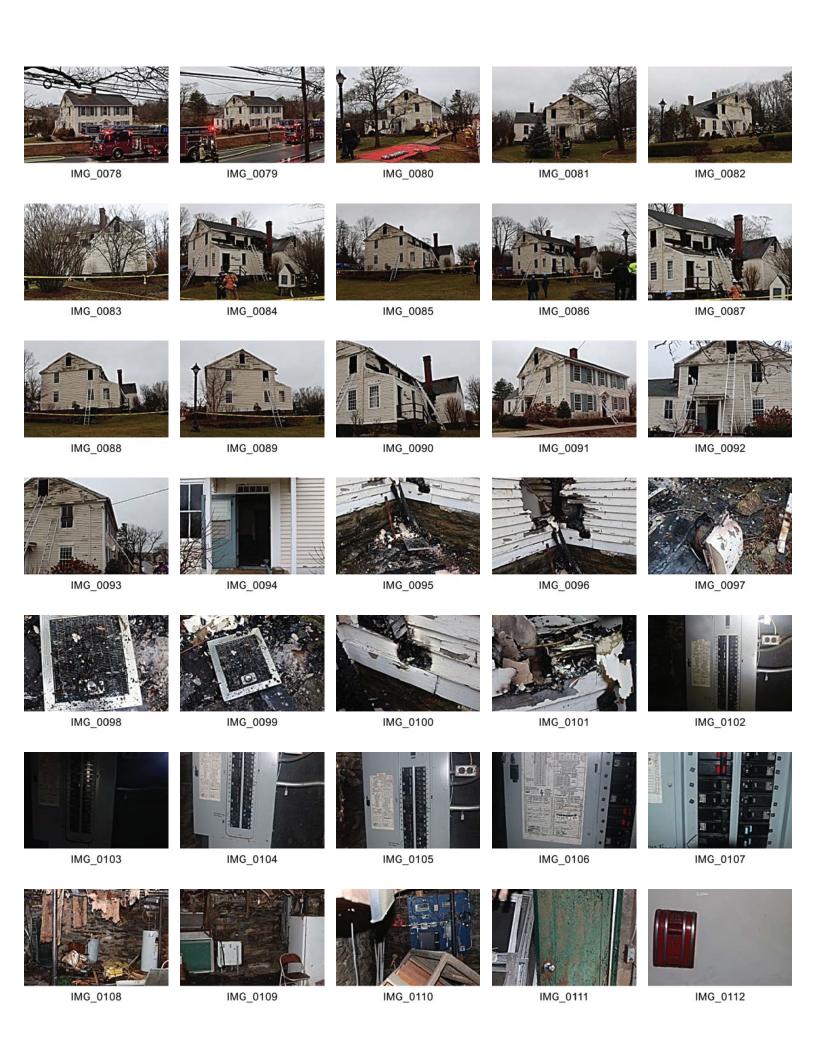
UCFD Form FM22-FIR-PL Rev. 11/2020

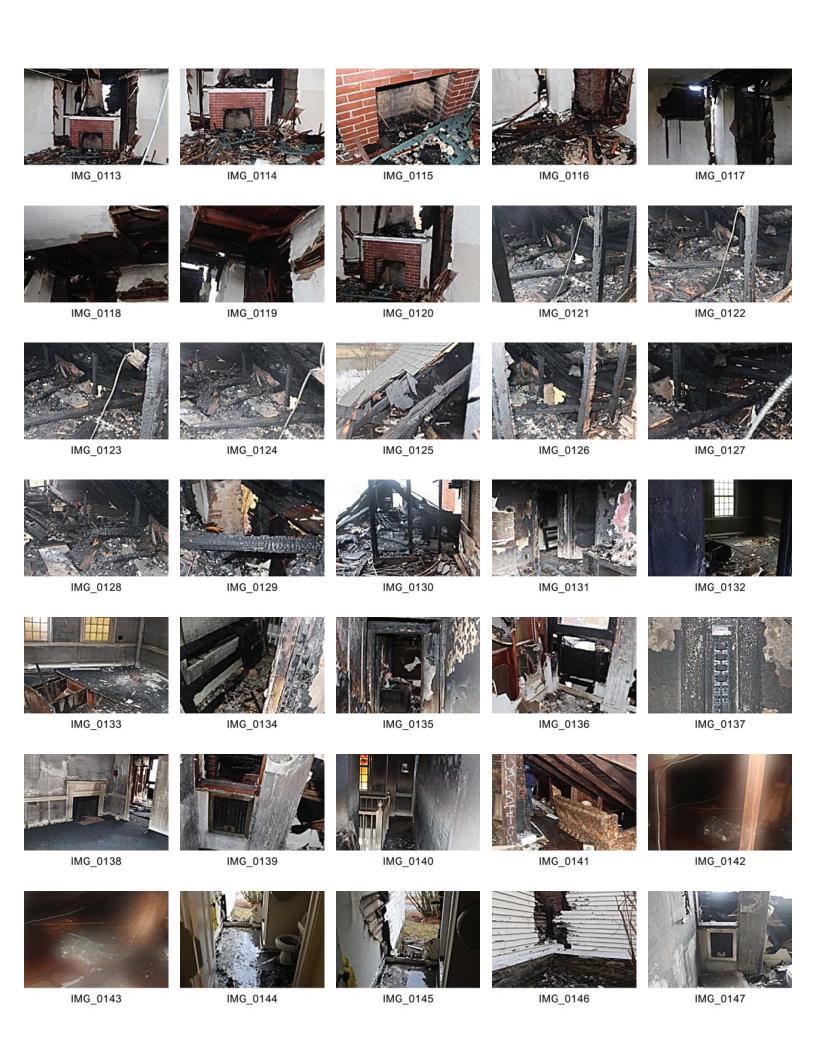
IMG_0106	Main circuit panelboard basement
IMG_0107	Main circuit panelboard basement, tripped breakers 25-27
IMG_0108	Basement general
IMG_0109	Basement general
IMG_0110	Basement general
IMG_0111	Basement general
IMG_0112	Old fire alarm pull station 1 st Floor
IMG_0113	1 st Floor living room area
IMG_0114	1 st Floor living room area
IMG_0115	1 st Floor living room area fireplace
IMG_0116	1 st Floor living room area
IMG_0117	1 st Floor living room area
IMG_0118	1 st Floor living room area
IMG_0119	1 st Floor living room area
IMG_0120	1 st Floor living room area
IMG_0121	2 nd Floor addition attic area
IMG_0122	2 nd Floor addition attic area
IMG_0123	2 nd Floor addition attic area
IMG_0124	2 nd Floor addition attic area
IMG_0125	2 nd Floor addition attic area roof
IMG_0126	2 nd Floor addition attic area
IMG_0127	2 nd Floor addition attic area
IMG_0128	2 nd Floor addition attic area
IMG_0129	2 nd Floor addition attic area
IMG_0130	2 nd Floor rear room
IMG_0131	2 nd Floor rear room
IMG_0132	2 nd Floor front room
IMG_0133	2 nd Floor front room
IMG_0134	2 nd Floor front room
IMG_0135	2 nd Floor hallway
IMG_0136	2 nd Floor rear Northwest room
IMG_0137	2 nd Floor hallway subpanel
IMG_0138	2 nd Floor front Northeast room
IMG_0139	2 nd Floor bathroom
IMG_0140	2 nd Floor hallway
IMG_0141	Attic main building
IMG_0142	Attic main building
IMG_0143	Attic main building
IMG_0144	1 st Floor bathroom
IMG_0145	1st Floor bathroom area of origin
IMG_0146	1st Floor bathroom area of origin from exterior
IMG_0147	2 nd Floor bathroom wall heater exemplar
IMG_0148	2 nd Floor bathroom wall heater exemplar
IMG_0149	2 nd Floor bathroom wall heater exemplar
IMG_0150	2 nd Floor bathroom wall heater exemplar
IMG_0151	2 nd Floor bathroom wall heater exemplar
IMG_0152	2 nd Floor bathroom wall heater exemplar

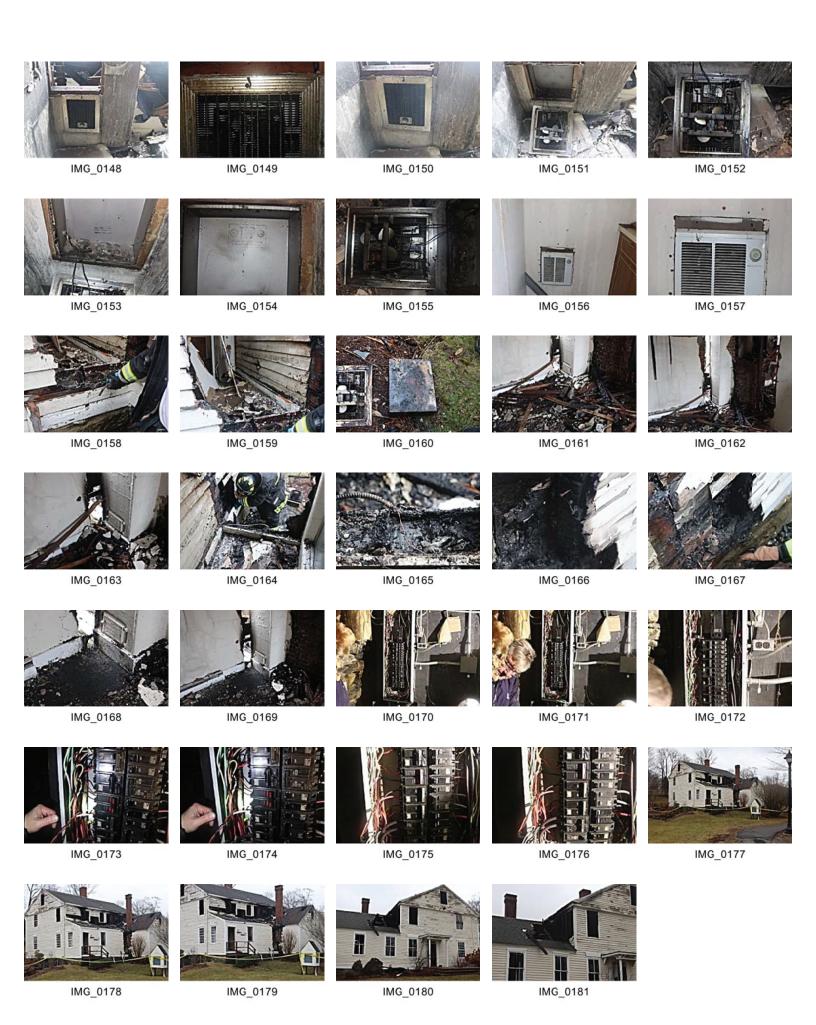
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IMG_0161
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IMG_0163
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IMG_0165 1st Floor bathroom area of origin IMG_0166 1st Floor bathroom near area of origin IMG_0167 1st Floor bathroom near area of origin IMG_0168 1st Floor West room IMG_0169 1st Floor West room IMG_0170 Basement circuit panelboard cover removed IMG_0171 Basement circuit panelboard cover removed IMG_0172 Basement circuit panelboard cover removed IMG_0173 Basement circuit panelboard cover removed IMG_0174 Basement circuit panelboard cover removed
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IMG_0175 Recement circuit nanelhoard cover removed
asement circuit panelboard cover removed
IMG_0176 Basement circuit panelboard cover removed
IMG_0177 Building exterior facing Southeast upon departure of scene
IMG_0178 Building exterior facing Southeast upon departure of scene
IMG_0179 Building exterior facing Southeast upon departure of scene
IMG_0180 Building exterior facing North upon departure of scene
IMG_0181 Building exterior facing North upon departure of scene

Submitted by: Lieutenant Daniel Volovski, Deputy Fire Marshal	Signature:	Som Ville
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UCFD Form FM22-FIR-PL Rev. 11/2020



UConn Fire Department Fire Marshal Unit

Photo Log Sheet Supplement to Evidence Report

FMU Case Number:	23-05373
NFIRS Incident Number:	23-05373

Date & Time of Photos:	January 23, 2023 at 1257 hours	Incident Description:	Whitney House Structure Fire Follow Up Exam Photos
Location:	1315 Storrs Rd, Storrs, CT 06269	Photography Team:	Lieutenant Daniel Volovski, DFM Captain Steven Garvin, University Fire Marshal
Type of Camera Used:	Canon EOS 90D DSLR	Recording Medium:	SD Card

Photo File Name	Photo Notes
IMG_182	Appliance examination overview
IMG_183	Wall heater
IMG_184	Wall heater rear
IMG_185	Wall heater
IMG_186	Wall heater
IMG_187	Armored cable blowout damage
IMG_188	Wall fan
IMG_189	Wall fan
IMG_190	Junction box to wall fan
IMG_191	Armored cable conductor to wall heater
IMG_192	Armored cable conductor to wall heater
IMG_193	Armored cable conductor to wall heater
IMG_194	Armored cable conductor to wall heater
IMG_195	Armored cable conductor to wall heater
IMG_196	Armored cable conductor to wall heater
IMG_197	Armored cable conductor to wall heater, blowout damage
IMG_198	Armored cable conductor to wall heater, blowout damage
IMG_199	Armored cable arcing
IMG_200	Armored cable arcing
IMG_201	Armored cable arcing
IMG_202	Armored cable sheathing
IMG_203	Armored cable sheathing
IMG_204	Armored cable sheathing
IMG_205	Wall fan overview
IMG_206	Wall fan overview

UCFD Form FM22-FIR-PL Rev. 11/2020

IMG_207	Armored cable sheathing
IMG_208	Wall fan components
IMG_209	Wall fan components
IMG_210	Wall fan components

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STATE OF CONNECTICUT, DEPARTMENT OF PUBLIC SAFETY-**INVESTIGATION REPORT (DPS-683-E) (REVISED 2/3/06)**

Page 1 of 2

Report Type:	Report #: 23000202	273 - 0002	20020								
Initial Report	: Prosecut	ors Re	eport: 🗆	Sup	plemer	nt: 🗆	Re-	open: [Assist:	☐ Closing: 🖾
Attachments:											
Statements:	☐ Teletype:	□ Ph	otos: [Ske	tchmap	o: 🗆 E	Evide	ence: [Other: [
CFS NO	INCIDENT DATE	TIME	INCIDEN	DATE	TIME	PRIMA	RY OF	FICER			BADGE NO
2300026273	01/20/2023	09:38	01/20/2	2023		BELLA\	/ANC	E, JEFFRI	EY C.		1041
INVESTIGATING OF	FICER	BADG	E NO	TYPE (OF EXCEP	TIONAL	CLEA	RANCE	CAS	SE STATUS	
BELLAVANCE, JEFFREY C. 1041 Not Applicable Closed/Cleared											
INCIDENT ADDRESS APARTMENT NO TOWN CD											
Storrs Rd/ Oak Hill Rd Mansfield 06268											
OFFENSE					LOCAL X-	-REF CO	DE	IBR COD	E	ATT/COMP	OFFENSE DESC
ASSIST TO OTHER A	AGENCY				9	9-2	# 5	INF		Completed	School/college
STATUS CODE C=C	OMPLAINANT V=V	ICTIM A	=ARRESTE	E J=JU	IVENILE I	H=OTHE	R M=	MISSING	W=V	VITNESS (D=OFFENDER/ACCUSED T=TOT
STATUS NAME		SE	XRACE	D.O.B.		TELEF	NOH	E			OP STATE & NO.
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1	re Marshal's Office				Bus	(86)	0) 486	6 - 4878			
47 Weaver Rd Storrs	0100289										
	· · · · · · · · · · · · · · · · · · ·	CCEL	ERANT	DET	ECTIO	N CAI	NINI	ETEAN	A A	SSIST	

Whitney House, University of Connecticut, Storrs Campus

ACTION TAKEN:

On 01/20/2023 at approximately 0943 hours the Accelerant Detection Team, consisting of this Trooper (Detective Jeffrey Bellavance #1041) and Accelerant Detection Canine "David" #9062 was assigned by Sergeant Benoit #294 of the Connecticut State Police Fire & Explosion Investigation Unit, to assist with a structure fire investigation at the Whitney House located on the University of Connecticut, Storrs Campus.

Upon arrival at approximately 1046 hours, I met with UConn Fire Marshal Captain Steven Garvin who explained the facts and circumstances of the incident. On 01/20/2023 at approximately 0623 hours, UConn Storrs Fire Department was dispatched for smoke emanating from a vacant structure. First arriving firefighters encountered fire conditions on the west side (rear) of the structure. The fire was located within the partition walls on the first floor and extended upward to the second floor and attic of the structure. The fire was extinguished with no reported civilian or firefighter injuries.

Refer to UConn Fire Marshal's Office (Case #23-5373) and UConn Police Department (Case

THE UNDERSIGNED, AN INVESTIGATOR HAVING BEEN DULY SWORN DEPOSES AND SAYS THAT: TAM THE WRITER OF THE ATTACHED POLICE REPORT PERTAININGTO THIS INCIDENT NUMBER.								
THAT THE INFORMATION CONTAINED THEREIN WAS SECURED AS A RESULT OF (1)MY PERSONAL OBSERVATION AND KNOWLEDGE: OR (2)INFORMATION RELAYED TO ME BY OTHER MEMBERS OF								
MY POLICE DEPARTMENT OR OF ANOTHER POLICE DEPARTMENT:OR (3)INFORMATION SECURED BY MYSELF OR ANOTHER MEMBER OF A POLICE DEPARTMENT FROM THE PERSON OR PERSONS								
NAMED OR IDENTIFIED THEREIN, AS INDICATED IN THE ATTACHED REPORT. THAT THE REPORT IS AN ACCURATE STATEMENT OF THE INFORMATION SO RECEIVED BY ME.								
INVESTIGATOR SIGNATURE:	INVESTIGATOR I.D.#:	REPORT DATE:						
/DET JEFFREY C BELLAVANCE/	1041	01/20/2023						
SUPERVISOR SIGNATURE:	SUPERVISOR I.D.#:		5 B					
/SGT SHAWN M BENOIT/	0294	1 "	1					



STATE OF CONNECTICUT, DEPARTMENT OF PUBLIC SAFETY-INVESTIGATION REPORT (DPS-683-E) (REVISED 2/3/06)

2300026273 Cont.

Page 2 of 2

#23-5374) incident report for complete details and photographs.

It was requested that the Accelerant Detection Canine Team search the fire scene for the possible presence of ignitable liquids.

That on 01/20/2023 at approximately 1115 hours the Accelerant Detection Team searched the confines of the interior as well as the exterior of the structure and outlying areas for the possible presence of ignitable liquids. Accelerant Detection Canine "David" is an approximately four year old male Yellow Labrador Retriever, assigned to the Connecticut State Police Fire & Explosion Investigation Unit. He has been trained and certified as an Accelerant Detection Canine by the Connecticut State Police Canine Unit.

Accelerant Detection Canine "David" was calibrated, by this Trooper, using one drop of partially evaporated gasoline. "David" alerted to this control sample prior to and after working the scene.

During the search by Accelerant Detection Canine "David", he exhibited no positive alerts for the presence of ignitable liquids.

The incident remains under investigation by the UConn Fire Marshal's Office and UConn Police Department.

No further action is anticipated with this investigation by this Trooper.

STATUS: CLOSED / CLEARED

THE UNDERSIGNED, AN INVESTIGATOR HAVING BEEN DULY SWORN DEPOSES AND SAYS THAT: I AM THE WRITER OF THE ATTACHED POLICE REPORT PERTAININGTO THIS INCIDENT NUMBER.

THAT THE INFORMATION CONTAINED THEREIN WAS SECURED AS A RESULT OF (1)MY PERSONAL OBSERVATION AND KNOWLEDGE: OR (2)INFORMATION RELAYED TO ME BY OTHER MEMBERS OF MY POLICE DEPARTMENT OR OF ANOTHER POLICE DEPARTMENT: OR (3)INFORMATION SECURED BY MYSELF OR ANOTHER MEMBER OF A POLICE DEPARTMENT FROM THE PERSON OR PERSONS NAMED OR IDENTIFIED THEREIN, AS INDICATED IN THE ATTACHED REPORT. THAT THE REPORT IS AN ACCURATE STATEMENT OF THE INFORMATION SO RECEIVED BY ME.

INVESTIGATOR SIGNATURE:	INVESTIGATOR I.D.#:	REPORT DATE:		P
/DET JEFFREY C BELLAVANCE/	1041	01/20/2023	, .	
SUPERVISOR SIGNATURE:	SUPERVISOR I.D.#:			
/SGT SHAWN M BENOIT/	0294			

Please find the below narrative of observations during the requested assistance of the fire investigation at 1315 Storrs Road Mansfield on the Friday January 20, 2023. If additional explanation or assistance is needed please do not hesitate to call.

Structure fire involving the structure on University property at International House (Whitney House), 1315 Storrs Road – building known as #0044 in our building file. The follow is a narrative of observations relative to request of assistance from the building department to evaluate the structure and assist in the origin and cause investigation.

I was alerted to the structures involvement in fire by the text message from the university alert system at 0640hrs and public media reporting that one of the buildings at the Storrs campus was involved in a fire. I received a call from My supervisor Walsh requesting me to respond to the scene to evaluate the structure and assist in the investigation at the request of the Fire Marshal Garvin. I called Captain Garvin to notify that I would be in route he told me the location and stated the suppression operations were still active, he sent a photo of the building.

Upon arrival the suppression operations and overhaul appeared to be concluded and the fire personnel were picking up equipment. I checked in with Captain Garvin and FMBIO Director Cooke to discuss course of action and how I can help. I walked around the exterior of the and noted that there was fire damage evident in the western single story building extension from the two story structure. The exterior wall was intact until the intersection of the southwestern section of the back of the structure and an extension from the back wall plane. There was a masonry chimney that extended out the roof in this location. The area of exterior wall damage was observed to be just above the frieze board at the sill and foundation wall and extended to the roof of the single story section and there was exterior sheathing damaged at the second floor level above the roof area. Upon entry through the south entry door there was localized damage involving the finishes and framing surrounding the masonry fireplace in main south room location. The interior of the next room northward of the fireplace was a bath room found to be the area which the exterior wall damage observed on the exterior survey. The bathroom exterior wall was fire damaged and missing from the floor to the ceiling level between the bathroom living area wall to the shower stall. The remainder of the first floor was smoke stained with no visible fire or structural damage. A walk through of the basement showed no signs of fire damage and areas of the crawlspace visible from the basement level presented as involved in fire movement or damage. A survey of the second floor showed a interior volume of fire and movement patterns extending from the first floor attic space above the western single floor extension where the fireplace and chimney extended through the roof. The exterior of the second floor western wall sheathing and framing were observed damaged by fire and the shed roof along the western single story extension from the main house was damaged and the sheathing was missing. A survey of the walkup attic presented as a half story unfinished attic space and no visible fire movement patterns were observed and only a ventilation operation hole was cut through the eastern roof plane.

In the corner of the bathroom and fireplace which had intersecting walls common to three rooms on the lower level or first floor. A survey of possible ignition sources of the walls in this floor revealed wiring in the bathroom wall in the base of the stud cavity and wiring extending from the wall cavity behind the shower stall in the exterior wall. The fire box of the fire place was clean and the structure was currently unused and considered to be vacant. There was no electrical wiring observed in the walls opened up and fire damaged location around the fireplace. There were two electrical appliances outside lying on the ground next to the bathroom wall the location of which corresponds to the wiring observed in the damaged wall of the bathroom. A survey of the exterior walls in the corner showed low areas of damage separated by framing. The wall cavity to the south backed up to the fireplace and the masonry structure of the fireplace provided a cavity between the framing and the fireplace rear plane. The base of the cavity had openings into the crawl space below a borescope camera was used and the area was felt by hand and the fire damage was not found in the crawlspace. The bathroom wall damage extended up and into the area at the back of the fireplace at a higher elevation. The area both inside and around the foundation in the corner of the structure was evaluated by the use of an accelerant detecting K9 and handler from CT State Police Fire & Explosion Investigation Unit no alert was detected at any location. The low burn in the area of the bathroom exterior wall coupled with the original construction methods there were fire intensity and movement patterns that led us to believe the area of origin was located in the bathroom wall area above the floor.

The AC cable wiring to the wall heating appliance showed two holes in the steel sheathing within two inches of the terminating connector at the appliance housing and two of the three conductors were missing from the cable end. The heating appliance had two conductor hanging out of the connector with a length which closely resembled the distance to the first of the two blow holes in the cable sheath. The housing of the heating appliance was distorted and had patterns of various heating intensity. The interior of the heating appliance showed signs of heat exposure but the components were not missing or visibly damaged consistent with an internal component failure with sufficient energy to be an ignition source from within. The AC cable steel sheathing and the internal phase to phase melting at the approximate location of the armors melting could be considered enough energy to ignite nearby combustible material. A search of the melting point of copper conductor inside of the sheathing was found to be 1600 – 1900 degrees F and steel is at 2000 – 2500 degrees F. The latter of which is most likely as the exterior sheath was steel and the insulated wood stud cavity with wood exterior sheathing and sheetrock on the interior has a potential for ignition from molten 2000 degree F steel exposure. The cause of the cable failure could not be explained without further analysis and lab exam of the heating appliance for a possible contributing factor. The wiring branch circuit was traced back to the main service panel where a 20amp 2 pole breaker on the supply side was found to be in the tripped position. The circuit was found to serve other heating appliances one of which was the kitchen heat appliance. The branch wiring heater in the area of origin was run from the junction box in the basement to the heater other devices extended separately from the box to other appliances. The heater in the area of origin was noted as 1500w 240v heater and the thermostat was found to be at a midrange setting and believed to be operational.

The other appliance found on the ground next to the heater was a Nutone through the wall ventilation fan. The interior of the fan housing and electrical connections and a section of cable showed signs of heat damage from exposure and no signs of wiring failure or sheathing damage from electrical activity. The wall switch box and wiring to the fan showed signs of heat and mechanical damage with visible signs

of electrical activity. The fan trim that was on the interior surface of the bathroom wall showed signs of heat intensity and movement from one corner or 25% of the whole trim. It is theorized that the fan was an exposed appliance and not the origin.

As a group we discussed the heater cable had the potential to be a competent ignition source. The cable failure at the location could not be explained and the heating appliance could be a contributing factor to the failure but further forensic exam and analysis would be required. Although the cable failure and interaction of combustible material is an ignition and first fuel event regarded to be likely scenario, the cable failure can not be explained definitely. As a group we agreed that the cameras and wifi access points in the area should be queried for activity in the area to rule out the act of human intervention. The origin and cause determination from this investigator is the area of origin is the exterior bathroom wall in the west corner with an undetermined cause with the most probable cause of a cable failure. This investigator reserves the right to amend the cause determination if additional information becomes available at a later date that was not available at the time of the writing of this report narrative.

Respectfully submitted

David houseman Jr.



Division of University Safety Fire Marshal and Building Inspector Office

47 Weaver Road, Unit 5052, Storrs, CT 06269-5052 (860) 486-4878

https://universitvsafetv.uconn.edu/fmbio/

January 20, 2023

To: Michael Jednak AVP Facilities Operations 25 LeDoyt Road Unit 3252 Storrs, CT 06269

Re: Whitney House 0044 1315 Storrs Rd Storrs, CT 06269

STATE BUILDING CODE §116 NOTICE OF IMMINENT DANGER, ORDER TO VACATE AND POSTING OF UNSAFE STRUCTURE

Dear Mr. Jedak:

On 1/20/2023, an inspection was conducted of the premises located at 1315 Storrs Rd for the purposes of determining compliance with the State Building Code as amended and the applicable referenced standards, adopted pursuant to the Connecticut General Statutes §29-252. The Code and said standards are available for your inspection at this office. The inspection revealed the following condition(s) in violation of the State Building Code which present an Unsafe Condition.

PURSUANT TO STATE BUILDING CODE §116, THIS STRUCTURE IS HEREBY DEEMED UNSAFE AND ITS FURTHER OCCUPANCY PROHIBITED BY THE BUILDING OFFICIAL. ALL OCCUPANTS ARE HEREBY ORDERED TO IMMEDIATELY VACATE THE SUBJECT BUILDING OR STRUCTURE. UNTIL FURTHER NOTICE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO ENTER SUCH PREMISES EXCEPT UPON PERMISSION GRANTED BY THE BUILDING OFFICIAL; WHICH MAY BE GRANTED FOR THE PURPOSES OF MAKING REQUIRED REPAIRS OR DEMOLISHING ANY PORTION OF THE PREMISES.

Please note that the correction of certain violations may require proper permits and approval from the Building Official and other local agencies prior to any construction.

Notice of Imminent Danger, Order to Vacate and Posting of Unsafe Structure: Temporary safeguards are required to be put in place immediately including boarding up any openings with plywood and installing fencing around the perimeter of the structure. The Building Department will be posting the entrances with the language stated above. You are hereby notified that you have the right to appeal this order pursuant to Connecticut General Statutes §29-266(b) to the municipal board of appeals or Connecticut General Statute §29-266(c) in the absence of a municipal board of appeals. Variations or exemptions from the State Building Code may be granted by the State Building Inspector where strict compliance with the code would entail practical difficulty or unnecessary hardship, or is otherwise adjudged unwarranted pursuant to Connecticut General Statutes §29-254(b), provided that the intent of the law shall be observed and public welfare and safety be assured. Any application for a variation or exemption or equivalent or alternate compliance shall be filed with the local Building Official.

This is the only order you will receive. Be advised that if the Owner cannot be located, or refuses or is unable to expeditiously make the building or structure safe per order, the Building Official may order the employment of necessary labor and materials needed to make the premises temporarily safe up to and including demolition and recover the costs against the Owner as provided at law, pursuant to Connecticut General Statute and State Building Code §116.4 and §116.5. The Building Official is further authorized to prosecute any violation of this order by requesting that legal counsel of the jurisdiction, or the Office of the State's Attorney, institute the appropriate proceeding at law. Any person who is convicted in a court of law of violating any provision of the State Building Code or for failure to comply with the written order of a building inspector for the provision of additional exit facilities in a building, the repair or alteration of a building or the removal of a building or any portion thereof shall be fined not less than two hundred not more than one thousand dollars or imprisoned not more than six months or both per State Building Code §113.3 and Connecticut General Statutes §29-254a and §29-394.

This office seeks and anticipates your cooperation, and looks forward to working with you in the interest of building and life safety for a timely resolution of this serious matter. If you have any questions, please feel free to contact this office at 860-486-4878

Sincerely,

Patrick Walsh

Patrick Walsh

Building Official

UConn Fire Marshal and Building Inspectors Office

cc: AVP Hans Rhynhart Fire Chief William Perez