



LITHIUM-ION BATTERY FIRE with RESCUE / e-Mobility Ann Arbor Fire Department - Ann Arbor Michigan

Media Release

November 22, 2022 at 12:18 AM

Shift 3 citywide, Chief 1-2 and Chief 1 responded on a structure fire at University Living at Ann Arbor - 2865 South Main Street. Engine 1-6 rescued two elderly, mobility impaired residents from the fire apartment, which had smoke banked down to the floor. Both residents were transported by HVA to University of Michigan Hospital for smoke inhalation and extremely elevated carbon monoxide levels.

Two fire sprinklers activated in the fire apartment limiting fire spread. Smoke and water affected numerous units, which lead to initial planning for a partial evacuation of the facility. As the incident was contained, patients from affected rooms were able to be moved to other parts of the facility.

The fire was caused by a thermal-runaway reaction of a lithium-ion battery from an electric wheelchair. AAFD has prepared for such an incident involving a lithium-ion battery. The exploded and remaining cells of the battery were packaged in a material called CellBlock in case of further reaction. Damage is estimated at over \$200,000.

Round Table Discussion / High Points

- Large, two story senior residential complex with nothing showing upon arrival. There are strobes present and AAPD on scene.
- Upon investigation of room on first floor, there is water coming from under the door. A master key was used from staff to open the door.
- There was smoke banked to the floor with fire sprinklers flowing water. No active fire
- Two residents are heard yelling for help and are located in the unit using a Thermal Imaging Camera
- An electric wheelchair is found plugged into the wall, next to the bed. The fire appears to be a result of the battery possibly overheating, discharging, and starting the fire.
- The fire spread to a desk and blinds, before two sprinkler heads activated. There is a heat mark across the ceiling. The sprinklers fully extinguished the fire and AAFD did not need to apply any water.
- The battery from the wheelchair was removed and placed in a special bucket containing an encapsulating material to in case of further discharge.

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Ann Arbor Fire Department - *Continued*

Equipment Used:

2- SCBA

1 - TIC

2 - PPV

2 - Sprinkler shut off valves

1- Pike Pole

1 - A Frame Ladder

1 - Battery Bucket Kit



View of chair as crews entered the room



View of chairs battery pack



View of chair and the fire extension to the desk and curtains