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Preliminary Report HWY22FH011

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

Battery Electric Transit Bus Fire

Hamden, Connecticut

July 23, 2022

On Saturday, July 23, 2022, about 3:39 a.m. eastern daylight time, a 2021 New Flyer Xcelsior battery electric 40-foot transit bus, operated by CTtransit, began emitting smoke from the rear compartment while parked inside a maintenance facility in Hamden, New Haven County, Connecticut.¹ The bus's electric battery had previously been charged on Wednesday July 20th, but the bus had failed to power up the following day. The bus had been placed out-of-service and was being stored in the maintenance facility awaiting examination by the bus manufacturer.

The event began when CTtransit maintenance personnel observed smoke and heard crackling and hissing coming from the rear of the bus. They called the Hamden Fire Department who responded to the scene. Upon their arrival, fire department personnel did not observe any visible flames, and the bus was pushed to the maintenance facility's parking lot using a service truck, where the bus was isolated from other vehicles and structures. As a result of relocating the bus, two CTtransit maintenance workers were transported to an area hospital where they were treated for smoke inhalation.

Later that day, about 7:32 a.m., the Hamden Fire Department responded back to the maintenance facility as the bus was again emitting smoke, and fire was observed coming from the rear of the vehicle. Fire fighters reportedly had trouble extinguishing the fire and decided to let the bus burn in the controlled environment. The fire remained active for several hours and fully consumed the vehicle (figure 1). Following the departure of fire personnel, the bus continued to smolder while remaining isolated in the parking lot. On Monday, July 25, 2022, 2 days after the initial event,

¹ CTtransit is the Connecticut Department of Transportation (CTDOT)-owned bus service.

smoke and an orange glow were observed emanating from the right rear wheel well of the burned bus. The Hamden Fire Department responded and extinguished the hot spot.

CTtransit operates 12 New Flyer battery electric transit buses, and as a precaution has taken the remaining ones out-of-service and parked them away from structures and other vehicles.



Figure 1. Photo on the left shows an exemplar CTtransit battery electric bus. Photo on the right shows the post-fire damage to the bus involved in the event.

Working with the National Transportation Safety Board (NTSB) investigation are the following parties:

- Federal Transit Administration
- Connecticut State Police
- Connecticut Department of Transportation
- First Transit Management
- New Flyer of America

The NTSB continues to collect information to further examine the events leading up to the fire, the transit company's safety procedures applicable to its electric bus fleet, and the emergency response to the fire.