



PRELIMINARY REPORT

HIGHWAY

HWY15MH011

The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.

About 11:11 a.m. local time on Thursday, September 24, 2015, a 2009 MCI motorcoach, operated by CWA Inc. DBA Bellair Charters Hesselgrave South, was traveling southbound in the center lane on the Washington State Route 99 (SR99) Aurora Bridge (official name: George Washington Bridge). The motorcoach was occupied by a 68-year-old driver and 50 passengers. At the same time, a 1945 DUKW—an amphibious military vehicle modified for tour operations, operated by Ride The Ducks Seattle LLC, and occupied by a 54-year-old driver and 36 passengers—was traveling northbound in the center lane on the SR99 Aurora Bridge. As the two vehicles approached each other, the DUKW driver reported hearing a loud “bang” as his vehicle experienced a mechanical failure at the left front axle assembly, causing him to lose control. The DUKW vehicle crossed the center line into the oncoming traffic in the southbound lanes. The front of the DUKW struck the left side of the motorcoach near the driver’s compartment. The DUKW vehicle then penetrated into the left side passenger compartment of the motorcoach, damaging the interior floor and occupied seats. During the impact, the DUKW rolled toward its left side and a number of passengers were ejected before the vehicle came to rest back on its wheels.

A 2011 Dodge Ram pickup truck was also traveling southbound adjacent to the motorcoach. In an attempt to avoid the collision, the Dodge pickup truck moved left into the northbound lane and subsequently struck the right side of the DUKW. The Dodge pickup truck continued forward, striking a 2006 Toyota Highlander sport utility vehicle, which had been traveling in the northbound left lane behind the DUKW and had struck the left side of the DUKW. A 2007 Toyota Tundra pickup truck, also traveling in the northbound lane, struck the left front of the Dodge pickup truck.

As a result of this crash, five occupants of the motorcoach died. Sixty-two occupants of the motorcoach, the DUKW, and the crash-involved passenger vehicles reported injuries ranging from minor to serious.

An axle housing modification described in an October 2013 notice issued by Ride The Ducks International, which refurbishes and modifies DUKW amphibious vehicles into passenger-carrying tour vehicles for commercial use, is being reviewed as part of the investigation. The stated purpose of the notice was to alert owners and provide guidance on a modification to strengthen the DUKW axle housing to prevent fractures. The left front axle assembly that failed on the accident vehicle had an earlier modification to the axle housing that

had been recommended by Ride The Ducks International but did not have an associated service bulletin.

NTSB investigators documented the damage to the crash scene, the DUKW vehicle, and the motorcoach using three-dimensional (3D) laser scanning technology. Figures 1 and 2 show the 3D scans of the left front side of the DUKW vehicle and the left side of the motorcoach, respectively.



Figure 1: Linked 3D laser scans depicting frontal damage on the accident DUKW vehicle.



Figure 2: Linked 3D laser scans depicting the damaged left side of the motorcoach.

Metallurgical examination of the axle components, review of the motorcoach company's onboard video systems, and review of the regulations for amphibious vehicles used for passenger transportation are ongoing. Additionally, investigators continue to interview passengers and pertinent witnesses, and gather factual information on the bridge characteristics, motor carrier operations, and toxicology testing.