

January 24, 2024 MIR-24-02

# Flooding and Sinking of the Towed Cargo Vessel *Carib Trader II*

On March 6, 2022, about 1620 local time, near the Magallanes Bank, about 25 miles northwest of Santo Domingo Cay, Bahamas, the uncrewed general cargo vessel *Carib Trader II* took on water and sank while being towed by the towing vessel *Capt. Beau*, which had five crewmembers aboard (see figures 1 and 2). A small debris field was reported. There were no injuries. Damage to the vessel was estimated at \$752,700.



Figure 1. Carib Trader II precasualty. (Source: Gordon Dalzell, shipspotting.com)

<sup>&</sup>lt;sup>1</sup> (a) In this report, all times are eastern standard time, and all miles are nautical miles (1.15 statute miles). (b) Visit <a href="mailto:ntsb.gov">ntsb.gov</a> to find additional information in the <a href="mailto:public docket">public docket</a> for this NTSB investigation (case no. DCA22FM011). Use the <a href="mailto:CAROL Query">CAROL Query</a> to search investigations.

Casualty type Flooding/Hull Failure

**Location** Magallanes Bank, 29 miles northwest Santo Domingo Cay, Bahamas

21°55.00' N, 76°15.00' W

Date March 6, 2022

Time 1426 eastern standard time

(coordinated universal time -5 hrs)

**Persons on board** 0 (Carib Trader II), 5 (Capt. Beau)

**Injuries** None

**Property damage** \$752,700 est.

Environmental damage None

Weather Visibility 10 mi, mostly cloudy, winds east 20-25 kts, swells west,

air temperature 76°F, water temperature 79°F, sunrise 0623

Waterway information Sea, about 3,300 ft deep



**Figure 2.** Area where the Carib Trader II sank, as indicated by the red X. (Background source: Google Maps)

## 1 Factual Information

On March 3, 2022, the 107.7-foot-long towing vessel *Capt. Beau* began a dead ship tow of the uncrewed 273.9-foot-long containership *Carib Trader II* out of the Port of Miami, bound for Gonaïves, Haiti, a 4-day transit. *Carib Trader II* was being relocated to a Haiti shipyard for repairs. The vessel had been detained in Miami by the US Coast Guard since November 2020 due to numerous safety, security, and environmental deficiencies. The *Carib Trader II*'s last drydock inspection had occurred on February 16, 2018, and a drydock examination, due by February 16, 2021, never occurred. Divers conducted a visual inspection in November 2021, but this examination would not have been able to determine the structural condition of the hull. Between November 2020 and the casualty event, the vessel only got underway for dead ship berth shifts within the port of Miami.

In February 2022, a flag state surveyor and Coast Guard inspectors examined the vessel prior to approving the dead ship tow from Miami to Haiti. They found the above-water hull, decks, and weather and watertight closures to be satisfactory. Because the vessel was moored, the underwater hull was not examined.

The Carib Trader II was towed astern of the Capt. Beau on a 2-inch wire rope with approximately 1,000 feet extended, which was connected to a 1 3/4-inch Spectra bridle. The bridle lines were connected to 2-inch chain used as chafing gear, run through the Carib Trader II's chocks, and connected to 1 3/4-inch wires, which were wrapped around the port and starboard mooring bits.

According to a tow plan provided by the vessel manager and approved by the Coast Guard, the tow was not to occur if winds were forecasted to exceed 25 knots sustained or the sea state or swells were expected to be greater than 8-10 feet. The midnight logbook entry for March 6 read that the tow was making 4.2 knots, with winds 24-30 knots and seas 7-9 feet. At 0035, the mate on watch said he heard a "bang" and the *Capt. Beau*'s speed increased, which he believed indicated that the tow had broken free. The mate woke the captain, who took the helm. The engineer, mate, and able seaman on watch reeled in the towing wire and found that both legs of the Spectra bridle had parted.

At 0141, as the *Capt. Beau* attempted to recover the *Carib Trader II*, the crew found that straps used to secure the port anchor for the tow had parted, and the vessel's port anchor chain had payed out. The captain also noticed that the *Carib Trader II* was riding lower at the stern. The crew reattached the tow line to what was left of the port leg of the Spectra bridle and, by 0400, took the *Carib Trader II* back under tow at a slow speed, with a plan to reevaluate the situation at daylight.

After sunrise, the captain thought the ship was trimmed by the stern more than it had been when they recovered the tow several hours earlier. At 0720, the mate boarded the *Carib Trader II* and found the engine room flooded, with water above the main engine. The mate was not able to identify the source of the flooding. The captain directed the mate to find the pump—a Predator 212cc gasoline-engine semitrash water pump with 2-inch hoses—that had been prestaged on board for the tow and begin dewatering. The mate brought the pump down to the engine room, rigged the hoses, and began pumping water overboard. The mate checked the engine room, pump, and hoses about every 15 minutes.

At 1100, the mate reported to the captain that the pump was not keeping up with the flooding. The captain told investigators that, by 1500, it became obvious that the *Carib Trader II* would sink. The *Carib Trader II* started listing to starboard and, about 1520, the mate departed the cargo vessel. The captain did not think the crew would be able to disconnect the tow before the *Carib Trader II* sank, so all of the tow wire was payed out to get the *Capt. Beau* as far away from the towed vessel as possible before the engineer cut the wire. The *Capt. Beau* remained nearby while the *Carib Trader II* continued to sink (see figure 3).

At 1620, the *Carib Trader II* sank stern first in a water depth of about 3,300 feet, taking the towing wire and bridle with it and leaving a small debris field. After the sinking, the *Capt. Beau* returned to Miami.



Figure 3. Carib Trader II during the casualty. (Source: Capt. Beau crew)

## 2 Analysis

The tow line bridle to the *Carib Trader II* parted in winds and seas that were near the maximum allowed in the tow plan. The *Capt. Beau* crew found that the *Carib Trader II*'s port anchor chain had payed out and the ship was riding lower at the stern. The increased drag from the tow's greater draft and a trailing anchor, combined with dynamic loading of the towline assembly in the 7-9-foot seas and 24-30-knot winds, would have increased forces on the bridle.

The Carib Trader II, which had a history of substandard care and maintenance, had been in layup for 2 years. The inspection history of the vessel suggests the Carib Trader II was in poor condition. After boarding the vessel, the mate found the engine room flooding, and, although he attempted to dewater with a portable pump prestaged for the dead ship tow, the pump was not able to keep up with the flooding. Because the engine room was found to be flooding rapidly, it is likely that the source of the flooding was below the waterline.

### 3 Conclusions

#### 3.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the flooding and subsequent sinking of the *Carib Trader II* while under dead ship tow was the uncontrolled flooding of the engine room from an undetermined location below the waterline.

Vessel	Carib Trader II	Capt. Beau
Туре	Cargo (Containership)	Towing/Barge (Towing Vessel)
Owner/Operator	Excelsior Holdings International SA (Commercial)	P&L Towing and Transportation (Commercial)
Flag	St. Vincent and the Grenadines	United States
Port of registry	Kingstown, St. Vincent and the Grenadines	Miami, Florida
Year built	1975	1954
Official number (US)	N/A	631574
IMO number	7396599	8424862
Classification society	N/A	ABS
Length (overall)	273.9 ft (83.5 m)	107.7 ft (32.8 m)
Breadth (max.)	45.9 ft (14.0 m)	26.9 ft (8.2 m)
Draft (casualty)	Vessel sunk (unknown); 6.5 ft (2.0 m) (sailing mean)	12.3 ft (3.7 m) (sailing mean)
Tonnage	1,560 GRT / 1,948 GT ITC	124 GRT / 242 GT ITC
Engine power; manufacturer	(N/A–dead ship tow) 1 × 1,972 hp (1,471 kW); MAK 8M452AK diesel engine	2 × 2,000 hp (1,491 kW); EMD 12V-645-E7 diesel engines

NTSB investigators worked closely with our counterparts from **Coast Guard Sector Miami** throughout this investigation.

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For more detailed background information on this report, visit the <u>NTSB Case Analysis and Reporting Online (CAROL) website</u> and search for NTSB accident ID DCA22FM011. Recent publications are available in their entirety on the <u>NTSB website</u>. Other information about available publications also may be obtained from the website or by contacting—

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