



National Transportation Safety Board

Marine Accident Brief

Flooding of Towing Vessel *Atlantic Raider*

Accident no.	DCA17FM002
Vessel name	<i>Atlantic Raider</i>
Accident type	Flooding
Location	Blount Island Channel, Jacksonville, Florida 30° 24.06' N, 081° 32.98' W
Date	October 28, 2016
Time	1530 eastern daylight time (coordinated universal time – 4 hours)
Injuries	None
Damage	\$800,000 to \$1,200,000
Environmental damage	An estimated 2,000 gallons of diesel oil was discharged into the waterway
Weather	Clear visibility; clear skies; northeast winds at 8–12 knots; air temperature 77°F
Waterway information	Blount Island Channel is a cutoff bend of the St. Johns River. The channel is 2.23 miles long and 300 feet wide, with a project depth of 30 feet.

On October 28, 2016, at 1530 local time, the towing vessel *Atlantic Raider* was in the Blount Island Channel of the St. Johns River near Jacksonville, Florida, when it suddenly listed to port. Efforts to correct the list were ineffective; the list increased, water began to flood into the engine room, and the crew chose to intentionally ground the vessel. All three crewmembers disembarked safely. An oil sheen could be seen extending from the vessel. Damage was estimated between \$800,000 and \$1,200,000.



Atlantic Raider aground on the shallows of the west side of the Blount Island Channel. Note that the port quarter is under water up to the lower wheelhouse deck. (Photo by Coast Guard)

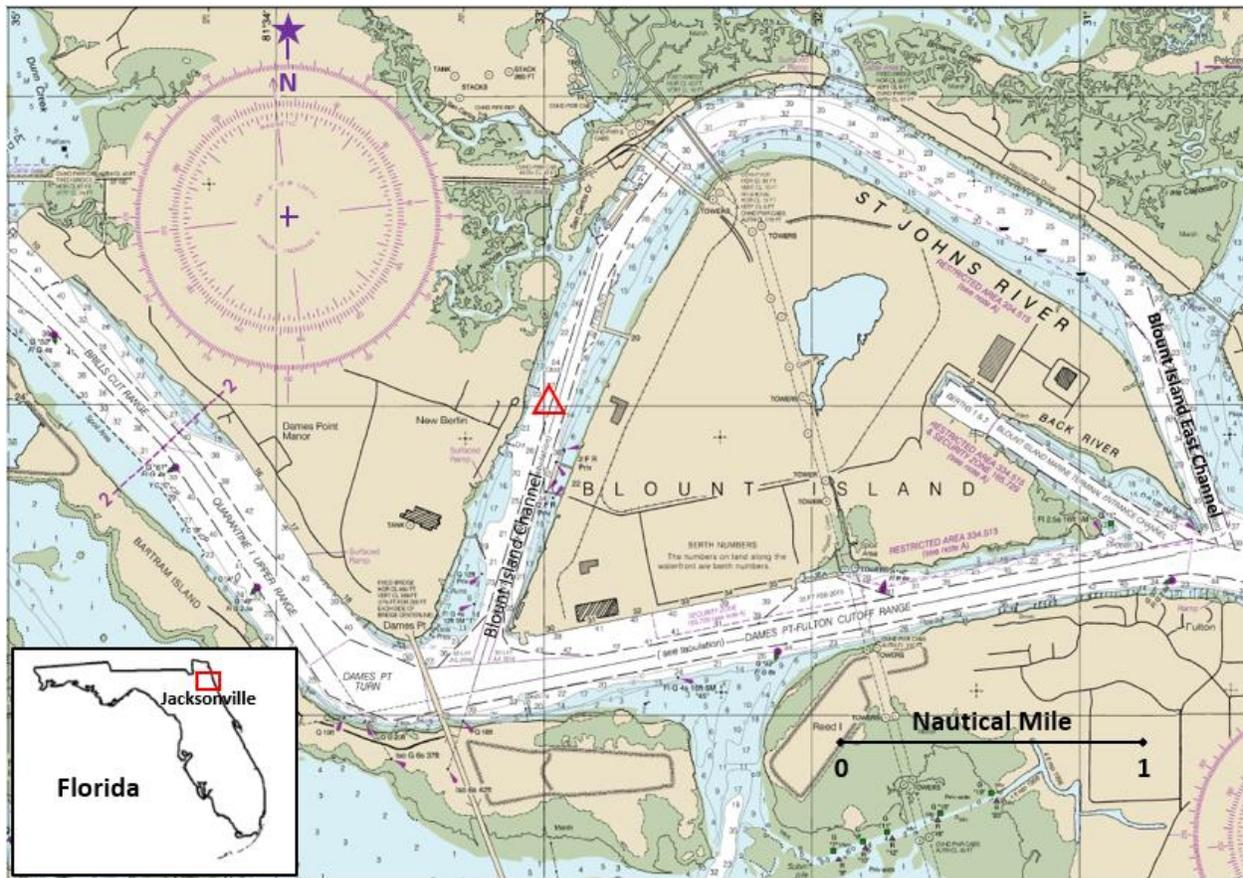
Accident Events

On the morning of the accident, the uninspected towing vessel *Atlantic Raider* loaded 10,000 gallons of fuel and topped off its potable water tank at the NuStar Energy Terminal near

Flooding of Towing Vessel *Atlantic Raider*

Talleyrand, Florida. The vessel then got under way about 1030 for its dredge assist jobsite in the Blount Island Channel, about 8 miles up the St. Johns River.

About 1530, while at its staging area preparing to lay pipe for dredging, the *Atlantic Raider* began listing to port. The captain told investigators that the source of the list was not known. He and the deckhand went to the engine room, observed no sign of flooding there, started the main engines, and tried to correct the list by shifting fuel, without success. Water covered the stern and eventually began to flood the lower engine room through an open door on the vessel's port side, aft on the maindeck. The crew then closed the door, took in mooring lines from a raft of dredge pipe, and maneuvered the *Atlantic Raider* into nearby shallow water to prevent it from sinking in the middle of the navigable waterway. The port list increased as the crew turned the vessel to starboard in the direction of the west side of the channel.



The *Atlantic Raider* was run aground beyond the west side of the Blount Island Channel, shown by the overlaid red triangle. (Background NOAA Chart 11491, *St. Johns River – Atlantic Ocean to Jacksonville*)

At 1545, the crew intentionally grounded the *Atlantic Raider* outside of the channel. The captain told investigators that the vessel rolled to port about 45 degrees as it grounded and came to rest down by the port quarter. Water continued to flood through open portholes on the port and starboard side of the main deck. In a short period of time, the engine room and most of the main deck were fully submerged. The other vessels in the staging area, the *Lady Theo* and the *Free State*, came to aid the *Atlantic Raider*, and all three crewmembers were able to disembark safely from the vessel without injuries. Samples were later taken from the three crewmembers for drug and alcohol testing; all results were negative.

Flooding of Towing Vessel *Atlantic Raider*

Immediately following the grounding, more than an inch-thick layer of fuel was reported near the vessel, and an oil sheen extended 3 miles from the accident site. Pollution abatement was conducted by the Coast Guard and a response company from October 28 to November 18, 2016. The *Atlantic Raider* had 26,000 gallons in its four fuel tanks. River water entered the fuel tanks, displaced the diesel fuel, and forced it out through the tank vents. On completion of pollution abatement, the response company reported recovering 36,206 gallons of a fuel-water mixture from the vessel and estimated that 2,000 gallons of fuel, which was not recovered, had discharged into the waterway.



Stern hull fracture discovered in drydock. (Photo with permission of A. P. Boudreaux, surveyor)

On November 30, the *Atlantic Raider* was put into drydock. A horizontal hull fracture 9.5 inches long and 0.5 inches wide was found on the vessel's stern at a weld seam, about 10.5 feet above the keel. The vessel's rudder compartment was on the inboard side of the stern hull fracture. A 1-inch hole and two pinholes were also discovered on the corroded bulkhead leading into fuel tank no. 4. The captain and the owner's representative stated that they did not know of the fracture until after the accident.

The last maintenance of the *Atlantic Raider*'s hull before the accident was a 2-month drydock period that ended in December 2014. Applicable work included repairing two holes in the forepeak tank, high-pressure washing and painting the hull, and replacing all 44 zinc anodes (to help prevent hull corrosion).

Flooding of Towing Vessel *Atlantic Raider*

Analysis

According to a company representative, the *Atlantic Raider* did not normally have 26,000 gallons of fuel on board as it did the morning of the accident. At that condition, the draft of the vessel would have been deeper than normal—about 10.5 feet—putting the hull fracture at the waterline. Water likely entered the rudder compartment through the hull fracture and increased the draft by the stern, which would have caused the flooding rate to increase. About 5 hours later, the vessel began to sink by the port quarter.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the flooding of the *Atlantic Raider* was a stern hull fracture that allowed ingress of water into the rudder compartment and caused the vessel to sink by the port quarter. Contributing to the accident was flooding through an open door to the engine room.

Flooding of Towing Vessel *Atlantic Raider*

Vessel Particulars

Vessel	<i>Atlantic Raider</i>
Owner/operator	Gore Marine Transportation Co.
Port of registry	Valona, Georgia
Flag	United States
Type	Towing vessel
Year built	1967
Official number (US)	508462
IMO number	7121762
Classification society	Not applicable
Construction	Steel
Length	70.5 ft (24.4 m)
Draft	9 ft (2.74 m)
Beam/width	24.2 ft (7.4 m)
Gross and/or ITC tonnage	147 gross tons
Engine power; manufacturer	1,430 hp (1,066 kW); 2 Caterpillar diesel engines D379TA
Persons on board	3

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

For more details about this accident, visit www.nts.gov/investigations/dms.html and search for NTSB accident ID DCA17FM002.

Issued: January 18, 2018

The NTSB has authority to investigate and establish the probable cause of any major marine casualty or any marine casualty involving both public and nonpublic vessels under Title 49 *United States Code* 1131. This report is based on factual information either gathered by NTSB investigators or provided by the Coast Guard from its informal investigation of the accident.

The NTSB does not assign fault or blame for a marine casualty; rather, as specified by NTSB regulation, “[NTSB] investigations are fact-finding proceedings with no formal issues and no adverse parties . . . and are not conducted for the purpose of determining the rights or liabilities of any person.” Title 49 *Code of Federal Regulations*, Section 831.4.

Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by conducting investigations and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report. Title 49 *United States Code*, Section 1154(b).
