

# **National Transportation Safety Board**

## **Marine Accident Brief**

## Stranding and Subsequent Loss of the Fishing Vessel Miss Annie

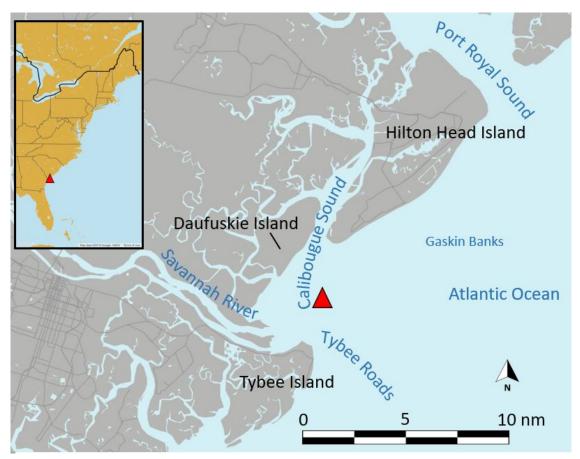
Accident type	Grounding/Stranding	No. DCA20FM008
Vessel name	Miss Annie	
Location	Calibogue Sound, Hilton Head Island, South Carolina	
	32° 03.50' N, 080° 49.70' W	
Date	December 19, 2019	
Time	0700 eastern standard time (coordinated universal time – 5 hours)	
Injuries	None	
Property damage	\$60,000 est.	
Environmental damage	600 gallons of fuel on board	
Weather	Visibility 10 miles, scattered clouds, winds north at 13-15 temperature 34°F, twilight 0653, sunrise 0720	knots, seas 2 feet, air
Waterway information	Calibogue Sound is an inlet from the Atlantic Ocean that s Island and Daufuskie Island, South Carolina.	separates Hilton Head

On December 19, 2019, about 0700, the fishing vessel *Miss Annie* was transiting out of Calibogue Sound, 2.3 miles north of Tybee Island, Georgia, when the vessel stranded on a submerged wreck. <sup>1</sup> The three crewmembers aboard remained with the vessel until they were rescued by the US Coast Guard, and the vessel later broke apart. No pollution or injuries were reported. The vessel was a total loss. The vessel value was estimated at \$60,000.



Miss Annie underway. (Source: Coast Guard)

<sup>&</sup>lt;sup>1</sup> All miles in this report are nautical miles (1.15 statute miles).



Area of accident where the *Miss Annie* stranded, as indicated by the red triangle. (Background source: Google Maps)

## Background

The 78-foot-long *Miss Annie*, a single-propeller, 364-horsepower, 109 gross ton, wooden fishing vessel was built in 1983 in Bayboro, North Carolina. The current owner bought the vessel about 2 years before the accident. The captain and two deckhands were on board the vessel at the time of the accident.

## **Accident Events**

On December 19, 2019, at 0530, the *Miss Annie* departed from the docks at Hudson Seafood on Hilton Head Island, South Carolina. The captain navigated the vessel outbound in Calibouge Sound and through the Calibouge Sound entrance channel, which was marked by lighted and unlighted buoys, to harvest shrimp in the Gaskin Banks fishing grounds offshore from the south end of Hilton Head Island. About 0700, the crew was conversing amongst themselves in the wheelhouse. As the captain steered southeast between Hilton Head and Tybee Islands at a speed of about 10 knots, the vessel came to a complete stop and listed to its starboard side. The captain told investigators that it was "like I hit a rock."

The captain saw flooding and believed the vessel would sink quickly. Everyone aboard donned personal floatation devices and remained on the vessel. At 0723, the captain sent a distress call to Sector Charleston over VHF/FM Channel 16. Within 4 minutes, Coast Guard Station Tybee Response Boat-Medium (RB-M) 45738 was underway. At 0735, the RB-M arrived on scene, and



by 0740, the RB-M was alongside the Miss Annie at the stern. The Miss Annie continued to list farther to starboard. After the first crewman boarded the RB-M at 0745, the Miss Annie rolled, causing the remaining two crewmembers to slide into the water. By 0747, the crew of the RB-M had recovered the two persons from the water.

*Miss Annie* shortly after all three crew were rescued. (Source: Coast Guard)

A day later, the

*Miss Annie* had broken apart. Large pieces of the vessel were photographed adrift and on shore by a Coast Guard aircraft.

## Additional Information

#### Waterway Information.

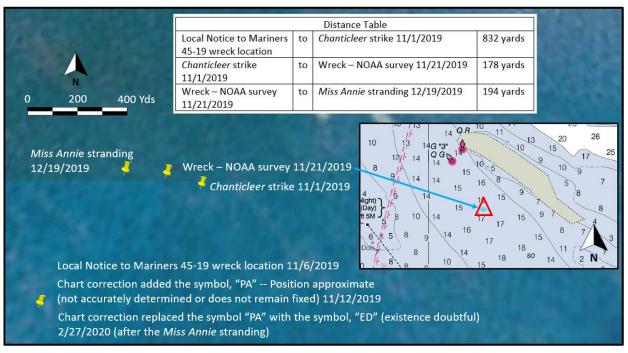
On November 1, 2019, the owner of the 93-foot aluminum motor yacht *Chanticleer* reported to the Coast Guard that his vessel had struck a "significant object" as he was leaving Hilton Head Island. He reported the object was in position 32°03.463' (32° 03' 27.78") N, 080°49.490 (080° 49' 29.4") W. He returned to Hilton Head Island, hauled his vessel out of the water for a bottom examination, and found hull damage and all blades of his two 42-inch diameter propellers bent.

In response, the Coast Guard published a hazard to navigation warning in the Local Notice to Mariners (LNTM), available online, for the waters in



*Miss Annie* top of wheelhouse and debris washed ashore. (Source: Coast Guard)

the Coast Guard's Seventh District beginning November 6, 2019, 5 days after the *Chanticleer*'s strike. The notice read, "The U.S. Coast Guard received a report of a submerged wreck in approximate position 32-03-10.560N/080-49-50.340W. Mariners are advised to exercise extreme



Area of Calibogue Sound where the *Miss Annie* stranded. (Background source: Google Earth) Inset: Chart (graphic) from NOAA Danger to Navigation Report. (Source: NOAA)

caution when transiting the area." This location differed from the location reported by the owner of the *Chanticleer*; instead matching the charted and last known location for the wreck of the *Miss Debbie*—a 40-foot shrimp boat that sank during a storm on May 27, 2017—just over 800 yards southwest of the location where the owner of the *Chanticleer* reported his strike. The hazard to navigation warning was repeated weekly through the end of 2019, and last published in the LNTM dated December 31, 2019.

On November 12, 2019, the National Oceanic and Atmospheric Administration (NOAA) updated charts using the location that was published in the LNTM. The update consisted of adding the symbol "PA" (Position approximate [not accurately determined or does not remain fixed]) next to the symbol already on the chart marking the last known location for the wreck of the *Miss Debbie*.

On November 21, 2019, NOAA conducted a bottom survey of the area near the *Chanticleer* strike. The bottom survey showed a wreck submerged about 4 feet below the surface at low tide in a location less than 200 yards northwest from the location reported by the *Chanticleer*.

The NOAA Danger to Navigation Report containing the results of the survey noted, "This

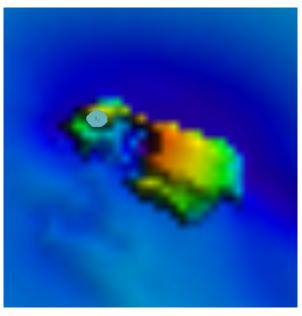


Image of wreck from NOAA Danger to Navigation Report. (Source: NOAA)

should be considered a dangerous wreck due to its proximity to heavily trafficked routes and the previously charted depths of 14-17 feet."

About 3 weeks after the survey, on December 19, the accident date, NOAA released corrections for their charts covering the area, marking the wreck found during the survey. Following NOAA's update for the accident area, the Coast Guard published the information in the Week 52/19 LNTM dated December 23, 2019, for the waters of the Seventh Coast Guard District.

More than 2 months after the *Miss Annie* accident, the symbol next to the previously designated last known position of the wreck of the *Miss Debbie*, located about 800 yards southwest of the surveyed wreck, was changed to "ED" (existence doubtful) from "PA" (Position approximate [not accurately determined or does not remain fixed]) in the NOAA Weekly Chart update of February 27, 2020.

**Navigational Charts.** Commercial fishing industry vessels such as the *Miss Annie* are subject to nautical chart carriage requirements. 46 CFR § 28.225 requires that each vessel must have "marine charts of the area to be transited, published by the National Ocean Service, the National Geospatial-Intelligence Agency, U.S. Army Corps of Engineers, or a river authority...that are currently corrected." The captain was not carrying paper or electronic charts that met the requirement.

The captain told investigators that he was using a Garmin GPS unit purchased new 6 months earlier, but he could not recall or locate the unit's model number, software version, or Garmin Maps product. Garmin's *BlueChart*® g3 product provides "maps" for the coastal waters of the United States, including a product covering the area where the accident occurred, called "U.S., Charleston, SC to Jacksonville, FL Coastal Charts."

Per the Garmin website, *BlueChart g3* and *BlueChart g3 Vision* charts are generally updated semiannually. The updates collect cartography and other data from over 100 third-party sources such as NOAA. However, product updates are not automatic, and users must manually download updates to their Garmin GPS units. The last update for the "U.S., Charleston, SC to Jacksonville, FL Coastal Charts" before the accident had been in April 2019, about 8 months before the accident. The captain had not updated the charts for the Garmin unit after its purchase 6 months earlier and could not confirm if he was using the most recent product.

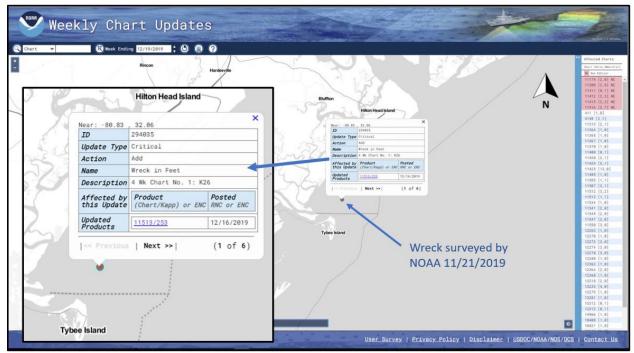
The disclaimer for the *BlueChart*® g3 product includes a paragraph:

The electronic chart is an aid to navigation designed to facilitate the use of authorized government charts, not to replace them. Only official government charts and notices to mariners contain all information needed for the safety of navigation, and as always, the captain is responsible for their prudent use.

After purchasing a paper or electronic chart system, there are three tools available to improve the situation awareness of mariners. NOAA releases update information online each week. Mariners can review the website regularly or before getting underway to check for the latest chart corrections along their route and update their onboard paper and/or navigation software. To alert mariners of chart corrections, NOAA's website provides a weekly update online (https://distribution.charts.noaa.gov/weekly\_updates/) and also tracks changes by individual charts

(<u>https://ocsdata.ncd.noaa.gov/ntm/Default.aspx</u>). The other tool alerting mariners to a hazard to navigation is the LNTM published by the Coast Guard.

The captain of the *Miss Annie* told investigators he did not read or listen to the LNTM information published on the Coast Guard Navigation Center website and broadcast by the Coast Guard. Though the object struck by the *Chanticleer* and subsequently the *Miss Annie* was never determined, Coast Guard Sector Charleston investigators and Waterways Management staff



NOAA Weekly Chart Update for the area of Hilton Head Island and Tybee Island (Week ending 12/19/2019). (Source: NOAA) Inset: Enlarged table of the chart update details. (Source: NOAA)

thought both vessels may have struck the missing wreck of the *Miss Debbie* after it was moved by the winds, currents, and waves of hurricanes and storms. The crewmembers of the *Miss Annie* told investigators they had seen the *Miss Debbie* wreck at low water during previous transits; the captain noted that he had not seen the wreck of the *Miss Debbie* for over a year.

## Analysis

Based on the locations of the *Miss Annie* strike and the wreck charted in the NOAA survey on November 21, 2019 (likely the *Miss Debbie*), the *Miss Annie* most likely struck the wreck identified and surveyed about a month before the accident.

The captain of the *Miss Annie* departed for his trip on the morning of December 19, following his usual route through the Calibouge Sound entrance channel. The crew had been aware of the *Miss Debbie* wreck's previously known position but had not sighted the wreck in over a year and were not looking for it. Although the captain could not confirm if he was using the most recent available charts for his Garmin navigation unit, the last released software update had been in April 2019 and would not have included the surveyed wreck that was struck, likely the *Miss Debbie* in its new position. Similarly, although the captain had not reviewed NOAA's chart updates or Coast Guard LNTMs, NOAA's chart

correction for the wreck was not published until later in the day on December 19, after the *Miss Annie* strike, and the Coast Guard LNTM about the chart update was not published until 4 days later.

The Coast Guard had published a repeating hazard to navigation warning regarding a submerged wreck in the LNTM, starting November 6, 2019, and NOAA had updated charts on November 12. Both updates noted the wreck in the area and gave an approximate position. However, the location given was based on the last known position of the *Miss Debbie* wreck, which was more than 800 yards southwest from the location of the *Miss Annie* strike. If the *Miss Annie* captain had read the notice and made note of the warning, and had the latest Garmin software updates, he would likely not have altered his route, thinking he was clear of the hazard. It appears that the previously charted wreck of the *Miss Debbie* had moved to the northwest over the 2 years since its sinking and last charted position. The strike position reported by the captain of the *Miss Debbie*. However, the strike prompted a survey that had identified the position of the wreck about 3 weeks later. During the process of updating the LNTM and the NOAA charts to the reflect the surveyed wreck, the *Miss Annie* struck it.

For chart correction tools to be useful, mariners must read them. In this accident the captain said he did not, nor did he ever, review the notice to mariner information (although in this case the information available would likely not have prevented the accident). Mariners must be alert to new hazards along their intended route and adopt a process to identify the hazards before getting underway. That process should include viewing the NOAA weekly chart update and the LNTM before getting underway. A particular emphasis should be placed on identifying obstructions, such as a wreck, along the intended track of the vessel.

## **Probable Cause**

The National Transportation Safety Board determines that the probable cause of the *Miss Annie* stranding and subsequent loss was the vessel striking an unmarked wreck, whose position had shifted from its previous known position and was yet to be charted or announced in the notice to mariners.

## **Identifying Navigation Hazards**

Situation awareness demands a mariner should be alert for new hazards that can appear along their intended route. NOAA and the Coast Guard track these hazards and publish chart corrections each week. Mariners should adopt a process for identifying new hazards that are not marked on their paper or electronic chart system, before getting underway.

NOAA provides weekly chart updates: <u>https://distribution.charts.noaa.gov/weekly\_updates/</u>

The U.S. Coast Guard provides NOAA chart corrections each week in Section IV – Chart Corrections in the Local Notice to Mariners: https://www.navcen.uscg.gov/?pageName=InmMain

For a list of all chart corrections for paper charts tracked by Chart number and edition: <u>https://ocsdata.ncd.noaa.gov/ntm/Default.aspx</u>

## **Vessel Particulars**

Vessel	Miss Annie
Owner/operator	Trawler Miss Hattie Inc.
Port of registry	Beaufort, South Carolina
Flag	United States
Туре	Fishing Vessel
Year built	1983
Official number (US)	654888
IMO number	N/A
Classification society	N/A
Construction	Wood (with fiberglass-covered bottom)
Length	78.2 ft (23.8 m)
Beam/width	22 ft (6.7 m)
Draft	6.5 ft (2.0 m)
Tonnage	109 GRT / 87 NRT
Engine power; manufacturer	1 x 364 hp (271 kW); Detroit diesel engine
Persons on board	3

NTSB investigators worked closely with our counterparts from Coast Guard Sector Charleston, South Carolina, throughout this investigation.

For more details about this accident, visit <u>www.ntsb.gov</u> and search for NTSB accident ID DCA20FM008.

## Issued: January 14, 2021

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*, Section 1131(b)(1). 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).