

National Transportation Safety Board Marine Accident Brief

Capsizing and Sinking of Towing Vessel Natalie Jean

Accident type	Collision	No.	DCA18FM017
Vessel name	Natalie Jean		
Location	Lower Mississippi River, mile 90.5, near New Orleans, Louisiana 29° 56.27' N, 89° 59.98' W		
Date	March 12, 2018		
Time	About 0938 central daylight time (coordinated universal time – 5 hours)		
Injuries	2 fatalities		
Damage	>\$500,000 est.		
Environmental damage	Unknown amount of diesel fuel released into the river		
Weather	North winds at 10–15 knots, gusting to 20–26 knots; air t temperature 54°F	emper	ature 62°F; water
Waterway information	The Lower Mississippi River measured 16.5 feet on the (flood stage is 17 feet). The current was estimated at 5 m		auge at mile 102

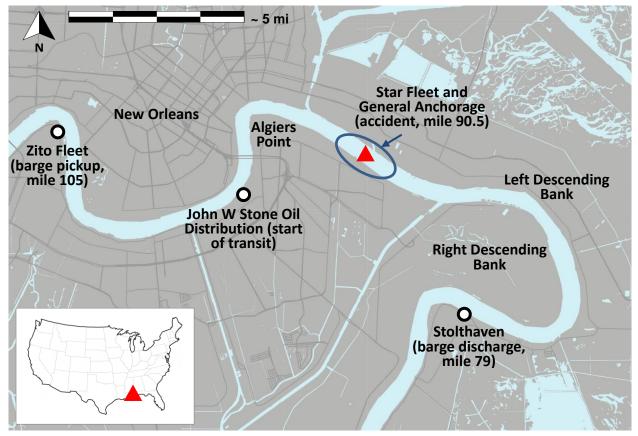
About 0938 local time on March 12, 2018, the towboat *Natalie Jean* was pushing an empty fuel tank barge upriver on the Lower Mississippi River near New Orleans, Louisiana, when the towboat became caught on the port anchor chain of the anchored bulk carrier *Atlantic Fairy*. The towboat capsized and quickly sank; the barge broke free and collided with the bulk carrier. Two of the three crewmembers on board the towboat died in the accident. Damage estimates exceeded \$500,000.



Natalie Jean before the accident. (Photo provided by US Coast Guard) NTSB/MAB-19/13

Accident Events

The owner of Creole Chief, Inc., which was the company that owned and operated the *Natalie Jean*, told investigators that he was contracted by Zito Fleet to pick up a loaded fuel barge (*IB 1957*) at mile 105, transit down to Stolthaven at mile 79, discharge the fuel from the barge, and then bring the empty barge back to Zito Fleet. The Creole Chief owner told investigators that he kept a list of trip captains whom he could call on regularly, but none of them were available for this job. The owner then contacted an acquaintance (hereinafter referred to as "the pilot") he had met earlier that week at a radar school and the pilot agreed to the job. He was an experienced mariner with more than 35 years in the oil field industry and on towboats. He had been retired for about a year and had not operated any commercial vessel for about 8 months but had recently decided to start doing part-time work again. Accordingly, he was in the process of renewing his Coast Guard-issued credential, last been issued in July 2013, as master of towing vessels upon the Great Lakes, inland waters and western rivers; radar observer (unlimited).



Map of the accident area near New Orleans. The site of the capsizing is overlaid by a red triangle. (Map data by Google Maps)

About 1600 on March 11, the day before the accident, the owner met the pilot at the vessel, which was docked at John W Stone Oil Distribution in Gretna, Louisiana, for a brief discussion about the transit. The pilot said that the owner informed him they would pick up the load at Zito Fleet and that the barge was going to Stolthaven to be discharged. The owner told investigators that he discussed with the pilot the river stage, station bills, night orders, and emergency equipment, and gave the pilot a pre-voyage orientation prior to leaving the vessel. The pilot told investigators that because this was his first time operating the *Natalie Jean*, he walked around the wheelhouse after coming on board to familiarize himself with the vessel and its equipment. He

stated that he did not review any emergency procedures or the station bills for abandon ship, fire, or man overboard.

Shortly thereafter, the pilot and two other credentialed masters—one serving as captain and the other as deckhand—departed with the *Natalie Jean* (light boat; that is, without a tow) to pick up the loaded barge at Zito Fleet upriver. The pilot was at the helm and, as the owner had instructed, the captain was in the wheelhouse observing his shiphandling, including the subsequent topping around (turning) of the tow in the river after coupling with the barge. The voyage then continued downriver with the loaded barge, the pilot still at the helm.

The pilot told investigators that he was not familiar with the vessel's steering system and that it took some time for him to get used to it. The *Natalie Jean* was equipped with a double-flanking rudder system and the primary steering control consisted of a short "stick" with a wooden rod taped to the end in order to extend it. The pilot told investigators that he "had to kind of work with that a bit," but he did not elaborate.



Postaccident photo of the *Natalie Jean*'s primary steering control, which had been modified with a wooden rod taped to the end to extend it. (Photo by Coast Guard)

The transit down to Stolthaven was uneventful. After arriving about 1830–1900 and securing the barge, the captain offered to let the pilot sleep while he and the deckhand discharged the load of fuel (the pilot told investigators that there was no set watch and that they would just relieve each other "accordingly"). He went to bed around 1900–1930.

At 2021, the National Oceanic and Atmospheric Administration (NOAA) issued a flood warning indicating that the river level—which was then at 17 feet—might rise further and make navigation and docking difficult.

About 0300 on March 12, after sleeping approximately 7 hours, the pilot returned to the wheelhouse to relieve the captain. When the captain and pilot completed their watch turnover, they did not discuss the flood warning in effect nor the current and winds, though the company's safety management system stated that when the relief person comes on duty, they must exchange information related to tide, current, and weather conditions, in addition to various other vessel information. The captain and the pilot talked about the captain's plans to assist the deckhand with the barge and setting up the running lights before departing for Zito Fleet. To the pilot's knowledge, the captain went down to the galley to start breakfast after helping the deckhand, and he was then going to sleep. Soon thereafter, the deckhand also went down below.

About 0500, the *Natalie Jean* departed Stolthaven with the empty barge. The pilot told investigators that, about the time they got under way, the wind was blowing "very, very hard . . . pinning me to the dock." He made meeting and passing arrangements with vessel traffic and proceeded upriver. He initially began to "run the west bank" (that is, the west or right descending bank of the river), transiting outside of the main shipping channel in that section of the river, because "when the wind's blowing like that, you got an empty [barge], you always try to keep the empty up in the wind . . . keep it away from other structures." He said that he "had trouble fighting the wind most of the time" after leaving Stolthaven. Electronic data from the Mississippi River Traffic Information System (MRTIS) showed the vessel zigzagging as it transited the straight stretch of river below Algiers Point at speeds between 1 and 2 mph.

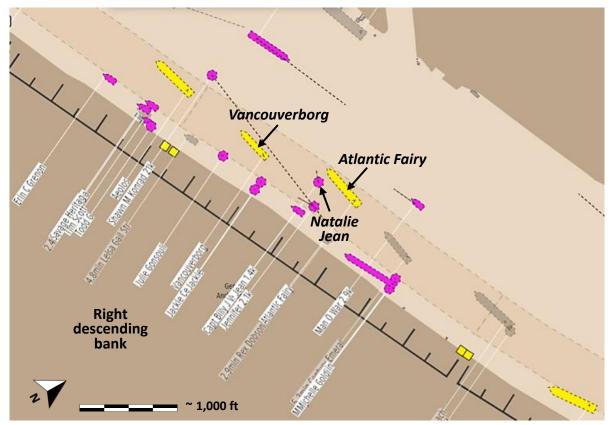
About 0910, the *Natalie Jean* approached the New Orleans General Anchorage at mile 90.1, an area about halfway between Stolthaven and Zito Fleet. The pilot said that because the wind was pushing the tow toward the west (right descending) bank of the river, and because the channel was narrowing ahead due to fleeting operations at the Star Fleet fleeting area, he decided to return the tow to the main shipping channel and continue the voyage there. At a speed of about 1.5 mph, the pilot began preparing to transit between two anchored deep-draft ships ahead on his starboard side: the bulk carrier *Atlantic Fairy* and the cargo ship *Vancouverborg*. The two ships were positioned about 550 feet, fore to aft, from each other.

To enter the main shipping channel, the pilot anticipated making a heading adjustment to starboard after transiting alongside the port side of the *Atlantic Fairy*. He said, "When I started my maneuvers to get between the ships, the barge was already cleared the ship that I was alongside, the *Atlantic Fairy*. Half of my boat was cleared, basically, abreast of the anchor chain, and next thing I knew I'm close to the [port] anchor chain . . . By that time, my boat and the barge was turning sideways."



Photo taken from the towing vessel *Earl Gonsoulin*, moored along the right descending bank looking upriver.

The pilot said he heard the *Atlantic Fairy*'s anchor chain getting caught on the towboat. According to video footage from a nearby factory and MRTIS data, the tow suddenly made a sharp turn to starboard.



Screenshot from MRTIS electronic data, showing the vessel traffic in the area at 0938 and the *Natalie Jean* seconds before its recorded sharp turn to starboard.

The tow then became pressed about perpendicularly against the bulbous bow of the *Atlantic Fairy* and also against the bulker's starboard anchor chain. The *Natalie Jean* subsequently heeled to port, and the port tow wire parted under tension. Seconds later, the *Natalie Jean* capsized and the barge broke free. The *Natalie Jean* then quickly sank.



Photo (looking upriver) of the *Natalie Jean* tow perpendicular to the *Atlantic Fairy*. The towboat has capsized and is sinking. (Photo by Moran Towing)

The towboat *Earl Gonsoulin* was nearby and its crewmembers witnessed the sequence of events. They hurried to assist with search-and-rescue operations. The pilot was found in the water between the barge and the *Atlantic Fairy*, but the captain and the deckhand could not be located. The Coast Guard and Good Samaritan vessels continued to search for the missing crewmembers but eventually had to call off the search. In June 2018, when the vessel was salvaged from the river bottom, the remains of the captain and the deckhand were recovered from inside the vessel.

Post-salvage, the general alarm switch's guard was found in the down-position and its toggle switch was in the off-position. The pilot stated that he activated the general alarm after he heard the anchor chain contact the towboat but said he did not hear it sound. The owner said he tested the system the day before and it worked, and that he always tested it before a voyage.

Additional Information

Damage

According to the damage survey report, the *Natalie Jean*'s shaft, propellers, and flanking rudders were severely damaged, likely during salvage operations. Because the vessel was upside down on the river bottom, it had to be strapped in order to flip it, causing damage around the shaft and flanking rudders. The steering linkage was sheared on the starboard side, near the piston. It could not be determined if the steering gear was sheared following the casualty, prior to the casualty, or during salvage operations.



Natalie Jean being salvaged. The vessel was upside down on the river bottom and sustained damage to the shaft and flanking rudders in the recovery efforts. (Photo by Coast Guard)

Safety Management System

Creole Chief participated in the American Waterways Operators' Responsible Carrier Program (RCP), which is a safety management system for tugboat, towboat, and barge companies and provides a framework for continuously improving company safety performance. The RCP program required yearly inspections to ensure the company was fulfilling the RCP requirements. A third-party audit completed in February 2018 indicated insufficient evidence that the *Natalie Jean* complied with a safety management system. For example, the station bills found on board were from another organization and did not properly reflect the crewing by Creole Chief. The auditors found a note in the materials indicating that the owner was to have reviewed and corrected that item by October 2017, but it still had not been completed as of February 2018 when the audit was conducted.

In addition, Creole Chief had implemented a towing safety management system (TSMS) in June 2016, which outlined hiring processes, training, and familiarization requirements for crewmembers. The Creole Chief owner told investigators that he had a few full-time employees who had completed the company's pre-employment process. Employees were required to fill out an application and complete a physical exam and a drug test. In terms of training, those employees were required to review a deckhand orientation manual and initial each page, date it, and keep it for reference. A copy was also kept in their personnel file. Once hired, the full-time employees would receive an onboard vessel orientation conducted by one of the full-time captains—a basic walkthrough of the vessel to familiarize them with the equipment and safety procedures.

Creole Chief's owner stated that the company did not require a pre-employment drug test for the pilot or for other part-time employees. However, the TSMS stated that employees would be drug tested prior to employment or the company would otherwise obtain verification of negative drug-test results. The owner did not request any pre-employment paperwork prior to the accident voyage but stated that he checked with the pilot's previous employer, a friend of his, and felt comfortable hiring the pilot to operate the vessel. The pilot said he took a periodic drug test for renewing his mariner credential, but he never provided it to Creole Chief, so the company did not know if he had passed the periodic test. Additionally, Creole Chief's TSMS as well as federal regulations required the company to obtain postaccident drug and alcohol testing. Toxicological testing was not conducted by Creole Chief after the accident.

Analysis

In general, Creole Chief failed to comply with several of its own requirements, including pre-employment drug testing, postaccident drug and alcohol testing, pre-employment hiring procedures (including verifying the captain's training and credentialing), and ensuring that the pilot was thoroughly familiarized with the vessel prior to operating it unsupervised. The owner placed the pilot on board the *Natalie Jean* even though he had no direct experience with the pilot's ability and knew that the pilot had not worked for 8 months. The owner did instruct the captain to monitor the pilot in varying and dynamic situations. Also, although the pilot had years of experience on board towing vessels on the Mississippi River, he had been in retirement for nearly a year. He was new to the *Natalie Jean* and, therefore, neither the owner nor the captain had the opportunity to provide him with all of the critical areas pertaining to the vessel or the company's TSMS. Furthermore, they were not able to assess his ability to judge specific operational situations given the limited underway time before the accident.

The pilot's decision to transit upriver in the general anchorage, given his unfamiliarity with the vessel (including its modified steering stick extension) and the close proximity to both anchored and underway vessels in high-water conditions and strong winds, increased the navigational challenges leading up to the accident. The pilot said that the current was not as strong outside the main shipping channel. However, transiting in the general anchorage confined him as fleeting operations were being conducted inside the anchorage, which eventually forced him to try to return the tow to the main shipping channel. AIS data showed the *Natalie Jean* transiting on a parallel course on the port side of the *Atlantic Fairy*, and as the towboat passed the bow, the vessel turned sharply to the right, indicating the moment that the towboat likely caught the bulker's port anchor chain. The pilot's decision to transit closely alongside the *Atlantic Fairy* resulted in the contact with the chain.

The pilot's lack of vessel knowledge and experience, coupled with high water, strong beam winds and a vessel able to make only 1–2 mph in a strong 5-mph current while pushing a barge upriver through a busy anchorage placed him in a very challenging situation.

Probable Cause

The NTSB determines that the probable cause of the capsizing and sinking of the *Natalie Jean* was the company's decision to place an inadequately vetted pilot on board the vessel who did not have previous experience operating the *Natalie Jean*.

Vessel Particulars

Vessel	Natalie Jean	IB 1957	
Owner/operator	Creole Chief, Inc.	Ingram Barge Company	
Port of registry	New Orleans, Louisiana	New Orleans, Louisiana	
Flag	United States	United States	
Туре	Towing vessel	Tank barge	
Year built	1981	2015	
Official number (US)	63283	1260150	
IMO number	8987474	N/A	
Classification society	N/A	N/A	
Construction	Steel	Steel	
Length	64 ft (19.5 m)	200 ft (60 m)	
Draft	7.2 ft (2.2 m)	12.6 ft (3.84 m)	
Beam/width	25.9 ft (7.9 m)	35 ft (10.6 m)	
Gross and/or ITC tonnage	80 gross tons	740 gross tons	
Engine power; manufacturer	1,200 hp (895 kW); two Cummins KTA19 at 600 hp each	N/A	
Persons on board	3	0	

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

For more details about this accident, visit <u>www.ntsb.gov</u> and search for NTSB accident ID DCA18FM017.

Issued: June 4, 2019

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. 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).