



National Transportation Safety Board

Washington, D.C. 20594

Marine Accident Brief

Vessel No. 1: U.S. Towboat *Christine Cenac*, 53 feet long, O.N. 523261, 69 gross tons, built 1969, uninspected.

Vessel No. 2: U.S. Tank Barge *CTCO 211*, 187 feet long, O.N. 002675, 574 gross tons, built 1966

Vessel No. 3: U.S. Towboat *American Heritage*, 183.2 feet long, O.N. 573798, 1415 gross tons, built 1976, uninspected

Location: Mile 179.5 AHP, Lower Mississippi River, near Donaldsonville, Louisiana.

Date: June 27, 1998

Time: 0250 cdt ¹

Owner/Operator
Vessel No. 1 Cenac Towing Company, Houma, LA

Owner/Operator
Vessels Nos. 2 & 3 American River Transportation, Decatur, IL.

Property Damage: \$500,000

Injuries: 0

The Accident

At 0250 on the morning of June 27, 1998, the U.S. towboat *American Heritage*, pushing 33 hopper barges loaded with more than 40,000 tons of grain, was downbound in the Lower Mississippi River near Philadelphia Point (Mile 181 AHP²). Two other tows, one under the control of the U.S. towboat *CSS Louisiana* and the other under the control

¹ All times in this report are central daylight time based on the 24-hour clock.

² Distances along the Lower Mississippi River are measured in statute miles above Head of Passes (AHP), Louisiana

of the U.S. towboat *Christine Cenac*, were also downbound in the river directly behind the *American Heritage*. The *Christine Cenac* was pushing two tank barges, the CTCO 210 and the CTCO 211, which were loaded with a total of about 20,000 barrels (840,000 gallons) of crude oil. The CTCO 210 was the lead barge in the tow, and the CTCO 211 was tied to the *Christine Cenac*. The river current was running 4-5 knots.

About 0230, when the *American Heritage* was abeam of Philadelphia Point (Mile 181 AHP), the operators of the three tows discussed passing arrangements with one another over the VHF radio. During these conversations, the operator of the *American Heritage* stated that he was in the process of flanking the bend³ at Philadelphia Point. He informed the operators of the *CSS Louisiana* and the *Christine Cenac* that they had his permission to overtake and pass the *American Heritage* on its starboard side after the *American Heritage* completed the turn around Philadelphia Point but before the *American Heritage* reached the bend at 81-Mile Point (Mile 179.5 AHP). The operator of the *CSS Louisiana*, concerned that his tow did not have the speed necessary to overtake the *American Heritage* under these restrictions, decided not to attempt to overtake until after the *American Heritage* cleared 81-Mile Point. The operator of the *Christine Cenac*, requested and received permission to overtake the *CSS Louisiana* on its starboard side.

During the next 15 minutes, the *Christine Cenac* overtook and passed the *CSS Louisiana* without incident and began to close on the *American Heritage*, which at that time was flanking the bend at 81-Mile Point. When the two tows were about 3/4 of a mile apart, the operator of the *Christine Cenac* observed the *American Heritage* move crosswise in the channel, with the head of the tow near the right descending bank and the stern of the tow near the left descending bank. Such a move is normal and expected for a large tow flanking a sharp bend.

During the subsequent attempt by the operator of the *Christine Cenac* to pass between the *American Heritage* and the left descending bank of the river, the port side of CTCO 211 struck the stern of the *American Heritage*. The force of the impact ruptured the No. 3 port cargo tank⁴ of CTCO 211 causing crude oil to spill into the river. It also caused the lead tank barge, CTCO 210, to break free of the tow. The *Christine Cenac*, still pushing the damaged and leaking CTCO 211, was able to catch up with the drifting CTCO 210 and push it against the left descending bank. (See Figure 1.)

The damage to the *American Heritage* was limited to a crack in the hull above the vessel's waterline and the vessel and crew were in no immediate danger. A survey of the damaged tank barge, however, revealed substantial damage to the No. 3 port cargo tank.

³ Flanking is a maneuvering technique used by towboat operators on the Mississippi River to negotiate sharp bends when going downbound in the river by allowing the current to carry the tow around the bend. During a flank maneuver, the operator normally will put the engines in reverse and will use the towboat's flanking rudders (a second set of rudders located forward of the propellers for use when the towboat engine is operating astern) to rotate the tow.

⁴ The CTCO 210 and the CTCO 211 each had a raked bow and a square stern. In order to facilitate the tow and to improve the connection between the barges, the tow was made up with the barges tied stern to stern. Therefore, the port cargo tanks of the CTCO 211 were on the starboard side of the tow.

It was later determined that approximately 1680 barrels (70,560 gallons) of crude oil had spilled into the Mississippi River and threatened to contaminate the water supplies of several communities downstream of the accident site. Coast Guard over flights later confirmed that the pollution spread downriver as far south as Lutchter, Louisiana (located at Mile 140 AHP).

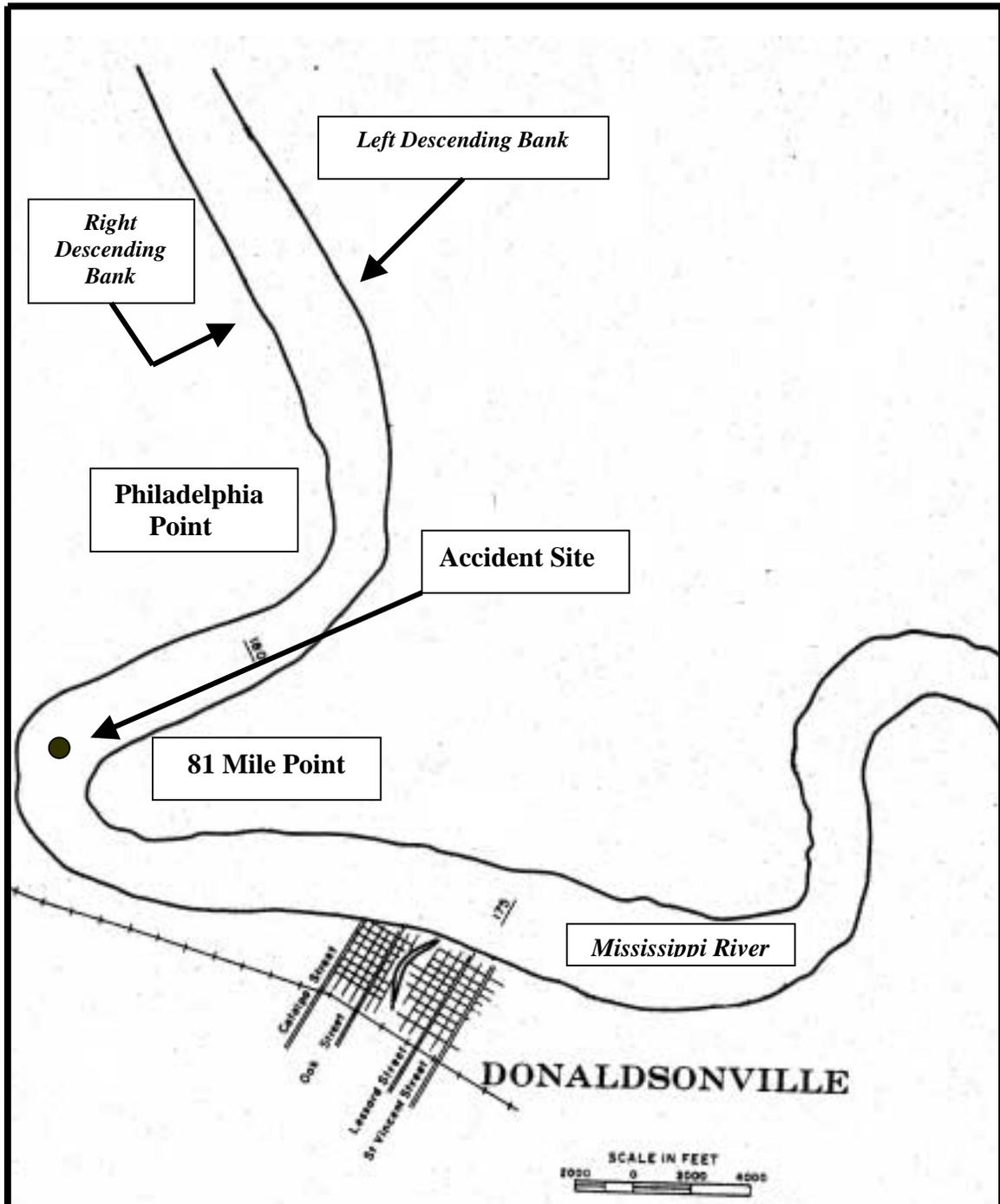


Figure 1. Chart of Lower Mississippi River Near Donaldsonville, Louisiana Showing Approximate Location of Accident Site

Shortly after the collision, the Coast Guard closed the river between mile 165 and 179.5 AHP to all vessel traffic and ordered that oil containment booms be placed around water intake openings downstream of the accident site. The Coast Guard set up a Unified Command Post in Darrow, Louisiana to oversee and coordinate clean-up efforts. Over the next several days, the remaining cargo was removed from *CTCO 211*, and clean-up operations were undertaken. There were no deaths or injuries resulting from the accident. Drug and alcohol testing of the crew of the *American Heritage* and the *Christine Cenac* were conducted with negative results.

Probable Cause

The National Transportation safety Board determines the probable cause of the collision between the *Christine Cenac* with tow and the *American Heritage* was the decision by the operator of the *Christine Cenac* to attempt to overtake and pass the *American Heritage* tow while the *American Heritage* operator was making a flanking maneuver at a sharp bend in the river.

Adopted: August 21, 2001