

Contact of *Josset* Tow with the Bayou Grosse Tête Bridge

On June 6, 2024, about 0512 local time, the towing vessel *Josset* was transiting the Morgan City-Port Allen Route of the Gulf Intracoastal Waterway, about 2.7 miles from Crescent, Louisiana, pushing three barges, when the lead barge struck the Bayou Grosse Tête Bridge (see figure 1 and figure 2).¹ There were no injuries, and no pollution was reported. Damage to the bridge was estimated at \$2.5 million.



Figure 1. *Josset* underway in 2013. (Source: Captain Jeff L. Yates)

¹ (a) In this report, all times are central daylight time, and all miles are statute miles. (b) Visit [nts.gov](https://www.nts.gov) to find additional information in the [public docket](#) for this NTSB investigation (case no. DCA24FM045).

Casualty Summary

| | |
|-------------------------------|---|
| NTSB casualty category | Contact |
| Location | Gulf Intracoastal Waterway, Morgan City-Port Allen Route, mile 47, about 2.7 miles from Crescent, Louisiana 30°16.10' N, 091°19.26' W |
| Date | June 6, 2024 |
| Time | 0512 central daylight time (coordinated universal time -5 hrs) |
| Persons on board | 5 |
| Injuries | None |
| Property damage | \$2.5 million est. |
| Environmental damage | None |
| Weather | Visibility 6 mi, overcast, winds west-northwest 3 mph, air temperature 79°F, sunrise 0532 |
| Waterway information | Canal; width 125 ft, depth 12 ft |

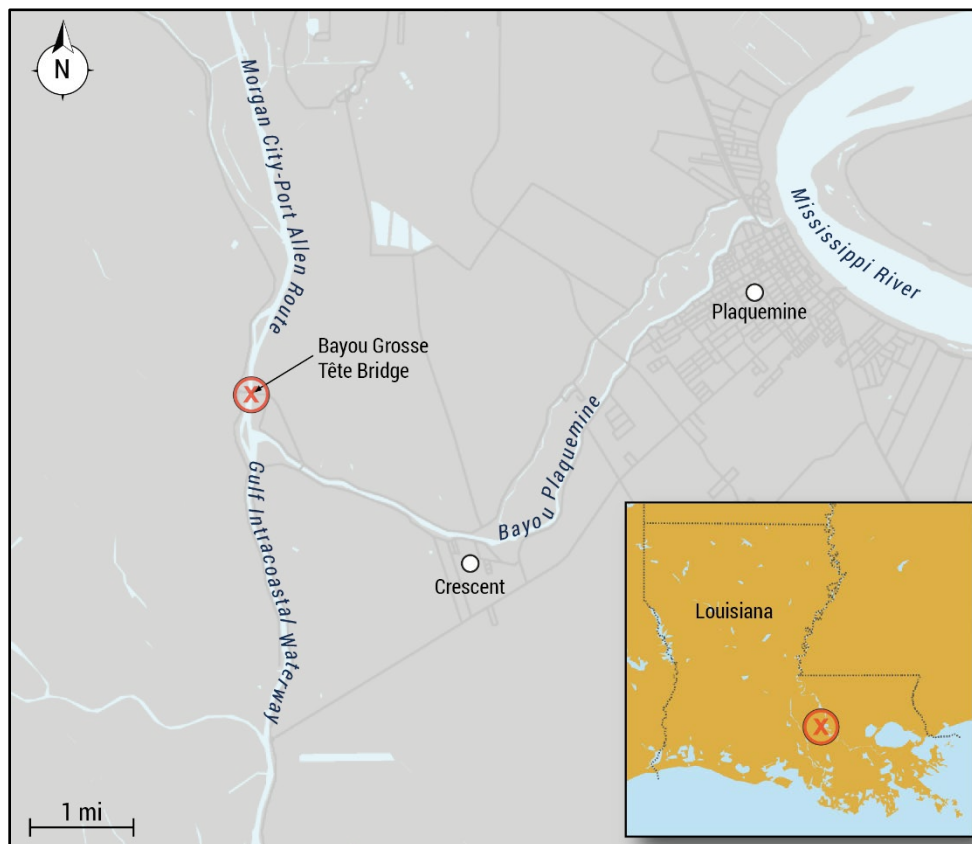


Figure 2. Area where the *Josset* tow contacted the Bayou Grosse Tête Bridge, as indicated by a circled X. (Background source: Google Maps)

1 Factual Information

The 55.2-foot-long, steel-hulled towing vessel *Josset* was built in 2001 for C & J Marine Services, Inc.

On June 5, 2024, about 2200, the *Josset* left the vicinity of Bayou Pigeon, pushing three barges upbound in the Morgan City-Port Allen Route of the Gulf Intracoastal Waterway.² The three barges—two loaded hopper barges and one empty tank barge—were strung out, with the tank barge *FMT 502* at the head. The total length of the tow was 692 feet (see figure 3). On board the *Josset* were a captain, pilot, engineer, and two deckhands.

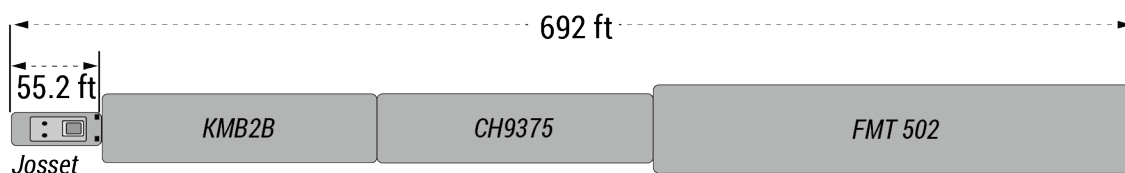


Figure 3. *Josset* towing arrangement (scale approximate).

About midnight on June 6, the pilot came on watch and took the wheel. The pilot was a “trip pilot,” hired under contract for a specific voyage and not an employee of the vessel’s operating company. He had joined the vessel the previous day. The pilot navigated the tow upbound in the Morgan City-Port Allen Route, transiting through the Bayou Sorrell Lock at mile 36.9, about 0200, without any problems.

About 0452, with the pilot navigating the *Josset* in darkness, the tow approached the Bayou Grosse Tête Bridge at mile 47 (see figure 4).³ The bridge carried a two-lane highway (LA 77) over the Morgan City-Port Allen Route of the Gulf Intracoastal Waterway and saw an average of 5,000 vehicle trips a day. The bridge had a horizontal clearance of 125 feet and a vertical clearance of 2 feet.

A bridge tender was stationed on the east bank to operate the bridge, which would swing open from the west bank toward the south (clockwise/downriver). The bridge tender, who had been in this role for 12 years, worked from midnight to 0600.

² The Morgan City-Port Allen Route connected the Atchafalaya River with the Mississippi River below Baton Rouge, Louisiana, allowing intracoastal traffic to bypass New Orleans, Louisiana.

³ The Bayou Gross Tête Bridge—National Bridge Inventory structure number 612402190107251—was a 384-foot-long swing bridge built in 1961.

According to the bridge tender's log, the bridge opened an average of 13 times a day between June 1 and June 7, 2024. The *Josset* pilot estimated he had navigated through the bridge about 20 to 30 times in his career.

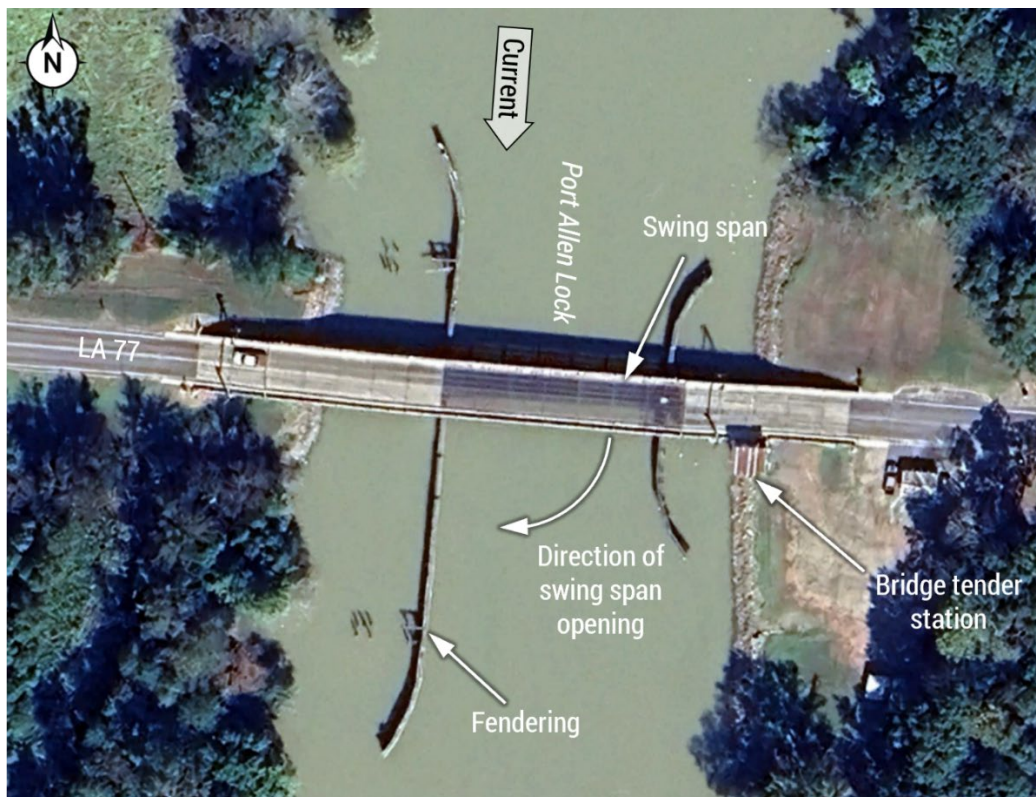


Figure 4. Bayou Grosse Tête Bridge in October 2022. (Background source: Google Earth)

According to the pilot, when the head of the *Josset* tow was about a mile from the bridge, the pilot called the bridge tender by radio and requested an opening. The bridge tender stated that, according to automatic identification system (AIS) data, the *Josset* was making 3 mph at the time, and he requested the pilot call back when the tow was "a little over half mile" from the bridge. (Investigators reviewed the AIS data and confirmed the *Josset*'s speed was about 3 mph during the last mile to the bridge.) The bridge tender then left his station to go to the restroom, which was adjacent to his station.

The pilot told investigators that he radioed the bridge tender again when the tow was 0.5 miles from the bridge (about 0502). He stated that he was told to proceed and that the bridge would be open by the time the towboat got to it. According to the bridge tender, the towboat was 0.4 miles from the bridge when the pilot called the second time. (The bridge tender believed that the AIS position was for

the *Josset*'s GNSS antenna.⁴ This assumption was correct; the towboat's GNSS antenna was located above its wheelhouse.) However, the tow's AIS static data broadcast only included the length of the towboat and not the total length of the barges. The head of the tow was about an eighth of a mile closer to the bridge than the towboat.⁵

About a half mile south of the bridge, there was a bend in the waterway, where the *Josset* pilot had to avoid another tow, the *Tennessee Merchant* and barges, that was pushed up on the west bank (see figure 5). After passing the *Tennessee Merchant* tow, the lead barge was about 2,000 feet away from the bridge when the bridge came into the pilot's line of sight. The lead barge was empty and sitting high out of the water, somewhat obstructing the pilot's view. The pilot told investigators that he did not send a deckhand forward on the tow to act as a lookout since he had navigated Bayou Sorrell Lock without problems.



Figure 5. The Morgan City-Port Allen Route as seen from the Bayou Grosse Tête Bridge, looking south. The bend in the waterway is about 0.5 miles distant in the background. (Source: Google Maps)

⁴ The GNSS, or *Global Navigation Satellite System*, enables worldwide navigation positioning and includes the Global Positioning System (United States) as well as the BeiDou (China), Galileo (Europe), and GLONASS (Russia) systems.

⁵ The GNSS antenna connected to the AIS was above the *Josset*'s wheelhouse.

During the second call, the bridge tender had responded that he would start to open the bridge and for the vessel to proceed. After vehicles were stopped, it typically took about 3 minutes for the bridge to fully open from the closed position. When the lead barge reached the bridge, the pilot noted the bridge was not yet open and backed the tow. As he was backing down, the bridge started to open, with the lead barge, *FMT 502*, inside the fendering. Although the pilot was backing, the tow still had headway, and about 0512, the *FMT 502* struck the swing span (see figure 6). The bridge tender stated that he never signaled that the bridge was open and estimated the swing span was only a quarter of the way open upon impact.

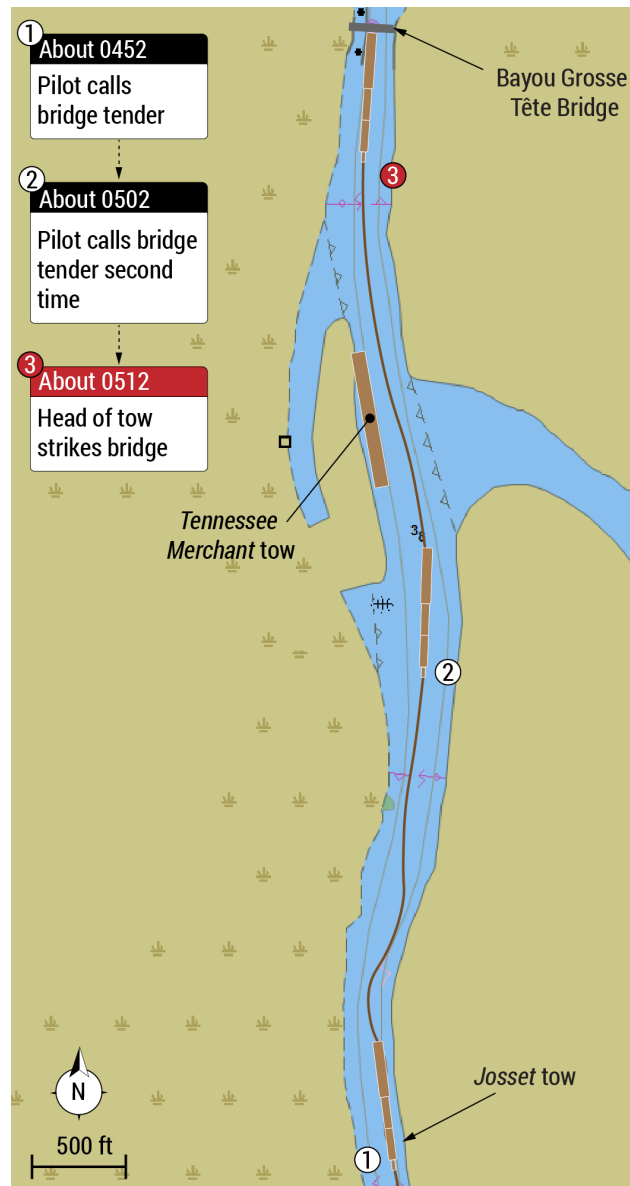


Figure 6. Trackline of *Josset* tow as it approached the Bayou Grosse Tête Bridge. (Scale approximate.) (Background source: National Oceanic and Atmospheric Administration Electronic Navigation Chart US4LA1HI as viewed on Made Smart)

The empty tank barge, *FMT 502*, suffered a 6- to 8-inch-long scrape. The Bayou Grosse Tête Bridge was out of service for 110 days, requiring an almost 1-hour detour for vehicles. Iberville Parish arranged for a passenger ferry for residents and school bus passengers. Repairs to the bridge were made at a cost of \$2.5 million, and the bridge was placed back into service in September 2024.

2 Analysis

As the towing vessel *Josset* was pushing a tow of three strung-out barges, approaching the Bayou Grosse Tête Bridge, the lead barge contacted the bridge's swing span as the span was opening. The bridge was out of service for 110 days.

Unless elsewhere stipulated, bridges must open for vessels on navigable waterways per US Coast Guard regulations. Vessels require time and space to stop, maneuver, or both. Slowing a vessel, particularly one pushing a string of barges, renders them less maneuverable.

Timely opening of bridges is only facilitated by adequate communication between bridge tenders and the vessel operators. The *Josset* pilot called the bridge tender about 0452, when the head of the tow was 1 mile away per standard practice. With the tow transiting at a speed about 3 mph, it would take the head of the tow, which was about 637 feet ahead of the towboat, about 20 minutes to reach the bridge. The bridge tender acknowledged the call and noted the range and speed of the vessel via AIS. The bridge tender waited for a second call from the vessel before starting to open the bridge, as was typical.

The bridge tender stated that he believed the tow's AIS position was based on the location of the *Josset*. The bridge tender used this position to calculate the tow's distance from the bridge. However, the bridge tender did not know the full length of the tow because that data was not broadcast by the *Josset* (nor was it required to be); only the length of the towboat was broadcast. Because the bridge tender miscalculated the tow's proximity to the bridge, he did not have the swing span open by the time the tow reached the bridge, as he had conveyed to the pilot.

There was a bend in the waterway about a half mile south of the bridge that would have obstructed the pilot's view of the bridge until the tow passed it. The *Josset* also had to avoid the *Tennessee Merchant* tow, which was pushed up on the west bank at that time. The tow was transiting in the early hours of the morning, in darkness, and the empty lead barge was high out of the water, further obstructing the pilot's view. Despite these obstructions, the pilot chose not to station a crewmember at the head of the tow to serve as a lookout. By the time the pilot was able to see the bridge and recognize the swing span was not open, the lead barge was nearing the bridge. The pilot began backing the tow as the bridge began to open toward the tow. However, the tow still had headway, resulting in the bow of the lead barge, *FMT 502*, striking the swing span as it was opening. Although not required, if the pilot had positioned one of the other crewmembers on the tow as a lookout, he likely would have been aware earlier that the bridge was not open as he expected and could have taken action to avoid striking the bridge.

3 Conclusions

3.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the contact between the *Josset* tow and the Bayou Grosse Tête Bridge was the bridge tender's miscalculation of *Josset's* proximity, which resulted in him not starting to open the bridge in a timely manner. Contributing was the lack of a lookout stationed on the head of the tow, resulting in the pilot being unaware the bridge was not open until it was too late to stop the tow.

Vessel Particulars

| Vessel | <i>Josset</i> | <i>FMT 502</i> |
|----------------------------|--|---|
| NTSB vessel group | Towing/Barge (Towboat) | Towing/Barge (Tank barge) |
| Owner/operator | C & J Marine Services, Inc. (Commercial) | Florida Marine Transportation (Commercial) |
| Flag | United States | United States |
| Port of registry | Berwick, Louisiana | New Orleans, Louisiana |
| Year built | 2001 | 2006 |
| Official number | 1116940 (US) | 1183539 |
| IMO number | N/A | N/A |
| Classification society | American Bureau of Shipping (third-party organization) ^a | None |
| Length (overall) | 55.2 ft (16.8 m) | 297.5 ft (90.7 m) |
| Breadth (max.) | 21.1 ft (6.4 m) | 54.0 (16.5 m) |
| Draft (casualty) | 8.6 ft (2.6 m) | 2.0 ft (0.6 m) |
| Tonnage | 87 GRT | 1,619 GRT |
| Engine power; manufacturer | 3 × 400 hp (895 kW); Caterpillar diesel engines | N/A |

a. The American Bureau of Shipping only served as the designated TPO for the *Josset* and did not class the vessel.

NTSB investigators worked closely with our counterparts from **Coast Guard Marine Safety Unit Baton Rouge** throughout this investigation.

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For more detailed background information on this report, visit the [NTSB Case Analysis and Reporting Online \(CAROL\) website](#) and search for NTSB accident ID DCA24FM045. Recent publications are available in their entirety on the [NTSB website](#). Other information about available publications also may be obtained from the website or by contacting—

National Transportation Safety Board
Records Management Division, CIO-40
490 L’Enfant Plaza, SW
Washington, DC 20594
(800) 877-6799 or (202) 314-6551