## MARINE OCCURRENCE REPORT

STRIKING OF BRIDGE

BY THE OIL TANKER "LE BRAVE" SOREL, QUEBEC 13 SEPTEMBER 1996

REPORT NUMBER M96L0116

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

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### Summary

On 13 September 1996, the Canadian oil tanker "LE BRAVE" was performing manoeuvres at Section 18 of the Port of Sorel, Quebec, to let the "L'ORME NO. 1" out. Driven by a stiff north-easterly breeze, the vessel struck the Turcotte Bridge on the Richelieu River in the Port of Sorel. The vessel and the bridge were slightly damaged. This occurrence did not result in any injuries or pollution.

Ce rapport est également disponible en français.

### 2 Other Factual Information

#### Particulars of the Vessel

Name "LE BRAVE"

Port of Registry Toronto, Ontario

Flag Canada

Official Number 371941

Type Oil tanker

Gross Tonnage 8,545 tons

Length 126.49 m

Built 1977, Shimonoseki, Japan

Propulsion One B&W 3,898 kW diesel engine driving a

variable-pitch propeller

Charterers Socanav Inc., Montreal, Quebec

Owner(s) Imperial Oil Limited,
Toronto, Ontario

On 13 September 1996, the "LE BRAVE" was moored to the shoulder of the "L'ORME NO. 1" in Sorel harbour. The Turcotte Bridge, which spans the Richelieu River between the cities of Sorel and Tracy, is located just upstream of Section 18 where the two tankers were moored. The weather conditions were good to fair, with winds from the north-east at approximately 20 knots.

At about 1630, the "LE BRAVE", without a pilot but assisted by the tug "OMNI ST. LAURENT" tied to her starboard quarter, began to move away toward the other shore to allow the "L'ORME NO. 1" out.

The "L'ORME NO. 1" departed slowly from Section 18, assisted by the tug "OMNI RICHELIEU". As the weather conditions were unfavourable, the tug opted to moor to the shoulder of the barge "OMNI ATLAS", lying just astern, to wait for the "LE BRAVE" to return to the wharf. It would then leave the Richelieu assisted by the two tugs.

As the north-easterly wind drove the "LE BRAVE" toward the Turcotte Bridge, the vessel requested the tug "OMNI ST. LAURENT" to pull northwards to hold her back. The tug, which was very close to shore, had some difficulties getting back into position. The tanker's bow moved closer and closer to the bridge, by which time she was almost athwart the river. Faced with the inevitable, the master of the "LE BRAVE" gave orders for the main engine to be started, but, at 1645, the vessel struck the Turcotte Bridge. The structure of the bridge was slightly damaged. The vessel sustained damage to the foredeck and the bowsprit.

During the days preceding the accident, the tanker had been moored in the Port of Sorel and was on stand-by. The crew was on board and had been busy performing maintenance work; there was no master on board. A master on leave was called upon only to perform the manoeuvres necessary to let the "L'ORME NO. 1" leave the wharf. The master came on board only a few minutes before the operation and left immediately thereafter.

<sup>&</sup>lt;sup>1</sup> All times are EDT (Coordinated Universal Time (UTC) minus four hours) unless otherwise stated.

To avoid paying for the services of a pilot, a mooring line was left on the wharf at the vessel's bow and the manoeuvre was tried without using the main engine. The main engine had been warmed up before the master's arrival, but was stopped when he arrived. The master finally ordered for the main engine to be put into reverse to avoid striking the bridge, but this was apparently done at the very last minute. The bow thruster was used throughout the manoeuvre. The tanker's bow had been ballasted for this purpose.

### Analysis

The Port of Sorel is a compulsory pilotage area. Vessels are, however, exempted from compulsory pilotage when confronted with an emergency like a fire. In such circumstances, vessels may perform undocking manoeuvres without a pilot on board.

In this case, the vessel had to move away from the wharf to give another tanker the room it required to get under way. Because the master had called for a tug to perform these manoeuvres, the Laurentian Pilotage Authority (LPA) considers that the presence of a pilot was compulsory on board the "LE BRAVE" even though a mooring line had been left lashed to mooring bitts on the wharf and the main engine was not used. It is agreed, however, that vessels may, if necessary, move along berths without a pilot on board provided that they do so using winches rather than the main engine.

According to the LPA, the manoeuvres performed by the "LE BRAVE" are considered a "movage" within the meaning of section 2 of the Laurentian Pilotage Authority Regulations where the term is defined as follows:

"Movage" means the moving of a ship within a harbour, whether the ship is moved from one berth to another or is returned to the same berth, but unless a pilot is employed does not include the warping of a ship from one berth to another solely by means of mooring lines attached to a wharf, the shore or a mooring buoy. (déplacement)

As the financial situation of the company chartering the tanker "LE BRAVE" was precarious, the master decided to perform these manoeuvres himself to avoid pilotage charges.

### Conclusions

- 1. The vessel had been at wharfside for some time without a master on board.
- 2. A master on leave was sent for in order to move the vessel to allow another tanker to depart.
- 3. To avoid pilotage charges, a mooring line was left on the wharf at the bow, and the main engine was not used.
- 4. Only one tug was used to perform the manoeuvre.
- 5. The winds blowing from the north-east at approximately 20 knots drove the tanker upstream.
- 6. During the manoeuvres to return to the wharf, the "LE BRAVE" struck the Turcotte Bridge.

- 7. The master took account of the company's financial situation and adopted an economical rather than a practical solution.
- . The Port of Sorel is a compulsory pilotage area.
- . Whenever a vessel employs a tug to perform wharfside manoeuvres, the LPA considers that there must be a pilot on board.

# Causes and Contributing Factors

The tanker "LE BRAVE" struck the Turcotte Bridge in the Port of Sorel while performing manoeuvres to let the tanker "L'ORME NO. 1" out, because the wind drove her athwart and upstream on the Richelieu River. The tug attached to her starboard quarter was caught between the vessel and shore. To avoid pilotage charges, the master had tried to perform these manoeuvres without using the main engine.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson Benoît Bouchard, and members Maurice Harquail, Charles Simpson and W.A. Tadros, authorized the release of this report on 28 January 1998.