## MARINE OCCURRENCE REPORT

### COLLISION

BETWEEN THE FISHING VESSELS "NAVEGANTE " AND "TERESA MARIA" NEAR S.E. SHOAL, LAKE ERIE 09 SEPTEMBER 1997

REPORT NUMBER M97C0057

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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Between the Fishing Vessels "NAVEGANTE" and "TERESA MARIA" Near S.E. Shoal, Lake Erie

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## Summary

In daylight and in clear weather, the fishing vessels "NAVEGANTE" and "TERESA MARIA" collided when both were returning to their home port of Wheatley, Ontario. One person suffered a minor injury, both vessels were lightly damaged but there was no pollution.

	"NAVEGANTE"	"TERESA MARIA"
Port of Registry	Windsor, Ont.	Chatham, Ont.
Flag	Canada	Canada
Registry/Licence Number	156868	801796
Туре	Lake Erie Fish Tug	Lake Erie Fish Tug
Gross Tonnage	128.61	121.13
Length	19 m <sup>1</sup>	20 m
Draught		
Built	1946, Erieau, On.	1987, Wheatley, On.
Propulsion	Diesel	Diesel
Number of Crew	8	5
Number of Passengers	Nil	Nil
Registered Owner	Presteve Foods Ltd. Wheatley, Ont.	670154 Ontario Ltd. Wheatley, Ont.

## Other Factual Information

Both vessels were equipped with a full range of navigating instruments including radar and several workable VHF radio sets each.

At approximately 0400<sup>2</sup> on 09 September 1997, both vessels departed their home port of Wheatley Harbour to fish. At 1200, both were returning at full speed towards Wheatley. The vessels were on converging courses, the "NAVEGANTE" was steering 010 (T) degrees at 11 knots and the "TERESA MARIA" was steering 000 (T) degrees at 10 knots.

Both vessels were on automatic steering and were crossing the main shipping channel near S.E. Shoal. There was no other shipping traffic in the area at the time. Visibility was several miles and each vessel was visible from the other. The relative bearing between the vessels remained almost constant as the distance between them decreased. As the distance between the vessels diminished, neither vessel altered course or reduced speed. At 1230, when the vessels were within an estimated 15 - 25 m apart and nearly abeam of each other, the "NAVEGANTE" suddenly veered to starboard. About three to five seconds later her bow struck the port side of the "TERESA MARIA", amidships, at an estimated angle of 45 degrees.

<sup>&</sup>lt;sup>1</sup> Units of measurement in this report conform to International Maritime Organization (IMO) standards or, where there is no such standard, are expressed in the International System (SI) of units.

<sup>&</sup>lt;sup>2</sup> All times are EDT (Coordinated Universal Time minus four hours).

After the collision the two vessels were briefly locked together and stopped in the water.

#### "TERESA MARIA"

The operator of the "TERESA MARIA" determined that his vessel was being slowly overtaken by the "NAVEGANTE". As the "NAVEGANTE" was closing and a close quarters situation was developing, he unsuccessfully attempted to communicate with the "NAVEGANTE" by VHF radio. He did not attempt to draw the other vessel's attention to the developing situation by making the prescribed sound signal on the ship's whistle. As required by the Colregs, he kept his vessel to her original course and speed. However, as the other vessel approached to within 25 m, the operator of the "TERESA MARIA" did not take action to increase the distance between the two vessels or to avoid collision. The "TERESA MARIA" remained in automatic steering until after the "NAVEGANTE" swung off course and struck the "TERESA MARIA" on the port side amidships.

As a result of the impact of the collision, a member of the crew was thrown to the deck and suffered a minor back injury. The bow of the "NAVEGANTE" struck the "TERESA MARIA" in way of a heavy "A" frame which absorbed most of the energy of the collision and minimized damage to the "TERESA MARIA".

After the vessels separated, the "NAVEGANTE" proceeded towards port. The "TERESA MARIA" reported the occurrence to the Ontario Provincial Police who relayed the occurrence information to the Ship Safety Branch of Transport Canada .

The operator of the "TERESA MARIA" was uncertificated and was acting as master while the regular master was on vacation. He had been doing this for several weeks each year for the last 10 years. He had been working in the Lake Erie fishing trade for approximately 15 years and had a good command of the English language.

#### "NAVEGANTE"

When the vessels were proceeding close together on near parallel courses, it was observed from the "TERESA MARIA" that the operator of the "NAVEGANTE" appeared to be pre-occupied with the instrumentation/controls on his control consol. Just prior to the impact the "NAVEGANTE" suddenly veered to starboard. The operator of the "NAVEGANTE", however, indicated that he did not switch the steering from automatic to manual until after the collision. The "NAVEGANTE" made no whistle signal to indicate her intentions nor did she sound a signal to warn the crew of both vessels of the impending collision.

The master of the "NAVEGANTE", who had a good command of the English language, did not attempt to communicate by VHF radio with the other vessel when he arrived on the bridge after the collision. He did not ascertain the extent of the other vessel's damage or if it required assistance. The "NAVEGANTE" then continued her voyage to Wheatley, Ontario.

The operator in the wheelhouse of the "NAVEGANTE" was new to this vessel, having been transferred to the "NAVEGANTE" from another vessel of the same company. After initial training given over two weeks, this was the first time that he had navigated the vessel alone without the assistance of the master, whom he had relieved for lunch. He did not respond to the VHF radio communications directed to his vessel from the "TERESA MARIA".

The operator has been engaged in the Lake Erie fishery for about eleven years. He maintained that he did not speak English or French and required a Portuguese translator when interviewed. In 1988 he was issued a Canadian Fishing Master Class IV Certificate. Two of the prerequisites to obtaining this certificate are: a fundamental understanding of the Rules of the Road (Colregs) and a Radio-telephone Operator's Restricted (Maritime) Certificate (RORC). A candidate for a RORC is required to demonstrate a working knowledge of either English or French.

In its report on the 1991 capsizing of the fishing vessel "FLYING FISHER" (M91W1075), the Board expressed concern that inability of the operators to communicate in either of Canada's two languages compromises the safe navigation and operation of fishing vessels in Canadian waters. The Board further indicated that one possible measure to mitigate this is to require crews to demonstrate a minimum level of language proficiency before being issued radio certification and/or before being granted a fishing license.

#### The Operators and Crews

When both vessels sailed from Wheatley at 0400, the operators and crews reported that they were adequately rested.

The operators who relieved the master for the return trip home had worked at various tasks, including setting and hauling nets, since sailing. They were given the duties of a watchkeeper, including being sole lookout (visual, radar and radio), and monitoring a variety of instrumentation for navigation and engine control.

The operators of both vessels reported that they had a good understanding of the International Regulations for Preventing Collisions at Sea (Colregs).

The owners rely upon on the masters of their vessels to find persons with a suitable level of competency and training to replace the regular master when he is on leave.

### Analysis

Because both vessels were on near-parallel converging courses and the speed of the "NAVEGANTE" was greater than that of the "TERESA MARIA" and the "NAVEGANTE" had come up on the "TERESA MARIA" from a direction of more than two points abaft the beam, an overtaking situation existed. The "NAVEGANTE", being the overtaking vessel, was obliged to keep clear of the "TERESA MARIA". The "TERESA MARIA" was the stand-on vessel and was obliged to maintain her course and speed unless it became clear that collision could not be avoided by the action of the giving-way vessel alone.

As the close-quarters situation developed, neither vessel took avoiding action as the distance between them reduced to between 15 and 25m. Because both vessels were on automatic steering at this time, the ability of the vessels' operators to make a rapid alteration of course was lessened.

To meet her obligation under the Colregs to keep clear of the "TERESA MARIA", the "NAVEGANTE" could have reduced speed or altered course or both. Neither of these options was exercised. When it became

clear to the "TERESA MARIA" that the "NAVEGANTE" was not taking the action required of her, the "TERESA MARIA" could also have taken similar action to avoid collision, but did not. The "TERESA MARIA" attempted to establish radio communication to determine the intentions of the "NAVEGANTE" but received no reply, however, no attempt was made to sound the appropriate whistle signal to warn the other vessel that her intentions were unclear.

The operator of each vessel was acting as sole navigator and look-out and both reported that they had a good understanding of the International Regulations for Preventing Collisions at Sea (Colregs). As such, each should have been able to make a full appraisal of the developing situation. However neither operator took action to prevent the development of the close quarters situation.

Immediately before the collision the vessels were so close together that the operator of the "TERESA MARIA" believed that he saw the operator of the "NAVEGANTE" making adjustments to the instrumentation (auto-pilot) on that vessel's console. The operator of the "NAVEGANTE", however, maintained that his vessel's steering mode was unchanged until after the collision. This information would appear to indicate that the "NAVEGANTE" did not sheer towards and collide with the "TERESA MARIA" as a result of a loss of control due to a change made in the mode of steering.

Given that no fault developed in the automatic steering, the most probable explanation for the sudden sheer taken by the "NAVEGANTE" is that the sheer was due to hydrodynamic interaction between the two vessels which were proceeding at speed on near parallel courses.

Although the operator of the "NAVEGANTE" was the holder of a Fishing Masters Class IV certificate and had received some training in the two weeks preceding the collision, he did not make a timely determination that a close-quarters situation was developing. A further indication that his training may not have been sufficient was that he did not keep an efficient radio watch because he did not respond to the VHF calls made by the "TERESA MARIA". Although he did not speak English or French, those on board the "TERESA MARIA" were, like him, Portuguese speakers and there should have been no difficulty in communicating in that language.

Although the principles of good seamanship and the provisions of the Canada Shipping Act require that the master or the person in charge of each vessel involved in a collision render assistance to the other vessel and to stand-by her until it is ascertained that such assistance is no longer required, the operator and master of the "NAVEGANTE" did not do so. The "NAVEGANTE" departed the scene without establishing the extent of the other vessel's collision damage or if she required assistance.

Although a report of the occurrence was made to the Ontario Provincial Police by the "TERESA MARIA", neither vessel reported the occurrence directly to TSB or to Transport Canada.

## Findings

### Both Vessels

1. Did not change steering mode from automatic to manual, to reduce rudder response time, until after they had collided.

- 2. The "NAVEGANTE" most likely sheered towards and collided with the "MARIA TERESA" as a result of the hydrodynamic interaction between the two vessels which were proceeding at full speed on near-parallel courses about 15 to 25 m apart.
- 3. Did not report the collision to Transport Canada, the Canadian Coast Guard or to TSB. The "MARIA TERESA", however, made a report to the OPP.
- 4. Although both operators claimed a good understanding of the Colregs, neither implemented the appropriate course of action as specified in the Colregs Steering and Sailing Rules.

#### "NA VEGANTE"

- 5. Was overtaking and was obliged to keep clear of the "TERESA MARIA".
- 6. Did not determine that a risk of collision existed and neither reduced speed nor altered course to avoid the development of a close-quarters situation.
- 7. Did not maintain an efficient VHF radio watch.
- 8. Did not attempt to establish contact with the "TERESA MARIA" either by VHF radio or by sound signals.
- 9. The operator did not speak English or French but could have communicated with the "TERESA MARIA" in Portuguese.
- 10. The operator was new to the vessel and, for the first time, had been left in sole charge of the navigation by the master.
- 11. The operator did not inform the master of the "NAVEGANTE" that a close-quarters situation was developing or ask for his assistance.
- 12. After the collision, the master did not ascertain the extent of the other vessel's damage or if it required assistance before the "NAVEGANTE" continued on passage.

#### "TERESA MARIA"

- 13. Being the stand-on vessel, maintained her course and speed as she was required to do by the Colregs.
- 14. The operator established that the "NAVEGANTE" was not giving way and attempted to communicate with her by VHF radiotelephone.
- 15. When it became apparent that the development of a close-quarters situation could not be avoided, the operator of the "TERESA MARIA" did not, as he was required to do by the Colregs, take such action as would best aid to avoid collision.

16. Did not attempt to warn the "NAVEGANTE" of the developing situation by the use of sound signals.

## Causes and Contributing Factors

The vessels collided because the hydrodynamic interaction between them caused the "NAVEGANTE" to sheer to starboard and collide with the "TERESA MARIA" when both vessels were proceeding on near-parallel courses, at speed and in close proximity to each other. Contributing factors to the occurrence were: the "NAVEGANTE", being the overtaking and give way vessel, did not give way; the "TERESA MARIA", when it became apparent that the development of a close-quarters situation could not be avoided, did not take action to avoid collision; a lack of inter-ship communication; and the operators' level of training and knowledge of the Rules of the Road.

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 11 December 1998.