

**MARINE OCCURRENCE REPORT**

**DAMAGE**

**TO THE BULK CARRIER "KAPITONAS MESCERIAKOV"  
LAC ST. FRANÇOIS, QUEBEC  
21 DECEMBER 1995**

**REPORT NUMBER M95C0118**

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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### **DAMAGE**

to the bulk carrier "KAPITONAS MESCERIAKOV"  
on Lac St. François, Quebec  
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### **Summary**

At approximately 1200 on 21 December 1995, the "KAPITONAS MESCERIAKOV" was transiting Lac St. François, Quebec, in restricted visibility and severe ice conditions for the time of year. Abreast of buoys D6 and D4, the ice field south of the channel was observed to be moving northward and closing the track of open water left by the other vessels transiting through the area. The "KAPITONAS MESCERIAKOV", driven toward the north edge of the channel by the ice field, tried unsuccessfully to counteract the drift; however, the vessel eventually did return to the middle of the channel. Subsequently, an ingress of water was discovered in the No. 3 port double-bottom tank. Although the crew did not feel any jolt and the vessel did not strike the bottom, the crack in the tank appears to have occurred when the vessel was driven toward the north edge of the channel by the ice. There were no injuries or pollution as a result of this occurrence.

**Factual Information**

**Particulars of the Vessel**

Name	"KAPITONAS MESCERIAKOV"
Port of Registry	Klaipeda, Lithuania
Flag	Lithuanian
Official Number	7733473
Type	Bulk carrier
Gross Tonnage	9,965
Length	146 m
Draught	Forward: 7.95 m Aft: 7.83 m
Cargo	9,978 metric tonnes of potassium
Built	1978, Russia
Propulsion	One B&W engine, 4,928 kW
Crew	20
Owners	Lithuanian Shipping Company Klaipeda, Lithuania

At daybreak on the morning of 21 December 1995, the "KAPITONAS MESCERIAKOV", under the conduct of two pilots, departed the berthing wall downstream of the Snell Lock, bound for Ireland. In an area of open water abreast of the Saint-Zotique anchorage, the vessel reduced speed to pass safely with an upbound vessel. After passing the vessel, the "KAPITONAS MESCERIAKOV" resumed her course and, at a speed of about eight knots, entered a section of the channel between the Saint-Zotique anchorage and the Beauharnois Canal. The bridge watch noticed that the ice field to the south had moved northward and was closing the track of open water left by preceding vessels.

The pressure of the ice caused the vessel to veer constantly to port. To counteract this effect, the pilots repeatedly had to correct the vessel's course to starboard. Despite the course corrections, it was impossible to keep the vessel in the middle of the channel. She drifted on a course that took her very close to the north edge of the channel abreast of buoy D4. The crew did not feel any abnormal jolt or vibration, but, when the vessel had left the ice zone and was transiting the Beauharnois Canal, the crew noticed that the vessel had a list to port. Soundings indicated that the No. 3 port double-bottom tank was full of water. Shortly thereafter, a crack was found in the turn of the bilge in way of the No. 3 port double-bottom tank.

**Analysis**

The heavy snow and intense cold of November and December 1995 promoted the formation of ice in the St. Lawrence Seaway. At the time of this occurrence, the concentration of ice was estimated at 10/10 grey ice. According to the *Sailing Directions for the Great Lakes*, navigation is considered difficult where the ice concentration is 7/10 to 9/10. The current in the Lac St. François channel sets fair with the channel, and its rate increases to two knots upstream of

the entrance to the Beauharnois Canal. The weather conditions recorded on board the vessel show that visibility was restricted by snow. The south-west wind was blowing at between 25 and 35 knots, and the air temperature was minus 8°C.

Once she had entered the section of the channel between the Saint-Zotique anchorage and the Beauharnois Canal, the "KAPITONAS MESCERIAKOV" was no longer able to return to the Saint-Zotique anchorage or to stop because of the ice.

The position of the "KAPITONAS MESCERIAKOV" and the prevailing environmental conditions made it very difficult to prevent the vessel from drifting toward the north edge of the channel.

### **Findings**

1. The vessel was sailing in restricted visibility in severe ice conditions.
2. The ice field to the south of the Lac St. François channel was pushed northward by the winds.
3. Once she had entered the channel, the vessel was no longer able to return to the Saint-Zotique anchorage or to stop.
4. The bridge watch tried to counteract the drift to keep the vessel in the middle of the channel.
5. The vessel appears to have struck the north edge of the channel abreast of buoy D4, causing a crack in the No. 3 port double-bottom tank.

### **Causes and Contributing Factors**

The "KAPITONAS MESCERIAKOV" sustained damage when she was driven toward the north edge of the channel by ice. The pressure exerted by the ice on the sides of the hull hampered the vessel's efforts to return to the middle of the channel.

*This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson, Benoît Bouchard, and members Maurice Harquail and W.A. Tadros, authorized the release of this report on 14 August 1996.*