



Statens haverikommission
Swedish Accident Investigation Board

SUMMARY

ISSN 1400-5735

Report RS 2007:03es

**Close encounter and grounding of the vessel MT Brevik
on Trollhätte canal, O county,
on 25 November 2004**

Case S-05/05

SHK investigates accidents and incidents with regard to safety. The sole objective of the investigations is the prevention of similar occurrences in the future. It is not the purpose of this activity to apportion blame or liability.

The material in this report may be reproduced free of charge provided due acknowledgement is made.

This report is also available on our web site: www.havkom.se

In case of discrepancies between the English and the Swedish texts, the Swedish text is to be considered the authoritative version.

Statens haverikommission (SHK) Swedish Accident Investigation Board

Postadress/Postal address
P.O. Box 12538
SE-102 29 Stockholm Sweden

Besöksadress/Visitors
Teknologgatan 8 C
Stockholm

Telefon/Phone
Nat 08-555 017 70
Int +46 8 555 017 70

Fax/Facsimile
Nat 08 555 017 90
Int +46 8 555 017 90

E-mail Internet
info@havkom.se
www.havkom.se



Statens haverikommission
Swedish Accident Investigation Board

2007-09-13

S-05/05

The Swedish Maritime Administration

SE-601 78 NORRKÖPING, Sweden

Report RS 2007:03es

The Swedish Accident Investigation Board has investigated a close encounter with subsequent grounding of the tanker vessel Brevik on Trollhätte canal, O county, which occurred on November 25th 2004.

In accordance with section 14 of the Ordinance on the Investigation of Accidents (1990:717) the Board herewith submits a report on the investigation.

The Board will be grateful to receive, by 13 March 2008 at the latest, particulars of how the recommendations included in this report are being followed up.

Carin Hellner

Jan Snöberg

Report RS 2007:03e

S-05/05

Report finalised 13 September 2007

<i>Vessel; Name</i>	MT BREVIK
<i>Signal letters</i>	SJBU
<i>IMO number</i>	7917537
<i>Type of vessel</i>	Chemical tanker
<i>Registered owner/Operator</i>	Rederi AB Brevik
<i>Nationality/Flag</i>	Swedish
<i>Classification society</i>	Lloyds Register +100 A1
<i>Time of occurrence</i>	25 November 2004, at 05:58 hours, in darkness <i>Note: All times are given in Swedish standard time (UTC + 1 hour)</i>
<i>Place</i>	Stallbackaleden, Trollhätte canal, Ö county, posn. 58°17.99'N 012°18.08'E
<i>Surface and weather conditions</i>	Clear and good visibility, westerly wind 5-6 m/s
<i>Persons on board:</i>	
<i>crew members</i>	10
<i>passengers</i>	–
<i>pilot</i>	1
<i>Injuries to persons</i>	None
<i>Damage to vessel</i>	Limited
<i>Damage to cargo</i>	None
<i>Other damage (to the environment)</i>	None
<i>Captain:</i>	
<i>Sex, age, period of time as captain of Brevik</i>	Male, 55 years, 5.5 years
<i>2nd mate</i>	
<i>Sex, age, period of time as second mate of Brevik</i>	Male, 64 years, 6 years
<i>Pilot</i>	
<i>Sex, age, period of time as pilot</i>	Female, 41 years, 1 year

The Swedish Accident Investigation Board (SHK) was notified on the 26th of November 2004 about an incident with subsequent grounding which occurred to the tanker BREVIK on Trollhätte canal, Ö county, on the 25th of November 2004 at 05:58 a.m.

The incident and accident have been investigated by SHK represented by Carin Hellner, Chairperson, and Jan Snöberg, Chief maritime operations investigator. The investigation was attended by Björn Molin, Swedish Maritime Administration.

Summary

The chemical tanker BREVIK, loaded, was en route upstream on the Trollhätte canal towards Lake Vänern with a pilot on board. The pilot had

agreed with the pilot on board the oncoming cargo vessel NAVEN that the meeting would take place at Hjulksvarn upper jetty. BREVIK was proceeding faster than estimated while NAVEN was slower, why a new place to meet was decided to be west of Stallbackaön. The NAVEN pilot reduced speed to a minimum and steered close to the port side of the fairway where the current was less rapid. NAVEN got into a position with her bow in the middle of the canal. The pilots had renewed contact over VHF where the meeting point was retained and meeting port to port was confirmed. The pilot on NAVEN tried to bring the ship over to her starboard side (west side) of the canal without any success. Hence with about 220 meters between the ships, the pilot on BREVIK decided that the meeting would instead have to be performed starboard to starboard and informed NAVEN accordingly over VHF. The ships passed each other at very close distance. Because of this, BREVIK came far out to her port side (west side) of the canal and was unable to get back to the middle of the fairway. Shortly after the meeting, BREVIK ran aground on the west side of the canal.

The primary cause for the grounding of BREVIK was that the ship was turned to port in order to avoid a collision, which in turn brought the ship far out to her port side of the canal. As a consequence BREVIK got into a difficult (tight) position in the canal for manoeuvring back into the fairway. The BREVIK position to port was aggravated by the current which forced the ship further to port but probably also by hydrodynamic forces from the meeting with NAVEN in the shallow and narrow canal. Reasons behind the above were as follows.

- The meeting was performed in a different location than originally planned.
- Due to difficulties for NAVEN to move out from her port side position in the canal, the meeting was performed starboard to starboard after a last moment decision made by the BREVIK pilot to abandon the plan to meet port to port.
- The difficulties for NAVEN to get over to her starboard side of the canal were probably caused by her very low speed through the water. On the other hand the pilot on NAVEN wanted to keep low speed with regard to the meeting and the draught of BREVIK. Onboard NAVEN her speed may have seemed faster in the prevailing following current.

Recommendations

It is recommended that the Swedish Maritime Administration:

- investigates whether special pilotage regulations should apply on Trollhätte canal due to the special character of the waterway (*RS 2007:03es R1*), and
- considers the need to assign recommended areas for overtaking and meeting and possibly define areas where overtaking and meeting are prohibited (*RS 2007:03es R2*).