



Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation
Bundesoberbehörde im Geschäftsbereich des Bundesministeriums
für Verkehr, Bau- und Wohnungswesen

Summary

Investigation Report 40/03

4 July 2003

Serious Marine Casualty:

Collision
MV "GINA-R. – FC "LIEBE"

on 14 February 2003 off Fehmarn

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1 Summary of the marine casualty

On 14 February 2003 at about 10:00 h with visibilities of about 50 m there was a collision in territorial waters off Fehmarn Belt west of Puttgarden between the freighter MV "GINA-R." and the Fishing Cutter "LIEBE".

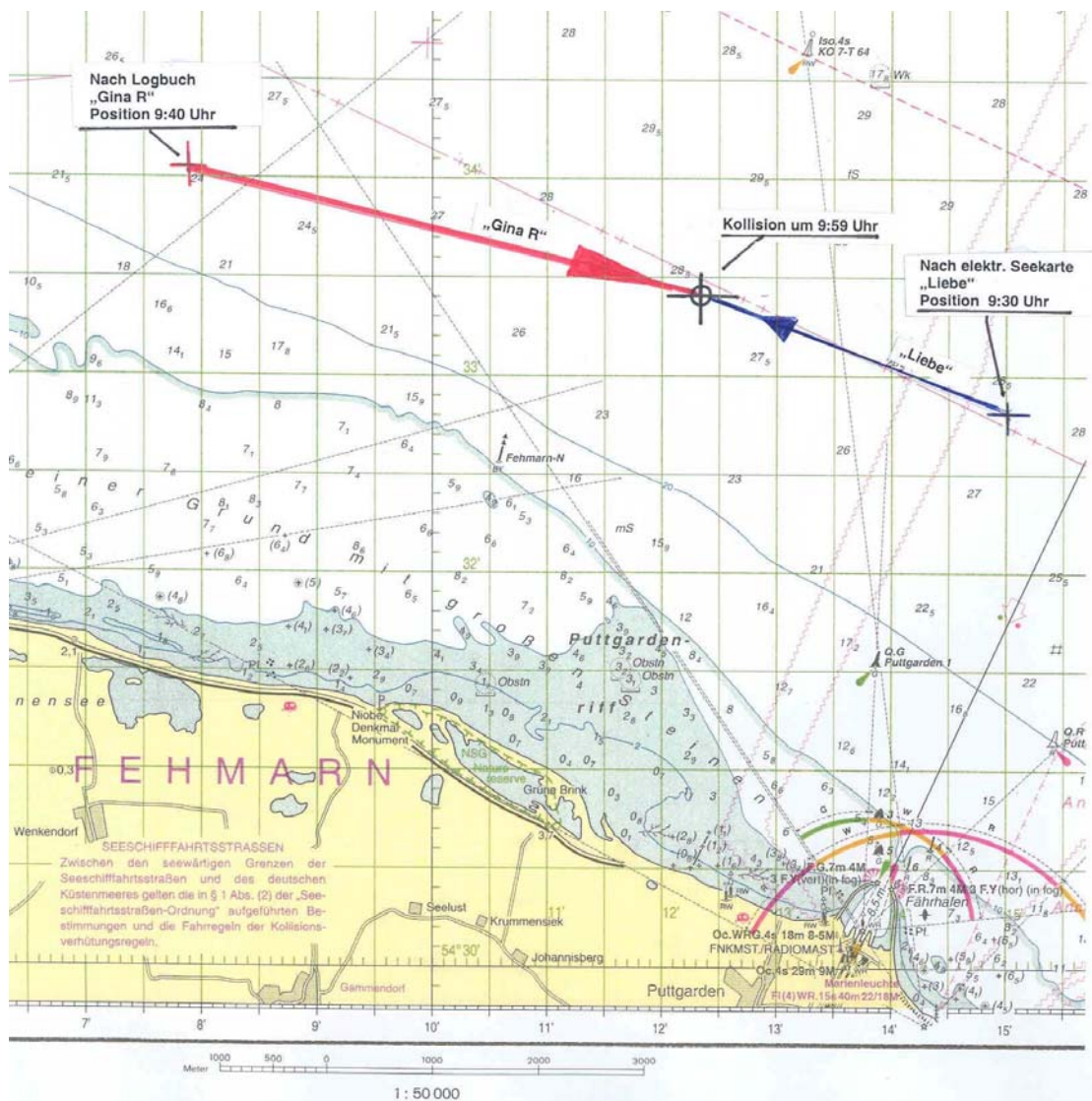
The bow of MV "GINA-R." collided with the fishing cutter midships and damaged it heavily. The fishing cutter was kept above water with drainage pumps and taken to Heiligenhafen for a relatively long repair period.

2 Scene of casualty

Nature of the incident : Serious marine casualty

Date : 14 February 2003

Location : Fehmarn Belt , Position 54°33.394'N, 011° 12.295'E



3 Vessel particulars and photos

3.1 Vessel particulars MV "GINA-R."

Name of vessel:	"GINA-R."
Operator:	Unika, Arnis
Port of registry:	St. John's
Nationality / Flag:	Antigua and Barbuda
IMO Number:	7125225
Ship's call letters:	V2PC6
Type of vessel:	Freighter– General Cargo Ship
Crew:	6 persons
Classification:	Germanischer Lloyd
Class:	100 A5 E2 FBD 2,962
Year built:	1971
Building yard:	Schiffswerft Hugo Peters, Wewelsfleth
Length overall:	76.95 m
Length between perpendiculars:	69.77 m
Width overall:	12.80 m
Draft forward / aft:	3.70 m / 4.00 m
Height:	7.00 m
Gross tonnage:	1773
Deadweight:	1500 t
Main engine:	Krupp MaK 8 cylinders
Engine rating:	Throttled to 600 HP / 430 kW
Propeller:	Fixed-pitch propeller / right-hand
Speed:	10.5 kn
Steering gear:	Semi-balanced underhung rudder



3.2 Vessel particulars FC "LIEBE"

Name of vessel:	"LIEBE"
Operator and owner:	(Surname) , Heiligenhafen
Port of registry:	Heiligenhafen
Nationality / Flag:	Federal Republic of Germany
Fisheries call signal:	SH 8 - SSR 1112
Ship's call letters:	DKAF
Type of vessel:	Fishing cutter – side-set trawler-
Crew:	3 persons
Classification:	Sailing Permit Certificate See-BG dated 30.7.1999 valid up to 20.7.2003
Year built:	1951
Building yard:	Schiffswerft Sakuth, Heiligenhafen
Length overall:	21.31 m
Length between perpendiculars:	19.80 m
Width overall:	5.77 m
Draft:	
Height:	2.55 m
Gross tonnage:	62
Building material:	Wood
Main engine:	Deutz / MWM TBD 234 V
Engine rating:	220 kW
Propeller:	Fixed-pitch propeller
Speed:	9 kn
Steering gear:	Manual hydraulic



4 Investigation of course of voyage/course of casualty

4.1 MV "GINA-R."

MV "GINA-R." was on a voyage from Amsterdam, Netherlands, via the Kiel Canal, to Kalmar, Sweden.

The vessel left the Brunsbüttel lock at 07.08 h on 13 February and proceeded along the Kiel Canal as a free runner. It left the Kiel lock at 15.00 h and then moored at the Thiessen quay in Holtenau for the night. At 05.00 h on 14 February 2003 MV "GINA R." left Kiel bound for Fehmarn Belt. The bridge was manned by the German Master and owner and the Russian 1st Mate.

Both VHF units were switched to channel 16 and the radar set, type Koden, was set to the 3 sm range ahead. Off Fehmarn Belt, approx. 3 sm ahead, a Dutch Motor Coaster known to the Master was running with the same easterly course. Visibility was impaired by dense fog to between 50 and 100 m. The wind came from NW with a force of 2 Bft. The sea was calm.

At about 10.00 h MV "GINA R." collided with the port side of the Fishing Cutter "LIEBE". At the time of the collision the speed of MV "GINA R." was 9 kn and that of the Fishing Cutter "LIEBE" 3.7 kn.

4.2 Statements by the Master of MV "GINA-R."

At a heading course of 105° the vessel was proceeding at a speed of 9.8 kn. Visibility was practically zero at the time. There was a great deal of traffic in the main channel of Route T. The buoys in the protected area were starboard ahead. The starboard wheelhouse door was open. Since the main engine was running very quietly, all other noises could be heard easily. At 9.55 h the 1st Mate reduced speed to approx. 7.5 kn since visibility was only 50 m. The signal "Caution" was given.

Due to the reduction of the main engine speed the Master interrupted his breakfast and went up onto the bridge. The outlook on deck was instructed to make the anchor gear ready. A first glance at the radar showed that the ferry running into Puttgarden and the buoys in the fishing protection area could be seen well. The Master further stated that no echo from the wooden cutter was visible on the radar screen and that no sound signal or warning call could be heard on VHF channel 16, and that the Fishing Cutter "LIEBE" suddenly "stuck" onto his stem. The cutter crew were able to climb onto the deck of "GINA R." via the stem and the unmanned cutter ran on at full speed and with the tow net and was immediately out of sight. The cutter turned one round to starboard and approached MV "GINA R." at full speed on a level with the engine room. The Master then manoeuvred ahead. The cutter proceeded approx. 0.5 m behind the stern and was quickly lost from sight again. The engine of MV "GINA R." was stopped. Unfortunately the tow line was caught in the rudder or propeller so that MV "GINA R." was towed slowly aft. By dropping the starboard anchor and three length of chain it was possible to stop the cutter. At 10.50 h the Rescue Cruiser "EDUARD ZIMMER" went alongside and transferred the cutter crew to the cutter. The towing gear was cut and the cutter proceeded to Heiligenhafen. Visibility slowly improved and was approx. 100 to 200 m. The mate and a deckhand of "GINA R." discovered on searching for a radar reflector of

the cutter that the radar unit (scanner) of the cutter was running again, which had not been the case at the time of the incident. The crew of MV "GINA R." reported to the Master that radio music had been heard from on board the cutter. He also stated that MV "GINA R." had made a large echo on the radar screen. After the diver reported that the rudder and propeller were clear, the vessel continued its voyage to Kalmar.

4.3 Fishing Cutter "LIEBE"

The Fishing Cutter "LIEBE" had been on a fishing voyage since 11 February 2003. The vessel was crewed by the Master and owner, with fishing certificate BKü and C-Mot, and two deckhands. The vessel first fished in the Howachter Bay and then off Fehmarn. Altogether six catches were on board. The last catch was taken on board at 06.00 h.

On 14 February 2003 at about 07.00 h in the morning approx. 1 sm south of buoy K.O.6 the net was set out and the vessel fished in south-easterly direction approx. 1 sm south of channel H. From about 09.00 h visibility deteriorated to approx. 0.5 sm. One deckhand was on the bridge too. At about 09.30 h the vessel turned and towed in north-westerly direction on a course of approx. 310°.

Both radar sets had been running since the vessel left the port. At a distance of approx. 3 sm a vessel was seen on the radar set on the port side coming from the west. Visibility deteriorated increasingly and after the other vessel approached with the same course, at a distance of approx. 0.5 sm the fog signal long-short-short for a towing fishery vessel was given. When the vessel came into sight the engine was set at full speed ahead to avoid a collision and at the same moment the collision occurred. On leaving the vessel this position of the engine lever was not changed and the engine was not disengaged.

4.4 Statements by the Master of FC "LIEBE"

The Master stated that on recognising the other vessel at a distance of 3 sm, as "right of way vessel" he had maintained his course and towing speed so as not to irritate the other vessel. The other vessel had still been running at full speed at the time of the collision and had jammed the wheelhouse so that there was a risk that his cutter would have been pushed under. He and his two crew members had helped each other to rescue themselves on board the Motor Coaster. He had then gone up to the bridge and had asked the Master in so many words whether this had really been necessary. Whereupon the Master of the Motor Coaster had answered that he had neither seen him nor had he heard a signal from him, while twisting the knobs on one of the radar sets. Only one of the two radar sets had been in operation and the radar image had been disastrous so that nothing could be seen. The Master of the Motor Coaster had said that he would first switch on the second radar set and only after being repeatedly requested he sent off an emergency call.

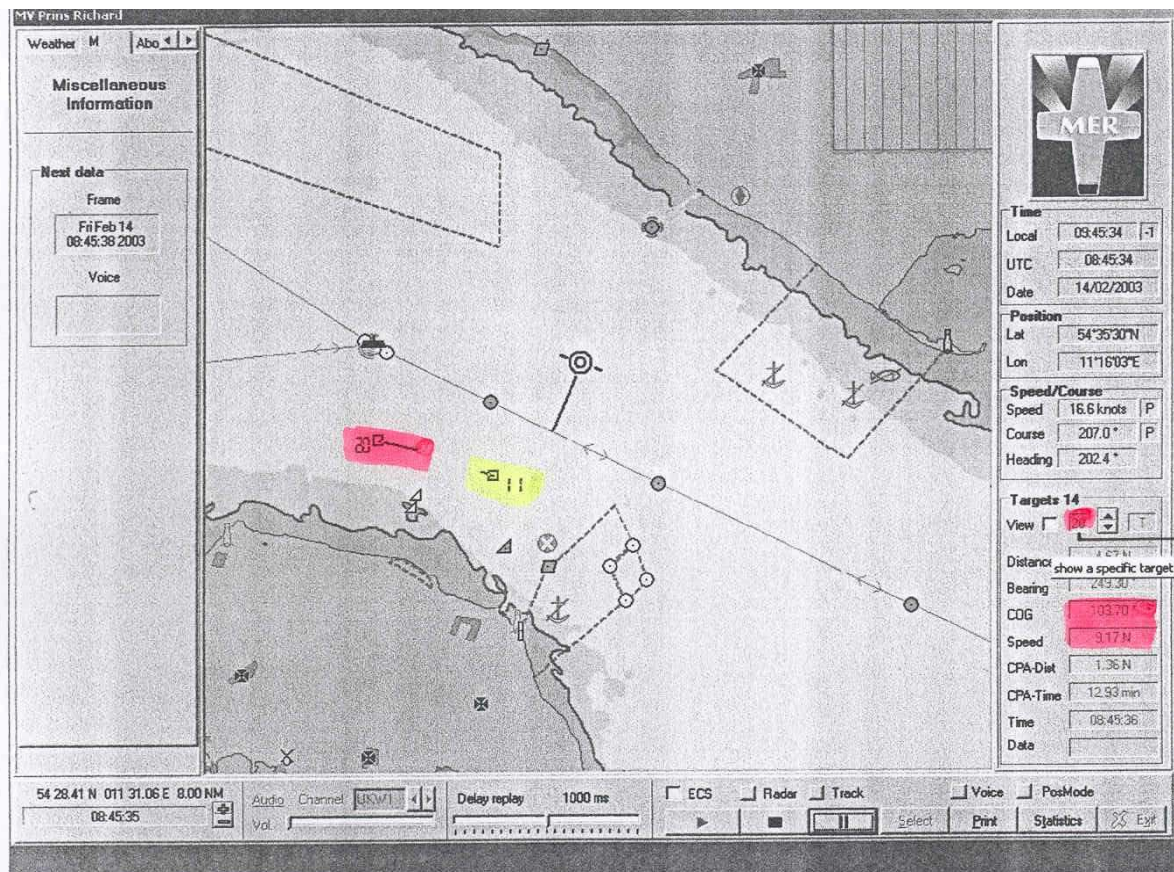
During this time the cutter had been running on without anyone on board until its fishing gear caught in the stern, displaced the Motor Coaster and caused the Master to drop anchor. After the Master of the Motor Coaster had twiddled with the radar set again, the cutter could be seen clearly on the radar screen at a distance of approx. 200 m. The rescue boat "EMIL ZIMMERMANN" from Puttgarden had arrived in the meantime and took him and his crew over and back to the cutter to stop the engine. On inspection of

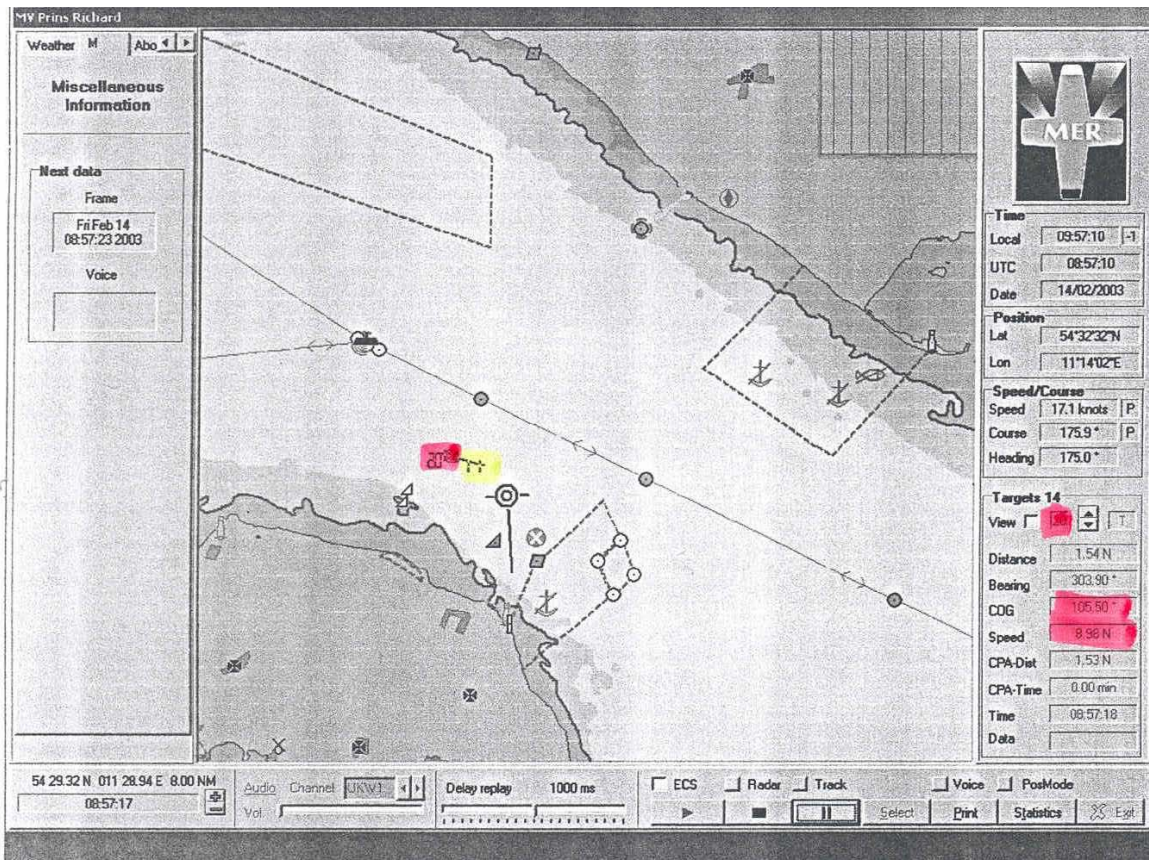
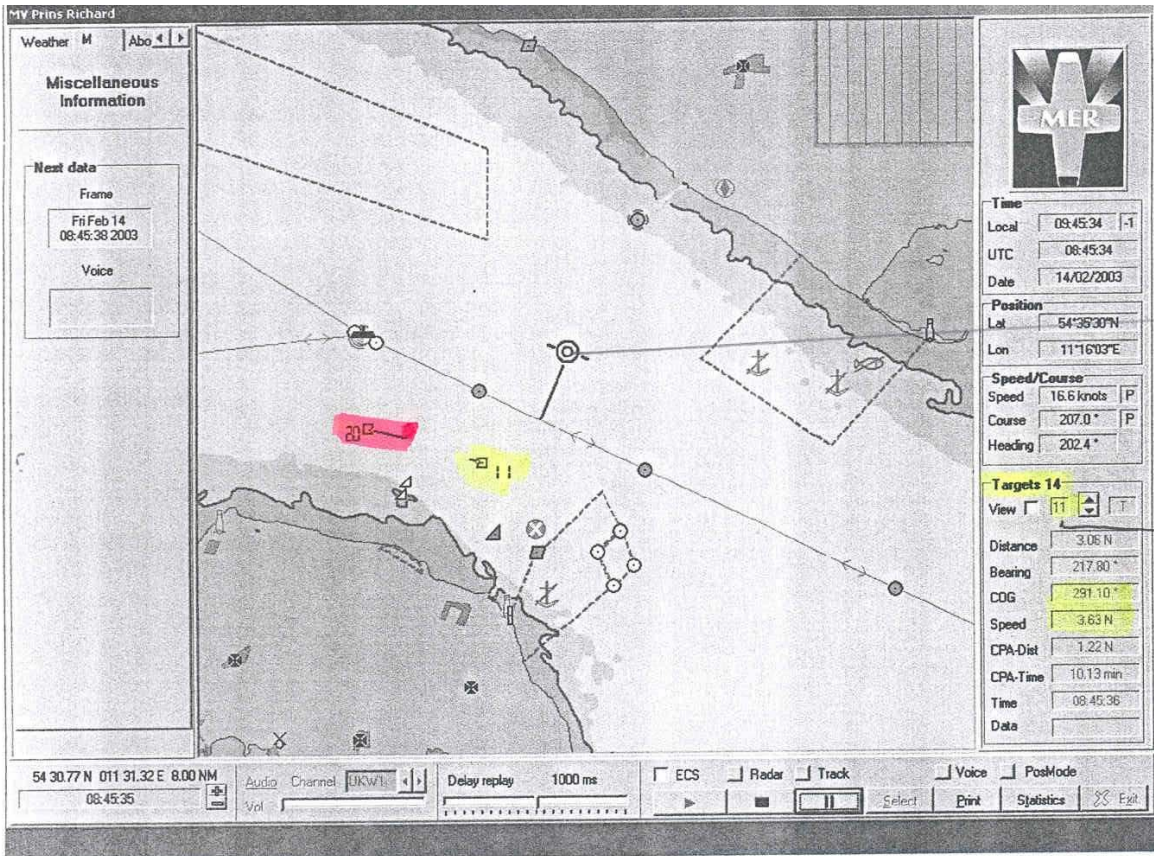
the vessel it was ascertained that water was standing 0.5 m high in the fish hold. The fishing gear could not be recovered since the hydraulic lines had been ripped off and had to be cut. The radar set that had been pulled completely out of its anchorage was still intact. With a drainage pump additionally taken over from the rescue boat and escorted by the rescue boat, the vessel reached its home port of Heiligenhafen under its own power at 13.45 h.

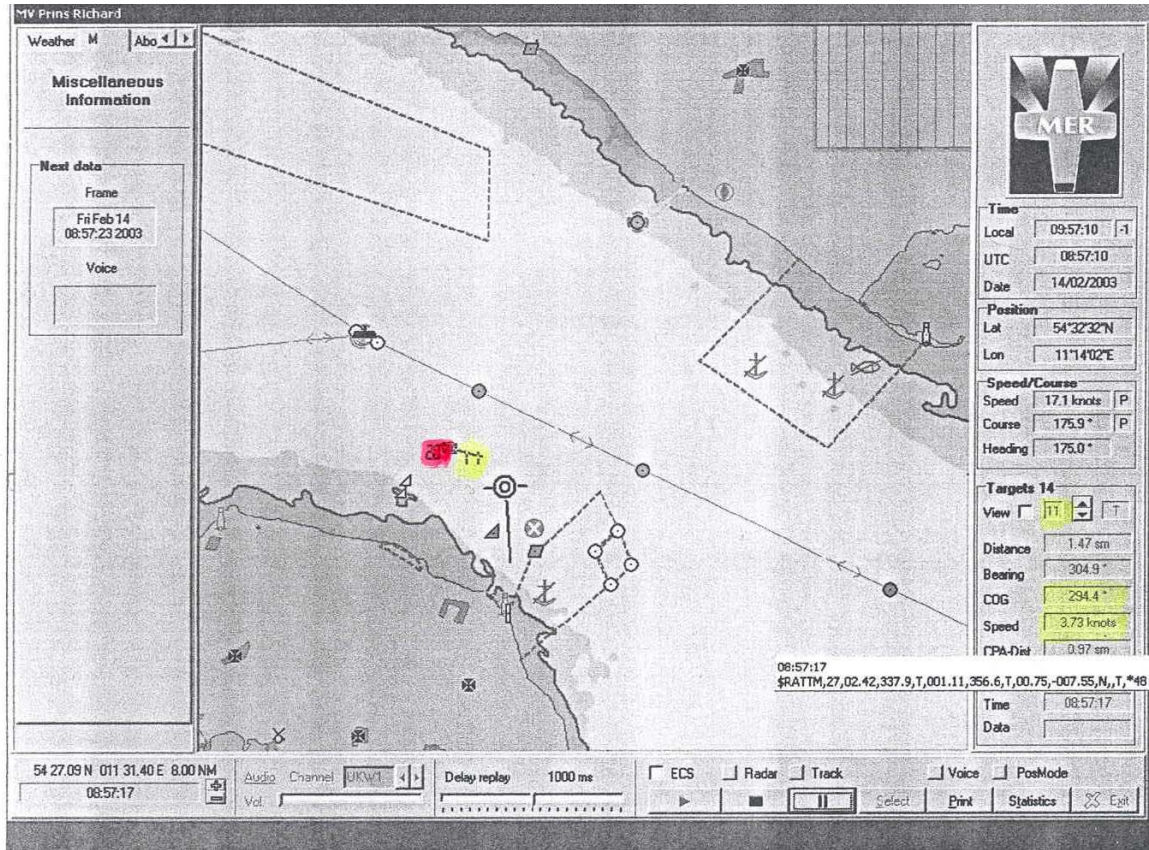
4.5 Radar images from on board the Ferry "PRINZ RICHARD"

The radar images of the course of the collision were recorded and stored on board the Ferry "PRINZ RICHARD".

Target 20 (red) is MV "GINA R." and Target 11 (yellow) is the Fishing Cutter "LIEBE"



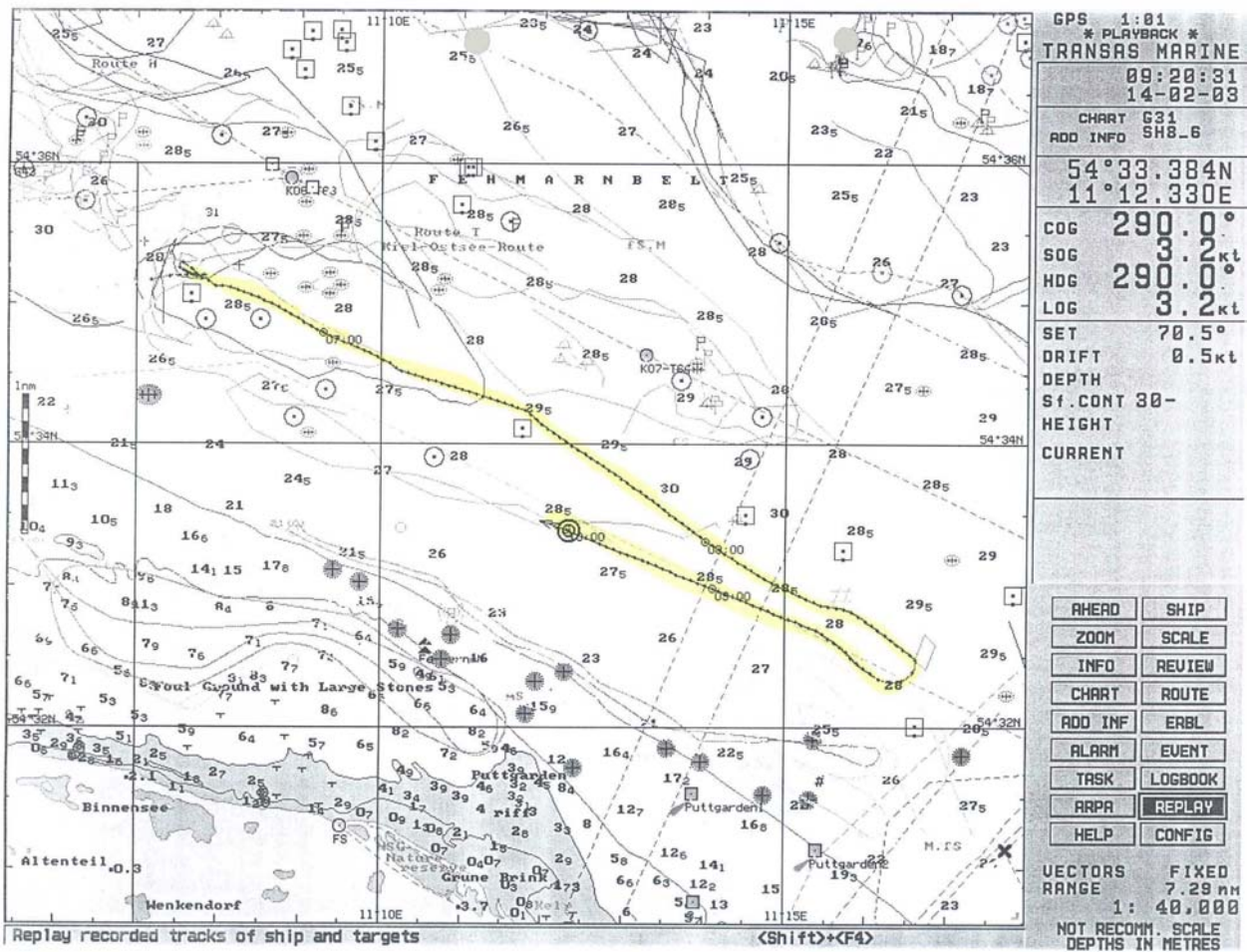




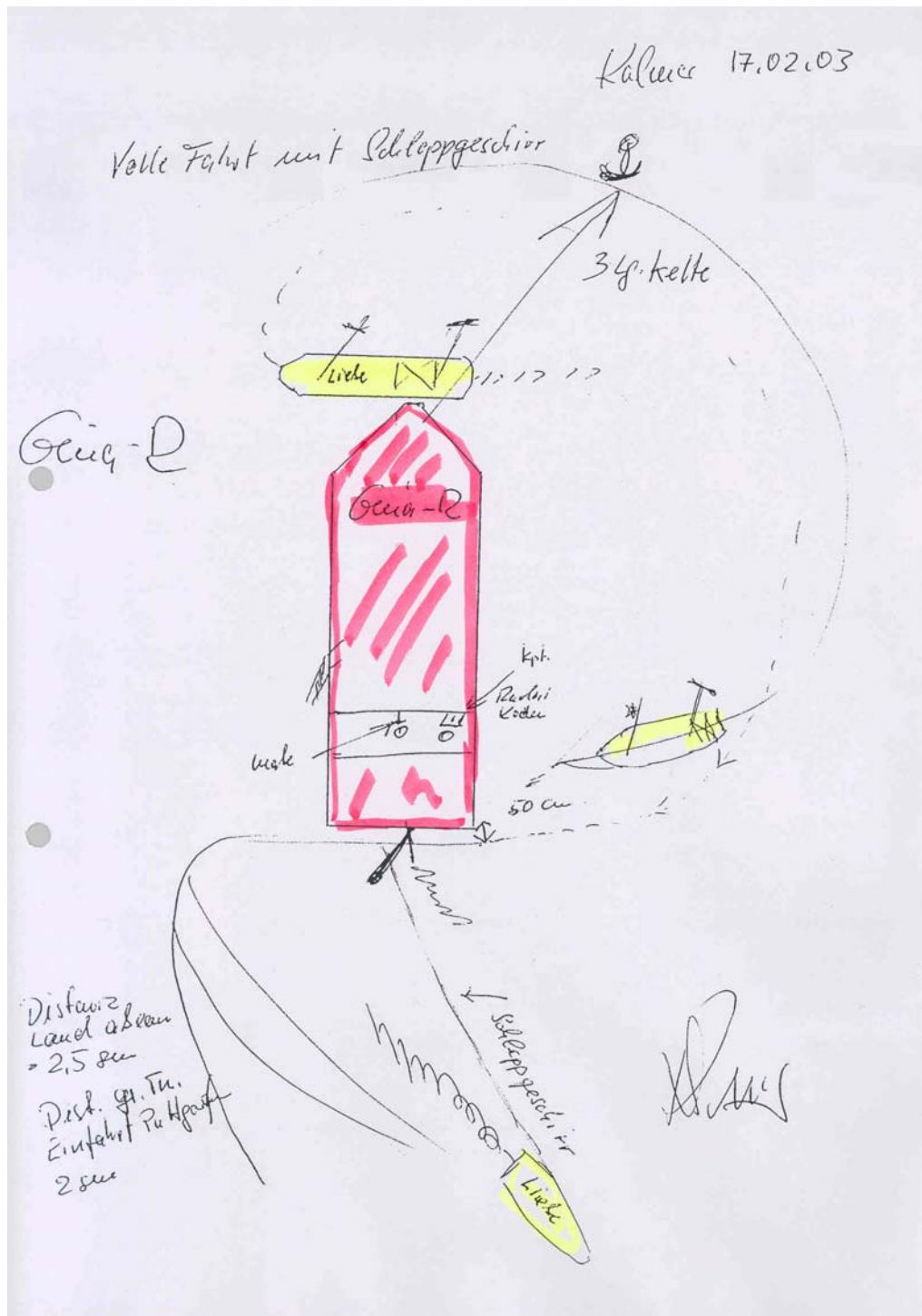
4.6 Print of the electronic chart from on board FC "LIEBE"

The electronic sea chart system on board the Fishing Cutter "LIEBE" is a configuration of a system not authorised by the Bundesamt für Seeschifffahrt. This sea chart was used in addition to the existing paper charts as a plotting aid. The system clock of the sea chart computer was approx. 22 min and 50 sec fast and was not automatically corrected since the computer was not connected to GPS.

The time at which the vessel reversed its course was 09.08 h and the time of collision with time correction after this was 09.59 h local time.



4.7 Sketch of the accident from on board MV "Gina-R."



Full speed with towing gear
3 chain lengths
Master Radar set Koden
Towing gear
Distance land ... 2.5 sm
Distance entrance Puttgarden 2 sm

5 Summary of the damage / Photos of the damage

The damage to the Motor Coaster "GINA-R." comprises three small dents and paint abrasion at the stem.



The Fishing Cutter "LIEBE" was heavily damaged on the port side, at the stem and the wheelhouse, so that a relatively log stay in the yard became necessary.

Damaged port side



Wheelhouse port side



Main deck port side



6 Summary of the casualty

No technical failure of the navigation equipment and auxiliary equipment was ascertained on board either vessel.

It was not possible to determine finally whether all sound signals in accordance with Collision Rule 35 "Sound signals in restricted visibility" were given and heard by the parties to the collision.

The Master of the Fishing Cutter "LIEBE" says in his written statement that he maintained his course and towing speed as right of way vessel so as not to irritate the other vessel. The Rules 15 "Crossing situation", 17 "Action by stand-on vessel " and 18 "Responsibilities between vessels " of the Collision Rules are superseded by Rule 19 "Conduct of vessels in restricted visibility".

The Master of MV "GINA R." states that shortly before the collision he reduced the service speed. According to the radar images stored on board the ferry "PRINZ RICHARD" both vessels proceeded at unreduced speed up to the point of collision, despite visibilities of about 50 m.

Under the existing traffic and weather condition the two Masters did not use all possibilities available to them to obtain a complete overview of the situation and the possibility of the risk of a collision.

Rules 6 "Safe speed" and 7 "Risk of collision" of the Collision Rules were not observed sufficiently on both vessels. In the close range situation with locating purely by radar, both vessels should have taken countermeasures at an early stage.

The investigation was conducted in conformity with the law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Law - SUG) of 24 June 2002. According to this the sole objective of the investigation is to prevent future accidents and malfunctions. The investigation does not serve to ascertain fault, liability or claims.

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