

Interim Investigation Report 138/22

Very Serious Marine Casualty

Person Over Board Resulting in Fatality on Board the Sailing Yacht SPEEDY GO on the Flensburg Firth on 8 April 2022

24.02.2023



Pursuant to the second sentence of Article 28(1) of the Law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Law – SUG) in conjunction with the second sentence of Article 14(2) of Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector, the Federal Bureau of Maritime Casualty Investigation publishes an interim investigation report within a period of 12 months of a very serious or serious marine casualty if it is not possible to complete the corresponding investigation report within that period.

This interim investigation report should not be used in court proceedings or proceedings of the Maritime Board. Reference is made to Article 34(4) SUG.

The German text shall prevail in the interpretation of this interim investigation report.

Issued by:
Bundesstelle für Seeunfalluntersuchung (BSU)
Federal Bureau of Marine Casualty Investigation
Bernhard-Nocht-Str. 78
20359 Hamburg
Germany



Director: Ulf Kaspera Tel.: +49 40 3190 8300

Tel.: +49 40 3190 8300 Fax: +49 40 3190 8340 posteingang@bsu-bund.de www.bsu-bund.de



Table of Amendments

Page	Amendment	Date



1 FACTUAL INFORMATION

1.1 Photograph of the Ship



Figure 1: Sailing yacht SPEEDY GO under sail1

1.2 Ship's Particulars

Name of ship: SPEEDY GO

Type of ship: Pleasure craft, sail-training vessel;

sailing yacht, Salona 44

Flag: Germany
Port of registry: Hamburg
Call sign: DG2167

Owner: Schoenicke + Reinecke Yacht GmbH

Shipping company: Jochen Schoenicke SKIPPERTEAM Ges.m.b.H.

Year built: 2014

Shipyard: AD-BOATS Ltd., Croatia Classification society: Germanischer Lloyd

Hull length: 13.50 m
Length of waterline: 11.45 m
Breadth overall: 4.19 m
Draught (max): 2.10 m
Displacement: 9.50 t
Engine rating: 41.0 kW

Main engine: Yanmar 4JH 5-E

¹ Source: Ship operator, in this photo a larger headsail is rigged than on the day of the accident.



Ref. 138/22

Hull speed: 8.2 kts (calculated)

Hull material: Glass-fibre reinforced plastic (GRP)

Hull construction: Built using vacuum infusion, "strongback"² made of

stainless steel

Minimum safe manning: $1 (2)^3$

Segelfläche: 135 m² total, jib: 35 m²

1.3 Voyage Particulars

Port of departure: Flensburg, Germany
Port of call: Marstal, Denmark
Type of voyage: other, international

Manning (crew): 1

Draught at time of accident: $D_f= 2.1 \text{ m}$, $D_a= 2.1 \text{ m}$

Pilot on board: No Number of fellow sailors: 5

1.4 Marine Casualty Information

Type of marine casualty: Very serious marine casualty, person over board

resulting in fatality

Date / time: 8 April 2022, 12:19 (UTC +2)

Location: Flensburg Firth

Latitude / longitude: $\phi = 54^{\circ} 53.20^{\circ}N$, $\lambda = 009^{\circ} 35.62^{\circ}E$

Voyage segment: Restricted waters

Place on board: Foreship

Consequences: Death of the skipper, hypothermia of a fellow sailor

² Reinforcement of the hull for the distribution and absorption of the forces in the boat, into which the shrouds are fitted and on which the keel is suspended.

³ If the yacht is sailed for more than 10 hours within 24 hours, it must be manned by another crew member (qualified with the German pleasure craft licence "Sportbootführerschein-See") in addition to the skipper (qualified with the German pleasure craft licence "Sportküstenschifferschein").

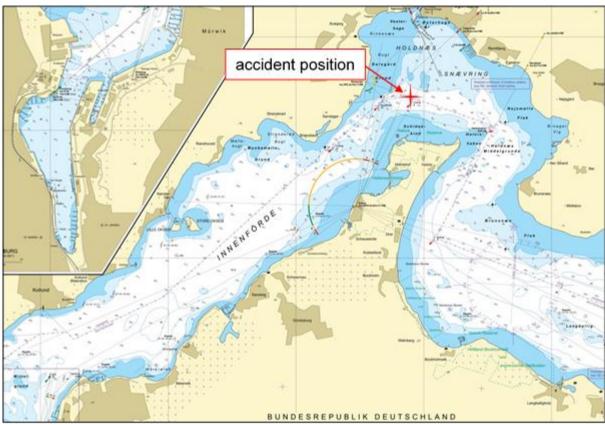


Figure 2: Extract from nautical chart DE26 - Flensburger Förde, INT136004

1.5 **Shore Authority Involvement and Emergency Response**

Agencies involved:

Lyngby Radio, JRCC⁵ Denmark, MRCC⁶ Bremen, Danish fire brigade Sønderborg Brand & Redning. Danish police of South and Sønderivlland. German-Danish police liaison office (Joint Centre Padborg), Flensburg water police.

Resources used: On board:

Horseshoe lifebuoy with line, POB⁷-marker buoy with further horseshoe lifebuoy, swimming ladder, VHF⁸ radio incl. DSC⁹, mooring line, blankets, mattress

⁴ Source: German Federal Maritime and Hydrographic Agency (BSH).

⁵ JRCC – Joint Rescue Coordination Centre, coordinates all measures within the scope of search and rescue (SAR) services in the area of aviation and maritime navigation as the responsible control centre.

⁶ MRCC – Maritime Rescue Coordination Centre, coordinates SAR-activities at sea.

⁷ POB – person over board.

⁸ VHF - very high frequency, term for radio communication on very high frequencies (30 MHz to 300 MHz) between marine radio stations (ships) and coastal radio stations.

⁹ DSC – digital selective calling, used to establish a radio connection with selected radio stations, e.g. for communication during emergencies at sea.



Externally:

German rescue boat WERNER KUNTZE, Danish rescue boat ALSIN from the fire brigade, several ships and yachts in the area (VIKING, FINNJA, LOOP, TRÄUMCHEN), Danish SAR helicopter M 405, German SAR helicopter, ambulance RTW-Glücksburg

Actions taken:

On board:

Throwing the horseshoe lifebuoy with line to the casualty - establishing a line connection, starting the yacht's engine, recovering the sails, tack¹⁰ over port bow, distress call via DSC and emergency communication with Lyngby Radio on VHF channel 16, installing the swimming ladder, throwing a mattress over board, making a bowline in a mooring line and hoisting on board a fellow sailor also floating in the water, firing of pyrotechnic distress signals, search for the skipper to the east of the accident position

Externally:

Request for rescue units by Lyngby Radio, picking up the hypothermic co-sailor with the WERNER KUNTZE, recovery of the skipper from the water by SAR helicopter M 405, transfer of both persons to different hospitals

_

¹⁰ Sailing manoeuvre in which the bow goes through the wind and the sails are subsequently on the other side of the ship.



2 SUMMARY

2.1 Sequence of Events

2.1.1 Trip Preparation & Familiarisation

At the time of the accident, there were six people on board the SPEEDY GO - a skipper and five fellow sailors. The day of arrival for the planned 5-day "heavy weather trip" from/to Flensburg was Thursday, 7 April 2022. In addition to the SPEEDY GO, three other yachts of the same ship operator were set to depart on a heavy weather trip the following day: EASY GO, MARIN and PIRANJA.

After the arrival of the fellow sailors, in the evening, together the provisions for the upcoming trip were stowed away and the skipper prepared dinner, which was shared together. The skipper and his fellow sailors did not know each other before the trip. In the course of the evening, around 22:00, the skipper said goodbye for a meeting with the skipper of the EASY GO. Meanwhile, the fellow sailors exchanged information about previous experiences at sea, but did not talk extensively about their expertise and knowledge.

The next morning, 8 April, all the fellow sailors had breakfast together. The skipper did not get involved in the conversation. He seemed dominant to the fellow sailors when he wanted something done, but at the same time unapproachable. After breakfast and when everyone was dressed, the skipper gave the fellow sailors a (safety) familiarisation. Already one hour before casting off, he insisted that all fellow sailors put on their life jackets. According to the skipper, he had his own life jacket. Afterwards, several fellow sailors had the impression that the (safety) familiarisation was short, superficial and incomplete and that some topics were only addressed upon enquiry by the fellow sailors. No muster list with the distribution of tasks in case of emergency and no co-skipper¹² was specified. The rig or the sails of the yacht were not part of the familiarisation.

Shortly before casting off, at around 10:50, heavy gusts of sleet and hail reached the marina, which were deliberately waited out before the casting off manoeuvre began.

2.1.2 Course of the Voyage until the Skipper Went Over Board

At 10:57, after the PIRANJA, the SPEEDY GO was the last of the four yachts to cast off, heading north out of Flensburg harbour. The skipper himself performed the departure manoeuvre under propulsion. Later, a headsail was set by the fellow sailors while the skipper steered. The SPEEDY GO then continued to sail downwind without using the engine.

When, after casting off and setting the jib, all the fellow sailors were sitting together in the cockpit and the skipper was at the wheel, he asked the fellow sailors who wanted to take over the helm. The skipper gave the instruction to follow the sailing yacht

_

¹¹ Trip designation by the ship / tour operator.

A co-skipper supports the skipper in all aspects of the ship's management and acts as his or her deputy, i. e. takes over command on board and thus the team leadership, should the skipper be indisposed.



PIRANJA and to avoid the buoys. After handing over the helm to a fellow sailor, he went below deck to the salon, laid down on a bench/couch on the starboard side, and covered himself with a blanket.

Around 11:30, the fellow sailors alternated at the helm while being on a northeasterly compass course of about 52° . In the meantime, the skipper briefly came on deck and then laid down again. The wind came from west to north-west with a force of 5-6 Beaufort, in gusts 7-8 Beaufort. The water temperature was about 5° C. The foresail was on the starboard bow and the helmsman stood on the port helm to have a good view ahead with the current sail position.



Figure 3: View to starboard (aft/abeam) at 11:58 13

¹³ Source: Fellow sailor.

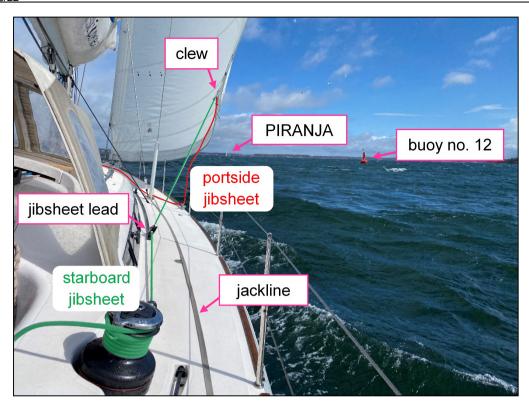


Figure 4: View ahead at 12:0614

At 11:58 the skipper came back on deck and instructed one of the fellow sailors to move the port jibsheet lead all the way forward. At 12:07, 70 minutes after departing the marina in Flensburg, the SPEEDY GO passed the buoy pair 11/12 (cf. Figure 4) and approached the buoy pair 9/10 at a speed of about 7 kts. Up to this point, the yacht had sailed on north-easterly compass courses between 40° and 56° since passing Fahrensodde at around 11:25, with the sail setting almost unchanged (true course approx. 50° between buoy pairs 13/14 and 11/12). Ahead of the SPEEDY GO, the PIRANJA gybed¹⁵ to steer an east-southeasterly course and continue to follow the fairway of the Flensburg Firth in the direction of Holnishaken. The current helmsman asked the skipper about five minutes after the PIRANJA's manoeuvre whether the SPEEDY GO should now also gybe. This was answered in the affirmative, while the course of the manoeuvre or the distribution of the individual tasks were not determined by the skipper.

The helmsman asked the other crewmembers aloud: "Ready to gybe?" Two fellow sailors answered "Ready". The co-sailor at the starboard sheet looked towards the one at the helm, who replied that he should look at the sail instead. The skipper, standing next to the helmsman, became - by the perception of the fellow sailors - somewhat impatient and said energetically, "Do it now!" In response, the helmsman quickly initiated a rapid course change to starboard. His co-sailor failed to release the starboard sheet in time and to veer it, whereupon the skipper shouted loudly at him, "Open, open, open!" He looked at the skipper and finally opened the sheet.

¹⁴ Source: Fellow sailor, inscriptions and colouration of the jib sheets by BSU.

¹⁵ Sailing manoeuvre in which the stern goes through the wind and the sails are subsequently on the other side of the ship.



During the manoeuvre, the sheets of the foresail became entangled underneath the end mount of the spinnaker pole¹⁶, which was stored at the mast:

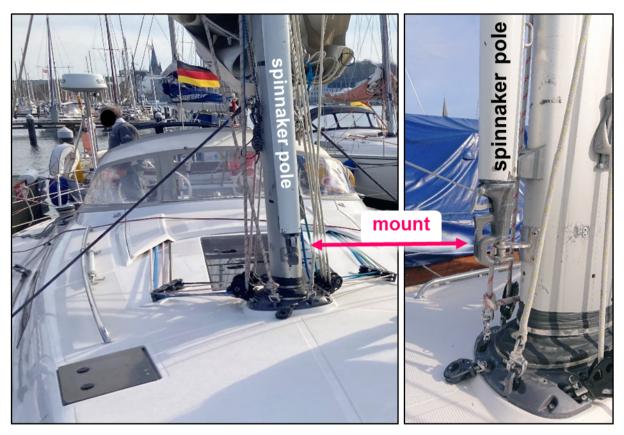


Figure 5: Spinnaker pole attached to the mast where the sheet became entangled¹⁷

There was hardly any speed left in the ship, the wind was coming from astern, the yacht was relatively upright without heeling, the headsail was flapping in the wind and did not come free. The skipper decided without further ado to go over the port side of the yacht onto the forecastle himself to clear the sail and the sheets. He was wearing neither a lifejacket nor any other safety harness to which a lifeline could have been attached, so he did not secure himself. Once at the mast, he first tried to free the sheets himself and then shouted to his fellow sailors in the cockpit for someone to come forward to help him. One of the fellow sailors then went over the starboard side to the forecastle. He was wearing a lifejacket - as were all the other co-sailors - but did not secure himself with the 3-point lifeline attached to the lifejacket.

The skipper instructed the fellow sailor to release the sheets. He at first stood next to the fellow sailor, then went back to the port side a little further aft and knelt between the mast and the sprayhood, below the railing. The sailor was able to release one of the sheets by pushing it downwards behind the end mount. Before he could free the second sheet, the skipper shouted loudly at him, "Now hurry, hurry, hurry!"

¹⁶ Used between the mast and the windward sheet on the windward clew of the spinnaker to boom out the spinnaker to windward / keep it open against the wind.

¹⁷ Source: BSU, inspection on 12.04.2022.

¹⁸ Belt strap with karabiners that acts as a safety line between the lifejacket / safety harness and a suitable anchor point on board to prevent people falling overboard.



Immediately afterwards, he had freed the second sheet, slid backwards a little in a crouched position - from the raised deck area to the lower, side deck passage - and stood up. On his way aft to the cockpit, he turned around and saw that the skipper had moved towards the bow. With the sheets free again, wind came into the foresail, which was now on port bow, so the yacht heeled to port and picked up speed. At the same moment, the skipper straightened up on the raised deck area - about abeam of the mast or a little further forward - and fell backwards over the rail and into the water.

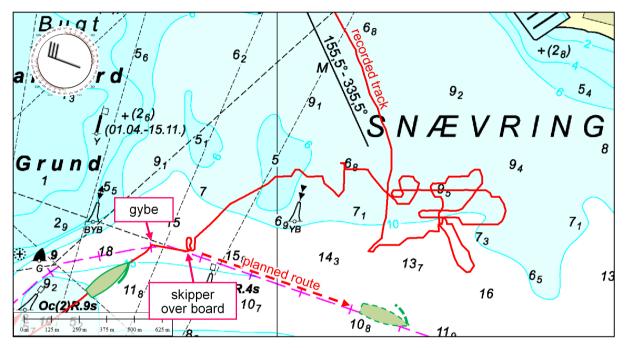


Figure 6: SPEEDY GO's track19

2.1.3 Rescue Measures

The fellow sailor on the forecastle immediately shouted loudly, "Man over board!" The starboard horseshoe lifebuoy with position-marking POB buoy was given overboard. One of the fellow sailors started the engine on the starboard side of the cockpit, took over the helm there as well without communication and initiated a course change to port. Meanwhile, the port side horseshoe life ring attached to a self-feeding line (cf. Figure 9) was also thrown into the water. In order to reduce the yacht's speed due to the forward thrust of the headsail, both jibsheets were released. The jib killed loudly in the wind, causing unrest on deck. The headsail was then taken in collectively.

¹⁹ Source: Navigational chart: BSH, recorded track: Fellow sailor.



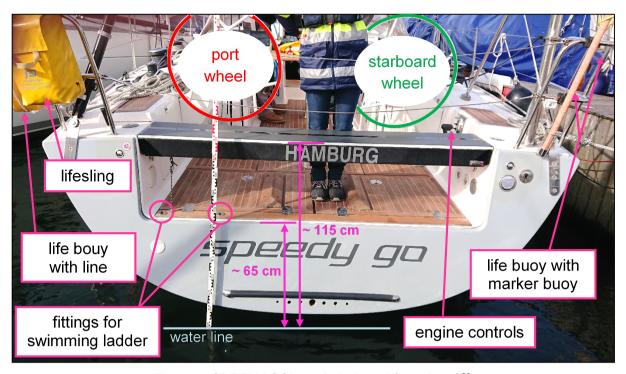


Figure 9: SPEEDY GO's cockpit viewed from the aft²⁰







Figure 8: Starboard horseshoe life buoy with POB marker buoy²⁰

Page 13 of 21

²⁰ Source: BSU, inspection on 12.04.2022.



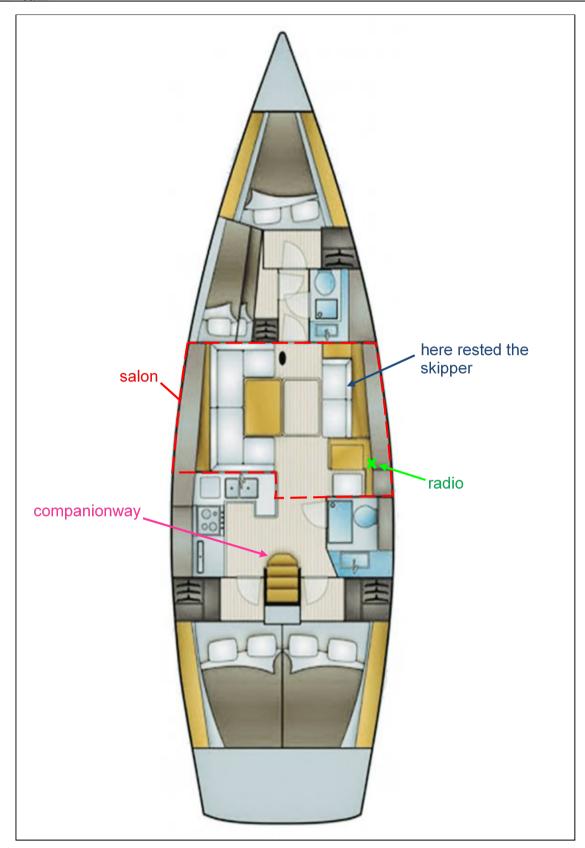


Figure 10: Sketch of SPEEDY GO's interior²¹

²¹ Source: Ship operator, inscriptions and colouration by BSU.



The skipper managed to swim in a prone position to the line of the port side horseshoe life buoy and grabbed it. He also held on to the lifebuoy and was thus able to be pulled to the stern of the yacht.

The skipper shouted from the water to his fellow sailors, "The swimming ladder!" The swimming ladder was then retrieved from the starboard side storage locker and inserted into the designated receptacles on the port side at the rear of the cockpit (cf. Figure 9 and Figure 12). The skipper was no longer able to climb the swimming ladder and was held by both hands as he was also unable to hold onto the ladder on his own.

One of the fellow sailors voiced that one of them had to make a distress call, whereupon another sailor went downstairs to the salon and pressed the "Distress" button on the radio. He was then downstairs most of the time and dealt with the subsequent radio traffic with various radio stations.



Figure 11: Desk / chart table with radio and other equipment²²

At 12:25, the radio message "MAYDAY, MAYDAY, MAYDAY. MMSI 211664360, call sign DG2167, man over board." was transmitted on VHF channel 16. The coastal radio station Lyngby Radio responded and asked questions about the position of the SPEEDY GO and the person in the water. Further, the SPEEDY GO was requested to keep the person in the water in sight and to stay close to the person with the vacht.²³

Outside in the cockpit, one of the fellow sailors climbed over the aft bench and first onto the top rung of the swimming ladder and, together with two others, tried to grab the skipper and pull him up. He was not secured by a line while doing so. He then

²² Source: BSU, inspection on 12.04.2022.

²³ Audio recording of the radio communication provided by the DGzRS.



climbed all the way onto the swimming ladder, first down two rungs and then all the way into the water. His life jacket immediately activated upon contact with the water and was very firm and tight around the collar. He manoeuvred himself in the water behind the skipper and tried to lift him up. The fellow sailors still only managed to pull the skipper out of the water up to about his chest.

In the cockpit, one of the mooring lines was prepared and a bowline²⁴ was tied into the end. The skipper was then tossed the line and asked to put one foot through the eye and pull it over his thigh to his crotch, but he was unable to do so. The fellow sailor in the water could not help the skipper either, as he could not reach far under the water due to the inflated collar of his life jacket.

During the rescue attempts, the swimming ladder had to be constantly held in place, as it kept lifting out of its intended mount on deck and had to be pushed backwards to hold it inside the slotted hole (cf. Figure 12). The skipper's face was repeatedly several centimetres under water before he resurfaced.

²⁴ Knot that forms a non-tightening, fixed loop with various applications.



Figure 12: Swimming ladder (replica) SPEEDY GO²⁵

To fix it in place, the swimming ladder was inserted into the fitting and then pushed sternwards. The ladder shown here is a replica that was manufactured immediately after the accident.

The swimming ladder first detached on one side and then on both sides altogether, went overboard and sank instantly. The skipper and his fellow sailor in the water immediately drifted off the boat several metres in different directions.

At 12:27 the loss of the swimming ladder and at 12:29 a second person in the water wearing a yellow lifejacket were reported to Lyngby Radio. Immediately afterwards, Lyngby Radio sent out a MAYDAY relay in English and Danish to all radio stations in the area asking for assistance.

The fellow sailors threw one of the mattresses overboard in the hope that the skipper would be able to hold on to it, but he was unable to do so. The strong wind caused the mattress to drift east very quickly, but it did not sink. The skipper floated in the water on the port side of the yacht, face down.

²⁵ Source: BSU, rescue experiment series in Flensburg on 26.10.2022.



Several parachute signal rockets were fired. In the meantime, Lyngby Radio had made several attempts to contact the SPEEDY GO by radio to inform that helicopters were now en route to the yacht's position.

It was decided to proceed to the fellow sailor who was drifting in the water. With the help of the floating line from the portside lifebuoy, the fellow sailor reached the stern of the yacht, and the previously prepared mooring line with bowline was thrown to him. With one foot he went through the eye of the bowline, then pulled it further up around his thigh and held on to the line leading up into the cockpit. The end of the line was then placed on a winch to secure it against unintentional rushing out. The fellow sailor on the radio came up into the cockpit from below and saw the situation on deck. His co-sailor who had gone over board had already been pulled a little out of the water, he then grabbed him and let his weight fall backwards. By joining forces and winching up the line, the fellow sailors thus managed to rescue their colleague from the water at around 12:35.

He was immediately brought down to the salon to take off his wet clothes and warm up with several blankets. At 12:36, the SPEEDY GO reported to Lyngby Radio that one of the people in the water had now been rescued. In return, the sailors received information that the German rescue boat WERNER KUNTZE would arrive alongside the SPEEDY GO in about 15 minutes and that helicopters were also on their way.



Figure 13: Rescue boat WERNER KUNTZE²⁶

At 12:40, Lyngby Radio informed the SPEEDY GO that helicopters would be on scene in eight to ten minutes. The skipper was no longer in sight after the rescue of the fellow sailor. The POB marker buoy was also no longer in sight. Only the mattress that had previously been thrown over board and quickly drifted away could still be made out visually. The search for the skipper was continued under power at

Page 18 of 21

²⁶ Source: DIE SEENOTRETTER – DGZRS / STEPHAN MÜHR: Archive photo.



full speed further to the east. As the mattress was drifting in this direction, the sailors assumed that the skipper would drift away in a similar way.

A few minutes later, a rescue helicopter was noticed by the fellow sailors. With another signal rocket, they drew attention to their emergency. The skipper could be located from the air and was retrieved from the water at around 12:50, about half an hour after he had fallen over board.



Figure 14: Rescue helicopter M 405 arrives on scene, 12:4727

At 12:52, the rescue boat WERNER KUNTZE, manned by volunteers, which had left Langballigau 4.5 nm away in the direction of the SPEEDY GO about eight minutes after the distress call, arrived on scene and went alongside the yacht. The rescue boat took over the fellow sailor who had also previously gone over board and first brought him to Schausende from where he was taken to hospital in Flensburg by ambulance. It turned out that his core body temperature had dropped to 32 °C.

2.1.4 Further Course of Events

Shortly after the WERNER KUNTZE had departed, the Danish rescue boat ALSIN from the fire brigade association of the municipality of Sonderborg (Sønderborg Brand og Redning) approached the SPEEDY GO. The crew of the ALSIN told the sailors on the SPEEDY GO that the sailing yacht should follow the ALSIN. Together they proceeded in convoy to a jetty in Egernsund (DK), where they arrived at 13:20. At the jetty in Egernsund, the local police with several officers were already awaiting

.

²⁷ Source: Fellow sailor.



the arrival of the sailing yacht. The fellow sailors were attended to by the forces of the Sonderborg fire brigade at the scene, where they were informed that both the skipper and their fellow sailor had been taken to hospital.

Later, the Danish police of South and Sønderjylland stated that the skipper was in need of resuscitation after being taken out of the water. He was taken by rescue helicopter to Odense Hospital (DK), where he arrived at 13:25 with no vital signs, resuscitation efforts continued and death was finally officially pronounced at 14:00.

Chronology of the Accident

10:57	Departure from Flensburg
12:18	Gybe, sheets get caught on spinnaker pole
12:19	Sail comes free, skipper straightens up and falls over board
	Starting the engine, taking in the jib, life buoys and POB buoy over board
12:21	Skipper at the stern of the yacht, installation of the swimming ladder
12:25	Distress call transmitted
12:26	Fellow sailor over board
12:27	Swimming ladder over board
12:35	Fellow sailor rescued from the water
M	Search for the skipper to the east
12:47	Helicopter on scene
12:50	Skipper recovered from the water
12:52	Rescue boat WERNER KUNTZE on scene, taking over hypothermic sailor
13:20	Arrival of SPEEDY GO in Egernsund

Figure 15: Timeline with key events

The bold white times were taken from various pieces of evidence, while all other times are approximate.



2.2 Investigation by BSU

The BSU investigated the following aspects in the context of this very serious marine casualty:

- Similar accidents,
- qualification, experience and equipment of the skipper,
- qualification, experience and equipment of the crew,
- ship's manning,
- weather conditions,
- seamanship on board the SPEEDY GO / on yachts, in particular
 - trip preparation and familiarisation,
 - crew (resource) management,
 - donning of personal life-saving equipment,
 - self-protection on deck,
- shipbuilding and ship's equipment, in particular
 - storage of the spinnaker pole at the mast,
 - swimming ladder and emergency ladder,
 - attachment of life-saving appliances,
- emergency response management, in particular
 - POB manoeuvres,
 - rescuing people from the water,
 - hypothermia and behaviour in the water,
 - alerting of rescue services as well as
- certificates of competency for recreational navigation.

In the meantime, the investigation of the accident has been completed and the BSU is currently in the process of preparing the corresponding investigation report. Since the one-year deadline set by the European Union and transposed into national law by the Federal Republic of Germany for the publication of the investigation report cannot be met, the public is being informed about the status of the investigation into this very serious marine casualty by means of the publication of an interim investigation report.