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The Motor Tanker VISTEN, PCKP - in collision
with the Fishing Vessel EROS, SDGK on
25 October, 2006



REPORT

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The Swedish Maritime Safety Inspectorate investigates accidents and near-accidents from a safety point of view. The sole objective of investigation is to prevent future accidents and malfunctions. It is not the purpose of the investigation to apportion liability or blame.

Summary

The Dutch product tanker VISTEN was heading from Karlshamn, Sweden, to Gdansk, Poland, at the same time as the Swedish fishing vessel EROS was on her way to Karlskrona to unload after having finished the fishing.

On the bridge of the VISTEN was 2nd deck officer, who plotted a fishing vessel, which later turned out to be the EROS, to starboard at a distance of abt. 6 M (one nautical Mile = 1852 metres).

At 1653 the 2nd deck officer got an engine alarm which caught his attention so that he did not maintain continuous control of the movements of the fishing vessel. When the 2nd deck officer had attended to the engine alarm he returned to the radar screen and tried to call the fishing vessel, which then was close, on VHF channel 16 but got no answer. He gave 5 short signals with the whistle but could not notice any reaction in the fishing vessel. The CPA (Closest Point of Approach) was then under 0.5 M and the 2nd deck officer took an evasive action to port. The evasive action, however, failed and the ships collided.

On board the EROS the wheel house was manned by the master, who kept watch by means of the radar unit, which was set at 6 M. He could not see any other ships in the immediate surroundings.

About 1650 the master turned to the chart table which was located on the port side in the aft part of the wheel house. Through a window he then saw a "blue wall" very close and he realized that they would collide with another ship. The master switched to manual steering and shifted the helm to starboard. However, the collision was a fact before the turn started.

The collision took place on 25 October, 2006, at 1654 in position N 55°54',47 E 015°26',76.

Summary of causes, facts, observations and recommendations

The investigation shows that the deck officer of the VISTEN was so busy by an engine alarm that he completely lost his attention to the EROS, which was close by.

None of the ships had a look-out, which is a contributing cause of the accident.

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None of the ships contacted the MRCC (Maritime Rescue Coordination Centre) to inform about the occurrence.

The visibility to port from the wheel house of the EROS was to a certain extent limited, since the sun was shining in from there.

Account of Facts

The ships

VISTEN

Name:	VISTEN
IMO No:	8819732
Call sign:	PCKP
Port of registry:	The Netherlands
Ship owner:	Almarco B.V. the Netherlands
Operator:	Barber Ship Management AS Norge
Gross tonnage:	4 060
LOA:	99 metre
Breadth:	17 metre
Draught:	6.53 metre
Classification society:	Lloyd's Register
Year built:	1990
Construction material:	Steel
Propulsion power	3 275 kW
Crew	11

The VISTEN was built in 1990 at Giessen Shipyard at Krimpen aan den IJssel, the Netherlands.

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The ship was constructed with the accommodation area and navigation bridge in the deck house by the stern on weather deck and the engine room underneath. The bridge had open wings.

The VISTEN was a double hull construction which means that she had double bottoms and double sides.

Considering the accident, the most interesting equipment on the bridge was two radar units of make Furuno which were both in operation and set at 3 M and 6 M at the time of the accident. There was also a GPS (Global Positioning System) in operation.

The VISTEN was also equipped with AIS (Automatic Identification System).

The main engine was of make Bergen Diesel AS and generated 3 275 kW. At full speed the VISTEN made about 12 knots. A transverse propeller (bow-thruster) was installed at the bow.

The ship was loaded with gasoil.

Port State Controls

Since 1999 the VISTEN has been subject to 14 port state controls. At the controls deficiencies were found occasionally but none of such importance that they caused detention.

The crew

The crew consisted of the master, 3 deck officers, the chief engineer, one engineer officer, 3 deck crew, 1 engine crew and one other personnel.

The EROS

Name:	EROS
Fishing vessel registration:	KA-16
Call sign:	SDGK
Port of registry:	Hasslö
Ship owner:	K.A. 16 Eros AB
Gross weight:	83
LOA:	20.15 metre
Breadth:	6.04 metre
Draught:	3.3 metre
Classification society:	Swedish Maritime Administration
Year built:	1961
Construction material:	Wood
Propulsion power:	350 kW
Crew:	3

The EROS was built by the father of two of the present owners at Hasslö shipyard in 1961. In 1977 the vessel was bought by the present owners.

The vessel was reconstructed in 1984, when she among other things got a new engine and the wheel house was made higher and longer. The fuel oil tanks were renewed and she got a new mast. Also propeller, electrical equipment and hydraulics were exchanged.

In the year 2000 the engine was changed once more.

The EROS was a side-trawler with the wheel house in the aft. From the wheel house half a flight of stairs led down to the mess room which was located aft of the wheel house.

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Under the wheel house was the engine room, which you could reach from a door on the starboard side of the deck, but also via a staircase from the mess room.

Ahead of the engine room was the cargo hold. The cargo hatch was in the centreline about 6 metres from the bow. The port side of the deck was built-in with a shelter deck running from the stem to the aft edge of the wheel house. A gutting machine was placed on the port side of the hatch.

Considering the accident, the most interesting equipment in the wheel house was two radar units of make Furuno and Decca respectively. One of the units was running and set at 6 M at the time of the accident.

The GPS of make Shipmate 2500 was also in operation. It showed plotter on the screen but no traces of the ship's route.

The EROS was at the accident run by automatic steering of make Decca.

There were two VHF units on board. At the occurrence one was set on channel 16 and the other one on channel 72. The volume was turned up to a maximum since the motor noise was loud in the wheel house.

All navigation equipment and other equipment in the wheel house was in perfect condition at the accident.

The radar unit in operation, a VHF and a GPS were placed on the port side of the centreline. A helmsman's chair was placed slightly to starboard of the centreline.

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Fig. The steering desk.

There were five windows in the front and two on each side to port and starboard. One window was on the aft port side and the door, which also had a window was on the starboard side.

The visibility from the wheel house was comparatively good, although it to a certain extent was limited by the window frame. On the port side the echo sounder was placed between the windows which made the visibility to port somewhat limited. A chart table was on the aft side to port.

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Fig. Chart table and echo sounder.

The propulsion machinery consisted of one Scania which generated 350 kW and was connected via a gear to a propeller with 4 reversible blades. To the machinery a bilge pump was connected via belt driving. There were also an electric pump and a deck pump on board.

Two fuel oil tanks that could hold 3 m³ each were placed to starboard and to port of the engine room.

The life saving equipment comprised among other things a life raft for six persons and four immersion suits.

The Crew

The crew comprised the master, 1 engine officer and 1 deck crew.

The master was 61 years old and well familiar with the equipment and manoeuvrability of the vessel. He had been working on the EROS since he was about 16 years old and was son of the man who had the vessel built. The master had the competence of Deck Officer Class VI and held a certificate on competence as a master in fishing vessels.

The engine officer held a certificate as Ship's Mechanic B.

All three crew members had passed a safety course for fishermen in 2004.

The Weather

On the occasion it was daylight and the visibility was good. The wind was westsouthwest abt. 8 m/sec. The wave height was about 1 metre.

Miscellaneous

Times stated in this report refer to Swedish summer time (UTC + 2 hours).

At the occurrence none of the ships contacted the MRCC to inform about what had happened.

A Coast Guard ship arrived about 30 minutes after the accident. Due to the fairly rough sea no coast guard could board the VISTEN.

When the VISTEN arrived in Gdansk the Polish authority made an inspection of the ship. They took photocopies of notes made in the ship's log. The master, the officer of the watch (OOW), one A/B and the engine officer also gave written reports on their opinion of the occurrence.

Onboard the VISTEN different "watch levels" were applied, depending on which waters the ship was sailing and if it was daylight or darkness. At the time of the accident watch level 1 was applied, which means that only the OOW was on the bridge. According to the "bridge procedure manual" of the VISTEN watch level 1 could be applied when the ship was in open sea and at daylight.

At watch level 2 the bridge should be manned by OOW and one look-out. Watch level 2 should be applied for example when the VISTEN was sailing in "areas with light traffic".

Collection of Facts

- Report on accident at sea from the EROS.
- Statement and interview of the crew of the EROS.
- Written statements of the crew of the VISTEN.
- Records from the Coast Guard's hearing of the master of the EROS.
- Information from the AIS.

- Radar recording made by the Swedish Naval Control.
- Information from the database Seasearcher.
- Information from the port state control database Sirenac (Paris Mou).
- Exerpt from the ship's log of the VISTEN.
- VHF traffic recorded by the MRCC.
- Survey-report from Blekinge Marine Independent Surveyors.

Course of Events

According to the VISTEN

The VISTEN left Karlshamn at 1415 hours on 25 October, 2006, heading for Gdansk, Poland.

The second deck officer went on duty for his watch at 1420. Both radar units were set at 6 M and two VHF units were set at channels 16 and 13 respectively.

The deck officer plotted a fishing vessel at a distance of 6 M. He calculated a CPA at about 1.5 M and that the VISTEN would pass ahead of the fishing vessel.

He continuously checked the movements of the fishing vessel and noted that the CPA changed but the two ships were not on a collision course. The deck officer then changed the scale of the starboard radar unit to 3 M.

Shortly after he noted an alarm on the engine control panel about overload. The alarm then kept the deck officer busy and he did no longer maintain a continuous check on the movements of the fishing vessel. He adjusted the propeller pitch in accordance with instructions he got from the officer in charge of the engineering watch.

The deck officer then returned to the radar screen and called the EROS on VHF channel 16 but got no answer. He gave 5 short signals with the whistle but noted no reaction from the fishing vessel. The CPA had

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lessened to below 0.5 M and the deck officer took an evasive action by shifting to port. The manoeuvre however was not successful and the ships collided. At the collision the port side of the fishing vessel hit the starboard side of the VISTEN ahead of the deck house. According to the deck officer the ships were on the same course at the collision, which he considered to be minor. The collision took place at 1654 hours.

He states that they got no information from the fishing vessel as to what damage she suffered.

The master had left the bridge at 1500 hours and informed the second officer to reduce the propeller pitch in case they got an engine alarm. When the master left the bridge the visibility was good and the traffic density in the area was normal. Therefore the master ordered watch level 1. The ship made about 10 knots and the course was 124°.

At 1655 hours the master was in his cabin as he heard the ship signalling. He immediately went to the bridge and could see that the VISTEN was in a turn to port and that a fishing vessel was close on the starboard quarter of his own ship. The fishing vessel then collided with the VISTEN and the master reduced the propeller pitch to a minimum.

After a while the distance to the EROS was about 100 metres and both ships were adrift.

At 1700 inspection was made on the own ship and it was established that only scrapes was the result. The master called the EROS on the VHF. Due to language difficulties he then called the Swedish Coast Guard to inform about the situation. The master was told to stay in his position and wait for further instructions.

At 1735 the fishing vessel continued her voyage towards Karlskrona at a speed of about 9 knots.

At 1840 one could see on the radar that the EROS reached Karlskrona.

At 1925 the master of the VISTEN got permission from the Swedish Coast Guard to continue her voyage.

An AB was busy painting on the afterdeck of the starboard side of the VISTEN. At about 1700 he heard the ship giving short signals and could see a fishing vessel approaching the starboard quarter.

The VISTEN was in a turn to port and the fishing vessel bumped her side to the side of the VISTEN ahead of the deck house.

The chief engineer of the VISTEN has stated that alarm sounded at 1550 and 1643 hours about too high temperature of the cooling water of the main engine. The officers of the bridge had been informed that under such circumstances the load on the engine should be reduced. These alarms in most cases sounded in connection with changes in wind, sea, current, or depth.

After phone contacts between the OOWs on the bridge and in the engine room the load on the engine was reduced. At 1705 hours the master informed that there had been a minor collision with a fishing vessel.

The chief engineer immediately checked that there was no water ingress in the ship. He was then stand-by in the engine room until 1937 hours.

According to the EROS

The EROS left Hasslö, Sweden, at 0445 hours on 25 October, 2006, to fish for cod in the waters southwest of Utklippan. At about 0715 the trawl was shot in position 55°52'N 015°28'E. The trawl was first towed to the south, then to southwest and finally to north.

At about 1550 hours the trawl was taken in. The EROS was then in position 55°50',78N 015°20',22E.

At 1620 the course was set towards Saltö, Karlskrona, where the catch of cod would be landed. The EROS was run by automatic steering at course about 035° and the speed was 8–8.5 knots.

The master was in the wheel house, the engine officer in the cargo hold and the deck crew was on deck. The windows and the door of the wheel house were closed during the voyage.

The master kept look-out by means of the radar unit which was set at 6 M. At regular intervals he checked course and radar screen. He made a small note in the fishing log but was otherwise not busy with tasks that could disturb his attention.

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The sun came in from port and the master remembers that he for that reason, about 5 minutes prior to the collision, draw a sun curtain at the forward window to port. The sun curtain was of a material that reduces the shining but does not limit the visibility. At the time the master did not see any other ship through the window. Neither did he see an echo on the radar screen that could indicate a close quarters situation.

At about 1650 hours the EROS was still on course 035° and no other ships were visible in close vicinity. The master turned towards the chart table which was to port on the afterside. He then saw through the window “a blue wall” close by and he realized that they would collide with another ship. The master immediately switched to manual steering and turned to starboard. However, the turn had not started before the collision was a fact.

The “blue wall” turned out to be the VISTEN, which at the collision passed the EROS fairly quickly. The ships were more or less on parallel courses at the occurrence. In the master’s opinion the VISTEN was the overtaking vessel since she so suddenly appeared from aft on the port side of the EROS.

At the collision the stern of the VISTEN bumped into the stern of the EROS. As the ships then parted, the stem of the EROS bumped into the VISTEN.

The master has stated that before the collision there was not radio communication between the two ships. Neither did he hear the VISTEN sounding any signal. The VHF volume was set on maximum and during the voyage he had heard the radio communication on channel 16.

Directly after the accident the master called the VISTEN on VHF channel 16. He then called the Coast Guard and asked them to contact the VISTEN. A Coast Guard ship arrived at the site after about 30 minutes.

The EROS suffered great damage but could go by its own engines to her port of registry at Hasslö.

The two crew members were busy gutting and packing fish and had not observed the collision until it was a fact.

According to information from the AIS and the radar records of the Swedish Naval Control

From the AIS can be read that the VISTEN prior to the occurrence was going on course about 120° at a speed of about 9.5 knots.

At 1653 hours she started a turn to port and her speed was then 9.8 knots.

The following data can be read from prints from the AIS:

At 16-53-30 hours the course was 113° and the speed 9.8 knots.

At 16-53-50 hours the course was 088° and the speed 9.8 knots.

At 16-54-10 hours the course was 057° and the speed 9.2 knots.

At 16-54-20 hours the course was 038° and the speed 7.9 knots.

At 16-54-30 hours the course was 036° and the speed 7.6 knots.

At 16-55-00 hours the course was 019° and the speed 5.4 knots.

The EROS was not equipped with AIS.

Data from the radar records of the Swedish Naval Control show that the course of the VISTEN at about 1639 hours was 124° and the speed about 10 knots. At the same time the course of the EROS was 037° and her speed about 8 knots.

At 1650 hours the VISTEN was going course 120° at a speed of about 9 knots. The simultaneous course of the EROS was 047° and her speed about 8 knots.

According to the recording the EROS was run between 1639 and 1650 hours on a course over ground (COG) of about 041° and the VISTEN at a COG of about 122°.

Analysis

According the recording of the Swedish Naval Control the ships were on a distance of about 2.5 M from each other at 1639 hours. The EROS then had the VISTEN about 055° to port and the bearing has on the whole not changed after that.

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At 16-54-30 hours the VISTEN was in a turn to port at course 036° which was approximately the course that the EROS kept. This fact indicates that the collision took place at this point of time.

The sun shone in from port and the master of the EROS remembers that he, about 5 minutes prior to the collision, therefore draw a sun curtain at the forward window on the port side. When the curtain was drawn the master was in such a position that he had a good view over the port side. The fact that he at that moment did not see the VISTEN is probably due to the fact that he was dazzled by the sun.

For at least about 15 minutes the master of the EROS did not notice, neither visually nor on the radar screen, that the VISTEN was more or less on an unchanged direction about 055° to port. The position of the sun in combination with the fact that the visibility to a certain extent was limited to port may have influenced the course of events. Also, the sunshine may have reflected upon the radar screen, which contributed to the fact that the master did not see the VISTEN.

According to the chief engineer of the VISTEN an engine alarm sounded at 1643 hours. The deck officer of the VISTEN had then for about 10 minutes been busy with the alarm until he initiated the turn to port at 1653 hours. During these approx. 10 minutes the ship had more or less operated blindly and with no control of other ships' movements.

The deck officer of the VISTEN has stated that he plotted a fishing vessel when it was at a distance of about 6 M. The CPA then indicated that the VISTEN would pass about 1.5 M ahead of the fishing vessel, which turned out to be the EROS. The deck officer of the VISTEN checked the movements of the EROS continuously and could see that the CPA changed slightly but they were not on a collision course. He then altered the scale of the starboard radar to 3 M. This must have been done just before the engine alarm sounded.

The VISTEN was the ship to keep out of the way to the EROS, following the International Regulations for Preventing Collisions at Sea (COLREG), rule 15. When the engine alarm sounded the EROS was in the close vicinity of the VISTEN, whose deck officer should have continued to make continuous observations of the movements of the EROS in order to check possible risk for collision. He was probably so focused on the engine alarm

that he did not realize that it took as long time as 10 minutes to reset the alarm.

According to rule 17 the EROS was the vessel to keep her course and speed. The rule also states that “When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision”. The manoeuvrability of the EROS was such that had the master caught sight of the VISTEN a little earlier he would have had time to take evasive action to avoid the collision.

At the accident no look-out was appointed on any of the ships. In Chapter VIII, Section 3–1 of the STCW Code are stated the basic principles to observe for watchkeeping on the bridge. The Code states that the officer in charge of the navigational watch may be the sole look-out in daylight on certain occasions.

In accordance with the ”Bridge Procedure Manual” of the VISTEN watch-level 1 could be applied in open sea in daylight. Watch-level 2 should be applied when operating in open sea in daylight and when operating in light traffic areas. When the master left the bridge he ordered watch-level 1. In the area where the VISTEN was, the traffic situation is changeable and the ship was also approaching the traffic passage going from the Bornholm Gut towards the south point of Öland. The master should therefore at least have ordered watch-level 2 when he left the bridge.

The deck officer of the VISTEN should directly have called a look-out to the bridge when the engine alarm sounded. He could also have called the master to the bridge, who could have assisted with navigation while the deck officer was busy with the alarm.

Also the EROS had the possibility, in accordance with the Swedish Maritime Administration’s Regulations (SJÖFS 2005:7) on Watchkeeping, to have the OOW as a sole look-out in daylight. In Part Three, Section 14 of the regulations is stated, among other things, that “OOW on the bridge may be a sole look-out in daylight, provided that, on each such occasion, the situation has been carefully assessed and it has been established without doubt that it is safe to do so”.

The fact that the master of the EROS did not catch sight of the VISTEN until the collision more or less was a fact demonstrates that look-out has not been maintained in accordance with the regulation.

The VHF unit onboard the EROS, which was set on channel 16, was located to port of the centreline and the volume was set at a maximum. The deck officer of the VISTEN has claimed that he tried to call the EROS on channel 16 shortly before the occurrence. The master of the EROS was standing so that he should have heard if anyone was calling on the VHF. The recording of the VHF traffic on channel 16 made by the MRCC has been checked. There are no indications in the recording that the VISTEN has called the EROS prior to the collision.

The deck officer of the VISTEN has also stated that he gave 5 short signals with the whistle shortly before the collision. The master of the VISTEN, who was then in his cabin, heard these signals and immediately went to the bridge. Onboard the EROS no one in the crew heard these signals. The master of the EROS was in the wheel-house where windows and door were closed. One crew man was in the cargo hold. The other one was at the gutter machine, which was located to port of the cargo hatch. The location was built-in with a shelter deck which stretched all the way to the afterside of the wheel-house. The noise from the motor of the EROS was loud and this, in combination with the location of the crew, has probably contributed to the fact that no one heard the signals.

None of the ships contacted the MRCC to inform about the accident. The master of the EROS has said that he thought it to be sufficient that he had contacted the Coast Guard after the accident. The EROS could go to port by her own engine without assistance.

Nothing indicates that fatigue has been a contributing factor to the occurrence.

Causes and Factors

- The deck officer of the VISTEN got an engine alarm which caught his attention so that he for about 10 minutes totally lost his attention to the EROS, which was in close vicinity.
- There was no look-out in any of the two ships.

- The master of the VISTEN ordered watch level 1 in stead of level 2 when he left the bridge.
- The position of the sun to port of the EROS in combination with the fact that the visibility to port from the wheel-house to a certain extent was limited.

Observations

None of the ships kept a look-out in accordance with regulations in force.

Recommendations

At several accidents insufficient look-out has been a direct or contributing cause to the occurrences happening at all. Thus there is cause to stress the importance of having a look-out. The look-out shall be well informed about his/her obligations and be a so called “active look-out”.

It is important always to ensure that the MRCC is informed about collisions and other occurrences. The staff at the MRCC are trained to quickly assess various situations in order to evaluate what efforts are needed. On this very occasion things might have gone another way and it would then have been of importance that the MRCC had received early information about the situation.

Damage

At the accident the crew member who was in the cargo hold of the EROS fell and his left hand was injured.

The EROS was so severely damaged that she was sold to destruction.