

UNITED STATES COAST GUARD

ADDRESS REPLY TO:
COMMANDANT
U.S. COAST GUARD
HEADQUARTERS
WASHINGTON 25, D.C.



MVI
(SOYA ATLANTIC - USS
DARBY a-5 Bd)

10 JAN 1961

Commandant's Action

on

Marine Board of Investigation; collision between the SS SOYA ATLANTIC (Swedish) and the USS DARBY (Destroyer Escort), vicinity of Cape Henry Light, 19 March 1960, with loss of life

1. The record of the Marine Board of Investigation convened to investigate subject casualty together with its Findings of Fact, Opinions and Recommendations has been reviewed.
2. At about 1945 EST, 19 March 1960 on a clear dark night the destroyer escort USS DARBY collided with the Swedish cargo vessel SOYA ATLANTIC at the entrance to the Chesapeake Bay approximately 1.9 miles, 048⁰T from Cape Henry Light. Two crew members from the DARBY were killed and one was injured. There were no personnel casualties aboard the SOYA ATLANTIC.
3. The testimony of the navigation witnesses of the two vessels varied as to the time of impact by eight minutes. Since the correct time could not be established from the evidence adduced the SOYA ATLANTIC's times have been reconciled with the DARBY time for the purpose of the following recapitulation.
4. The SOYA ATLANTIC, outbound from Baltimore in ballast arrived in the area north of Cape Henry and at 1922 began reducing speed preparatory to disembarking the pilot. The vessel was navigated to the westward of Tail of the Horseshoe buoys 3TH and 1TH so as to pass buoy 1TH 800 yards to port. At 1925 the engine was stopped and the vessel was placed on a heading of 160⁰T in order to make a lee for the pilot. The pilot launch was delayed slightly but at 1932 with the engines still stopped and the vessel making slight headway the pilot disembarked. At about the same time with the heading then 165⁰T the white lights and green side light of the vessel which later proved to be the DARBY were sighted 10 to 20 degrees forward of the port beam about 4 miles away. As soon as the pilot launch was clear, full ahead and a course of 115⁰T were ordered. As the vessel was coming left the master observed buoy 2A (LL 2406) on the radar and desiring to pass it abeam to port 1/2 mile off ordered the helmsman to come to 125⁰T. As the SOYA ATLANTIC approached buoy 2A the white and

red side lights of another vessel were observed almost dead ahead several miles away in the vicinity of buoy 2CB. At 1937 with the vessel ahead approximately five to six miles away the SOYA ATLANTIC altered course to 134°T. In the meantime the DARBY was still approaching on the port bow and it was anticipated that she would come right and pass to port. Buoy 2A was abeam to port 1/2 mile off at 1942 and the engineroom was notified of departure. When the DARBY had closed to about 1/4 mile the master, believing the DARBY to be getting too close, stopped the engine and sounded the danger signal. No signals were heard from the DARBY and observing no change in her heading or speed a long blast was sounded on the SOYA ATLANTIC's whistle and the rudder was ordered hard right. After about 30 seconds as the DARBY continued on a heading across the course of the SOYA ATLANTIC it became apparent collision could not be avoided by going right whereupon the SOYA ATLANTIC's rudder was shifted to full left and the engine was put on half astern. The SOYA ATLANTIC was heading directly for the DARBY's midship section when the master of the SOYA ATLANTIC ordered full astern. The engineroom bell book of the SOYA ATLANTIC shows the stop, the half astern and the full astern bells as having been received within a period of 1 minute. Shortly after the full astern bell the two vessels collided with the bow of the SOYA ATLANTIC striking the DARBY on the starboard side at almost a 90 degree angle. At the time of contact the SOYA ATLANTIC's forward speed was estimated to be between 5 and 8 knots.

5. The DARBY, en route from sea toward Little Creek Harbor passed buoy RB to port 1/2 mile off at 1938 on course 266°T speed 19 knots. At about this time several lights were observed in the vicinity of the Tail of the Horseshoe Channel approximately 4-1/2 miles away 15° on the starboard bow. The watch officer checked with the vessel's Combat Information Center to find out if any moving targets were among the lights. The Combat Information Center which had the main surface radar on the 7 mile scale reported no moving targets in that vicinity although a number of targets believed to be buoys were in evidence. No further requests for radar information were made and at no time up until the collision was the SOYA ATLANTIC observed on the radar although other targets were clearly visible. Between two and three minutes before the collision the port side light and then the range lights of a vessel bearing about 40 degrees on the starboard bow about 1500 to 2000 yards away were picked out of the background of lights ahead. The engines were ordered stopped and a few seconds later upon hearing four short blasts from the other vessel the order was given for full left rudder and engines back full. The DARBY sounded four short blasts followed by the collision alarm and another signal believed to be a four blast signal was heard from the SOYA ATLANTIC. As the DARBY came left the bow of the SOYA ATLANTIC appeared to pass down the DARBY's starboard

side and when about 100 feet away the rudder was put amidships and engines ordered all ahead full. Seconds later the bow of the SOYA ATLANTIC struck and holed the DARBY on her starboard side abaft amidships at about a 90 degree angle.

6. The two vessels separated after collision. The DARBY controlled the flooding and was towed into Norfolk. The SOYA ATLANTIC remained in the area after the casualty and later proceeded to Norfolk under her own power.

REMARKS

1. The Board concluded that the navigation situation was one of crossing vessels and that the principal cause of the collision was the failure of the DARBY to detect the presence of the SOYA ATLANTIC until the collision was imminent. The facts indicate that earlier visual detection of the SOYA ATLANTIC was hampered by background lights extending from the port bow to the starboard bow of the DARBY; however, the question of a proper lookout is also raised. In this connection the record disclosed that the forward lookout, an 18 year old seaman standing his fourth lookout watch, was stationed on the flying bridge atop the pilothouse and that he heard the whistle of the SOYA ATLANTIC at least 15 seconds before he was able to make out her lights and determine her relative position.

2. The Board further concluded that the DARBY's speed was excessive. The Board pointed out that the scene of the collision was an area where traffic converges from four main directions and is in proximity to the Virginia and Maryland pilot stations. Since the background lights impeded the ability of those on board to clearly locate objects ahead a more moderate speed was indicated. In this connection it was noted that radar was also considered to be a factor in this case. Although the reason the DARBY failed to detect the presence of the SOYA ATLANTIC by radar is not evident in the record there can be little doubt that the speed of the vessel was influenced by the absence of any reports of moving targets ahead.

3. The Board ascribed no fault to the SOYA ATLANTIC for her part in the collision. Notice was taken, however, of the improper "long blast" signal to indicate her turn to starboard in the final moments before collision and the fact that her lookout was stationed on the bridge, neither of which is considered to have contributed to this casualty.

4. As set forth in paragraph 27 of the conclusions the SOYA ATLANTIC as the privileged vessel in a crossing situation was justified in holding on as long as she did. The statement of the Board to the effect that she was further justified to maintain course and speed based on probability

that the DARBY was bound up the Chesapeake Bay and would therefore turn to her right at buoy 2A is not concurred in, however. In the absence of signals or other communication no vessel should attempt to predict the intentions of the other when one or more possibilities are open. As was established in this case the DARBY was not bound up the Chesapeake Bay but was headed directly toward Little Creek Harbor.

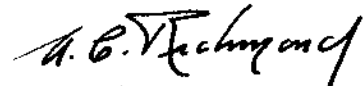
5. The Board's statement in paragraph 28 of the conclusions that the attention of the Officer of the Deck on the DARBY was diverted by the presence of his relief to whom he was turning over the watch is approved with modification. According to the record the OOD had only advised his relief of the vessel's course and speed, the location of Cape Henry Light and possibly one buoy when he terminated the relieving procedure and resumed his duties. The time elapsed was estimated at 30 seconds. Under the circumstances it is considered that this was not a factor in the case.

6. The Board's acceptance of 1945 EST as the time of collision is adequately supported in the record and is probably more nearly correct. On the other hand the record disclosed that the navigation witnesses on the SOYA ATLANTIC were keeping a close accounting of times by the bridge clock as well as the position of the vessel with respect to the buoys in the area. Accordingly it is considered more reasonable to assume that all times given by the SOYA ATLANTIC navigation witnesses were 8 minutes fast on the DARBY time rather than just the time of collision as stated by the Board in paragraph 30 of the conclusions.

7. The Board's conclusion in paragraph 33 is approved to the extent that the record contains evidence of negligence on the part of the Commanding Officer and the Officer of the Deck of the DARBY. Since the proper authority to act upon such evidence in this case would be the U. S. Navy a copy of this report will be forwarded to that agency.

8. Subject to the foregoing remarks the record of the Marine Board of Investigation is approved.

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A. C. RICHMOND
Admiral, U. S. Coast Guard
Commandant

After a full and mature deliberation, the Board finds as follows:

FINDINGS OF FACT

1. At about 7:45 p. m. (EST), 19 March 1960, the USS DARBY (DE-218), while inbound from sea after participating in military exercises, was in collision with the SS SOYA ATLANTIC, a Swedish merchant vessel, which was bound to sea from Baltimore, Maryland. Two crew members on the DARBY were killed and one seriously injured. There were no personnel casualties on the SOYA ATLANTIC. The DARBY sustained structural damage estimated at about \$350,000; the SOYA ATLANTIC, \$35,000. The collision occurred at or near position of latitude 36°56'.9 N and longitude 75°58'.7 W (distance 1.9 miles bearing 048°T from Cape Henry Light, (LL 2215); chart USC&GS No. 1222 encompasses the area.

2. a. The vessels involved were:

(1) USS DARBY (DE-218); length 306 feet; turbo-electric power plant; twin screw; H. P. per shaft 12,000; the vessel is equipped with two main bridge areas, one, the compartment wherein is located the chart table, steering and engine speed control mechanism and referred to as the pilot house, and forward of this on the same level, is the navigation bridge and is referred to as the open bridge. The forward bulkhead of the pilot house is fitted with several port holes. Forward of this bulkhead, a distance of about 6 feet, is the forward bulkhead of the open bridge. The open bridge is fitted with plexi-glass windows as shown in the photograph, Exhibit 20. The surface search radar was in operation prior to and at the time of the collision. The vessel's course was not being recorded by dead reckoning tracer; there was no "course recorder" on board.

(2) The SS SOYA ATLANTIC, O. N. 9498, Swedish merchant vessel, owned by Roderi A/B Walltank, Stockholm, Sweden; home port, Stockholm; operated as a tank-ore carrier; 16,266 gross tons; built in 1954; single screw; H.P. 8100; length 595 feet. This vessel was equipped with radar which was in operation at the time of collision. The vessel was not equipped with a course recorder. At the time of collision the vessel was in ballast; draft forward 17 feet, aft 26½ feet; the pilot house of the vessel is located about amidships with deck house and crew accommodations aft.

b. Crew members on the DARBY who lost their lives were:

- (1) JOHNSON, Thomas Edward (339-94-29) CSG3, USNR-R
- (2) CRANDELL, Charles Edward (258-28-55) MML1, USNR-R

c. The crew member on the DARBY who sustained injuries which required hospitalization was:

- (1) TRUSTY, James B. (446-13-61) CS3, USN

3. At the time of collision wind was easterly, force about 2; sea was light, easterly; weather was clear with good visibility; tide was ebb, current with an east-southeasterly set.
4. The required navigational lights of both vessels were burning during the time preceding impact.
5. There was no failure of equipment on either vessel to contribute to the collision.
6. On 19 March 1960, the SOYA ATLANTIC, hereafter referred to as the SOYA, departed Baltimore, Maryland bound down the Chesapeake Bay en route to Puerto de Hierro, Venezuela. On board as pilot for the state of Maryland was Mr. W. Anderson. The SOYA, without incident, completed the run down the Bay and while approaching the area where the pilot was to disembark, was navigated to the westward of the Tail of the Horseshoe buoys "3TH" and "1TH", so as to pass "1TH" about 800 yards to port. The engines of the SOYA were stopped and the vessel placed on a heading of 160°T in order to make a lee for the pilot. The pilot and the master of the SOYA, Mr. Karl Bakke, conferred regarding other vessels seen in the area ahead. At about 7:40 p. m., 19 March 1960, with the engines on the SOYA stopped and the vessel moving through the water "a little," pilot Anderson departed.
7. When the pilot was in the clear, and while the SOYA was heading about 165° , Captain Bakke observed white lights and green side lights from a vessel 10 to 20 degrees forward of his port beam. This vessel was the DARBY. Captain Bakke then ordered ahead full (14.5K) and ordered the man at the wheel to come left to 115°T . As the SOYA approached this course, Captain Bakke, wishing to pass buoy 2A (LL 2406) abeam to port, distance one-half mile, observed the buoy on radar, decided the correct course to pass one-half mile off was 125° , and he ordered this steered. The vessel came to course 125° , after having been on 115° "just a short while."
8. As the SOYA approached buoy 2A, Captain Bakke observed the white and red side lights of another vessel almost dead ahead several miles away and in the general direction of buoy 2"CB" (LL 2218) south-eastward from Cape Henry. He then decided to come right to 134°T in order to leave room between his vessel and buoy 2A for the latter oncoming vessel to pass. He came to course 134. At this time he was watching the approaching DARBY off his port bow, and expecting the DARBY to come right and pass to port of the SOYA.
9. When buoy 2A was abeam, the DARBY was then approximately 50 degrees off the port bow of the SOYA and still closing. Captain Bakke at about this time observing that the DARBY was, as he put it, "coming too close," ordered his chief mate, Mr. Mathais A. Leman, to sound the danger signal and stop the engines. Both orders were executed. Failing to observe any change in

maneuvering on the part of the DARBY, Captain Bakke sounded one long blast and ordered hard right. As the SOYA began turning right, Captain Bakke observed that the DARBY was still closing so as to cross ahead of the SOYA and thinking that he could not avoid collision by going right, ordered hard left and half astern. The right rudder had been held for about one-half minute. As the bow of the SOYA was about amidships of the DARBY, Captain Bakke, seeing that the vessels would not clear, ordered full astern. The two vessels collided, the stem of the SOYA contacting the starboard side of the DARBY, abaft of amidships.

10. At about 4:50 p. m., 19 March 1960, the DARBY, having completed anti-submarine exercises at sea off the Virginia Capes, began her return voyage toward the entrance to Chesapeake Bay, with instructions to rendezvous with an admiral's barge, near buoy 2A (LL 2730), the approach lighted bell buoy off Little Creek Harbor, for the purpose of disembarking passengers. Little Creek Harbor is located approximately 8 miles westward from Cape Henry Light.

11. The DARBY proceeded westward, passed Chesapeake Lightship to starboard, distance about 1900 yards, and the next aid to navigation, buoy R "2", was passed to starboard, distance about 150 yards. The vessel continued on and passed buoy RB (1 quick flashing-whistle) to port at about 7:38 p. m., distance about one-half mile. At the time of passing this buoy speed was 19 knots and the course, which was set at 6:55 p. m., was 266^{OT}. Also, when in the immediate vicinity of the RB buoy, the Commanding Officer, Commander John C. Allen and the OOD (Officer of the Deck), Lieutenant George E. Schuefele, both being on the forward bridge, noticed, about 15 degrees off the starboard bow, several lights in the area of the Tail of the Horseshoe Channel, which channel is marked by "TH" buoys. Lieutenant Schuefele was conning. Commander Allen asked Lieutenant Schuefele to check with CIC (Combat Information Center) to find out if a moving target was among the lights. CIC returned a negative answer. Lights which Commander Allen and Lieutenant Schuefele accepted as coming from a ferry boat were seen in this same area, but Commander Allen, observing that CIC had not reported a moving target, assumed that the ferry boat must be beyond the radar range which was set on the 7-mile scale.

12. Posted as forward lookout on the DARBY and located on the signal bridge was MANNING, Jr., Edgar F., Seaman Recruit. Posted as after lookout and located above the after 40 MM gun mount was HUFF, Marvin A., Seaman Recruit.

13. As the DARBY proceeded toward the point of collision, the bearings of the lights off the starboard bow were observed to shift aft. Approximately 2½ minutes before the collision, Commander Allen observed the masthead, range and port red running lights of a vessel, which bore about 40 degrees off his starboard bow. He reported this to Lieutenant Schuefele, who was standing nearby. Lieutenant Schuefele left for the starboard wing of the bridge to

take a bearing by pelorus on the lights but was unable to do so because COSTA, Guy Thomas, QM1, the assistant navigator, was using the pelorus. Lieutenant Schuefele then viewed the lights with binoculars, which he took to be the masthead and port red light of a vessel other than a ferry boat, estimated distance to be about 2000 yards, proceeded to the forward part of the open bridge where he found Commander Allen and reported to him, "that's no ferry boat." Commander Allen, about this time had stopped his engines and a few seconds later, after hearing a four short blast whistle signal from the other vessel, ordered "left full rudder - all engines back full," sounded four short blasts on his whistle, then the collision alarm. Commander Allen then heard what he thought was another four blast signal from the other vessel. The DARBY began to turn left and the bow of the other vessel, the SOYA, passed down the starboard side of the DARBY and when about 100 feet away, Commander Allen ordered "rudder amidships - all ahead full". A few seconds later the SOYA struck the DARBY, at which time the DARBY's engines were stopped.

14. The angle of collision, that is the angle between the starboard side of the DARBY and the starboard side of the SOYA, was about 85 degrees.

15. At the time of collision the DARBY was dead in the water, or nearly so, and the forward speed of the SOYA through the water was between 5 and 8 knots.

16. Approximately $1\frac{1}{2}$ minutes elapsed from the time the first 4-blast signal was heard from the SOYA to time of collision.

17. At the time Commander Allen sighted the lights of the SOYA, Lieutenant Schuefele, the OOD, was in the process of being relieved by Lieutenant Louis G. Wingate. Lieutenant Schuefele, during a time period of about 45 seconds, had pointed out to Mr. Wingate certain lights on the aids to navigation and had given the course and speed, when he became aware of the presence of the other vessel and left for the starboard wing.

18. The sea return of the radar on the DARBY, on the 7-mile scale, in use, extended out to about 1 mile.

19. Prior to the collision the OOD received no report from either the forward or after lookout concerning the SOYA, although the forward lookout states that he reported the vessel, after first hearing a whistle signal, and this report was not acknowledged by the bridge talker.

20. At no time prior to the collision was the radar contact of the SOYA identified by the radar operator on the DARBY as being a vessel underway.

21. Following collision, the DARBY freed herself from the bow of the SOYA and the two vessels separated. The DARBY took immediate steps to control flooding and by radio notified shore authorities that she had been rammed. This message from the DARBY was received at 7:49 p.m., 19 March 1960 by the Amphibious Operational Training Unit, U. S. Naval Amphibious Base, Little Creek, Virginia.

22. The DARBY, with damage as depicted in the photographs, Exhibits 21(1) and 21(2), was able to prevent progressive flooding and remained afloat. The injured and deceased personnel were cared for and the vessel was later towed into the port of Norfolk, Virginia. The SOYA remained in the area and proceeded into the port of Norfolk.

- OPINIONS -

23. The situation with regards to the Rules of the Road which existed from the time the SOYA departed the pilot station to time of collision, was a crossing situation with the DARBY being the burdened vessel.

24. The proximate cause of the collision was the failure on the part of the DARBY, the burdened vessel, to see the SOYA in time to take effective evasive measures.

25. The sounding of the one long blast by the SOYA to indicate that she was turning right, although not being provided for in the Inland Rules, had no influence one way or the other on the collision.

26. The stopping of the SOYA's engines and the right turn made by her at the time she sounded the one long blast was done in extremis and at a time when her Master realized that the time had come when there was nothing that the DARBY alone could do to avoid the collision.

27. The visibility being as it was, the Master of the SOYA, watching the DARBY approach, was justified in holding on as long as he did because he realized that being in the vicinity of buoy 2A, the place where vessels bound up the Chesapeake Bay usually turn right, the other vessel could be expected to turn to her right, head northwestward and pass the SOYA port to port.

28. The evidence adduced in the case does not clearly explain why the DARBY failed to see the SOYA before collision was imminent, although it is evident that the lights on the SOYA were located among the numerous lights in the area. It is felt that too much reliance was put on radar. Both Commander Allen and Lieutenant Schuefele were at open windows with an unobstructed view, although at the critical time, the attention of

Lieutenant Schuefele was directed principally to the relaying of information to his relief, Lieutenant Wingate, as to the vessel's position, course, speed and mission.

29. Irrespective of the maneuvering qualifications of the DARBY, it is felt that the speed of 19 knots was excessive in view of the prevailing darkness and the area being where traffic converges from 4 main directions and the close proximity of the Virginia and Maryland pilot stations.

30. The accelerating speed on the part of the SOYA from the time she departed the pilot station to the time her engines were stopped before collision did not amount to a "change in speed", as prohibited by the Inland Rules of a privileged vessel in a crossing situation. Also, the prior course changes from 115 to 125 to 134 did not amount to a "change of course" as prohibited by the same Rules of a privileged vessel in a crossing situation.

31. The preponderance of evidence in this case supports the time of 7:45 p.m., as being the time of collision as opposed to the time of 7:53 p.m., which latter time was given by evidence from the SOYA. The time of 7:40 p.m., which is the time the SOYA logged the departure of the Baltimore Pilot is accepted. The times logged thereafter by the SOYA as to courses, speed changes, buoys passed and time of collision is not considered acceptable in this case. Therefore, the position of the SOYA at the time the pilot disembarked was closer to the point of collision than is shown on Exhibits 2 and 3.

32. The action on the part of the personnel on the DARBY to halt progressive flooding was extremely effective and was done with a degree of skill indicative of a high standard of discipline and efficiency; thereby preventing a possible sinking and further personnel and material injury.

33. Negligence, both on the part of Commander Allen and Lieutenant Schuefele is evident in this case, however, the degree of such does not appear to reach a stage amounting to criminality.

- RECOMMENDATIONS -

34. Based on the evidence adduced, the findings of facts, and opinions, no recommendation is made except that the complete record be forwarded the Commandant for action thereon by that office.

/s/ T. A. BERG

T. A. BERG
Commander, U. S. Coast Guard, Chairman

/s/ R. O. FOSTER

R. O. FOSTER
Commander, U. S. Coast Guard, Member

/s/ M. E. MEEKINS

M. E. MEEKINS
Lieutenant Commander, U. S. Coast Guard, Member and Recorder

The Board then, at 10:30 a.m., 11 May 1960, adjourned to await the action of the convening authority.

/s/

T. A. BERG
Commander, U. S. Coast Guard, Chairman

/s/

M. E. MEEKINS
Lieutenant Commander, U. S. Coast Guard, Member and Recorder