

UNITED STATES COAST GUARD

Address Reply to:
COMMANDANT
U. S. Coast Guard
Headquarters
Washington, D. C.

MVI
26 April, 1951
(STEEL INVENTOR -
ASTRA (Danish) CoS Ed)

From: Chief, Merchant Vessel Inspection Division
To: Commandant
Via: Chief, Office of Merchant Marine Safety

Subj: Marine board of investigation; SS STEEL INVENTOR - SS ASTRA - collision
on 30 March, 1951 off Little Egg Inlet, New Jersey.

1. Pursuant to the provisions of Title 46 CFR, Part 136, the record of the Marine Board convened to investigate subject casualty, together with its Findings of Fact, Conclusions, and Recommendations, has been reviewed and is forwarded herewith.

2. The SS STEEL INVENTOR, a freight vessel of 5686 g.t. and the SS ASTRA, a Danish freighter of 2709 g.t. were inbound to New York. The weather was dense fog, and both vessels, although sounding regulation fog signals, were proceeding at excessive speeds. At approximately 0617 on 30 March, 1951 the STEEL INVENTOR and the ASTRA collided approximately 15-20 miles Southeast of Atlantic City, New Jersey. As a result of the collision the ASTRA sank and the STEEL INVENTOR sustained \$25,000.00 in damages. No lives were lost and no injuries were sustained in this casualty.

3. The Board made the following Findings of Fact:

"1. The American freight vessel STEEL INVENTOR and the Danish freight vessel ASTRA collided at approximately 6:17 A. M. on 30 March, 1951 in a position 39° 11' north, 74° 7 $\frac{1}{2}$ ' west. At the time of the collision fog prevailed with a visibility of less than 1,000 feet, a southeast wind, force 3 to 4 and moderate sea.

2. The STEEL INVENTOR is a freight vessel of 5,686 gross tons, official number 220776, built in 1920, owned and operated by the Isthmian Steamship Co., of 71 Broadway, New York City. The vessel was in command of Robert F. Cornwell of Destin, Florida. The vessel is single screw powered by Parsons cross compound turbine of 3100 horsepower. Her propeller pitch is 14' 6.5", and under 82 R. P. M., her maximum speed loaded is slightly better than 11 knots.

3. The ASTRA is also a steam vessel of 2,709 gross tons built in 1945 and owned and operated by The Steamship Orion Inc. of Amaliegade 36 Copenhagen, Denmark. The vessel's propulsion is steam, double compound exhaust turbine, rated horsepower 1800, propeller pitch 4.4 meters, 86 R. P. M., speed about 11 knots. Her master was Captain Axel Jelstrup of Lannosvej 3B Copenhagen, Denmark.

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4. The STEEL INVENTOR had departed Philadelphia on 29 March, 1951 partly laden, bound for New York. Her cargo consisted of 1,756 tons of general cargo and steel, and her draft forward was 13' 8" and aft 18' 6". After having passed Overfalls Light Vessel the course was set for Five-Fathom Bank which was passed abeam at 3:10 A. M. A course of 40 degrees true was set from Five-Fathom Bank, per gyro compass, which had one degree easterly error. Shortly after 5:00 A. M., the master, who had been sleeping in the chart room, was called to the bridge by the chief mate who was on watch. The reason for summoning the master at this time, was that fog had set in, reducing visibility to approximately 1/2 mile. The telegraph was placed on standby and the revolutions of the engines reduced to 60, which would provide a speed of approximately 8 knots or slightly over. Fog signals were sounded at regular intervals. At about 6:15 A. M. a fog signal was heard ahead slightly on the port bow, and the STEEL INVENTOR's engines were stopped. Within seconds thereafter another fog signal was heard on the port bow, close aboard, and the engines were ordered full astern; her wheel also ordered hard right. Simultaneously, the ASTRA hove into sight, approximately a ship length ahead, and the STEEL INVENTOR's wheel was immediately put hard left. This maneuver was made almost immediately upon the right wheel order, which had not as yet affected the ship's heading. The vessel swung left, and while so swinging, collided with the ASTRA, her stem striking the starboard side of the ASTRA in way of the bulkhead between numbers 3 and 4 hatches at an angle of about 50 degrees.

5. The STEEL INVENTOR's bow penetrated into the ASTRA's side approximately 10 feet, causing severe damage, as a result of which the ASTRA's after holds were flooded, causing the after end to sink decks to almost immediately. The STEEL INVENTOR maneuvered in close proximity to the ASTRA in order to render assistance, and at 6:30 A.M., the crew of the latter vessel were ordered to abandon ship using their own lifeboats. All hands of the Danish vessel were taken on board the STEEL INVENTOR which continued to remain in the vicinity of the stricken vessel. At 9:30, the master of the ASTRA with six members of his crew, returned to the vessel in order to make further determination as to her condition and also to drop her anchor, which was done. After the master had determined that the vessel was apparently in a sinking condition and that the engine room bulkhead might let go any time, he again left with his crew and returned to the STEEL INVENTOR. The STEEL INVENTOR's master also offered to put a hawser on board the ASTRA and take her in tow. This offer was declined by Captain Jelstrup for reasons as stated by him that he did not consider it safe for the STEEL INVENTOR to maneuver into position for such operation, due to the increasing wind and sea, and further, that he would prefer the assistance of a regular towing vessel. In this connection it is noted that a towing vessel was requested by radio, but due to weather conditions, as well as the condition of the ASTRA, no contact was made. At 10:20 P. M. on 30 March, the STEEL INVENTOR, after communicating with the Coast Guard Cutter TAMARJA which was in attendance, received instructions to proceed to New York, which it did with the entire crew of the ASTRA on board his vessel.

6. The ASTRA had departed from Pier 14, East River, New York on 30 March, 1951, bound for Havana, Cuba. The vessel was partly laden carrying a total tonnage of 1,163, and drawing 11' 9" forward and 16' 10" aft. In addition to her cargo, she also carried her ballast tanks filled with ballast water, totaling approximately 670 tons. After disembarking her pilot at Ambrose, a course was set for Barnegat Light Vessel per standard compass, and Barnegat was passed abeam close to port at 2:48 A. M. From this point a course of 190 degrees true was maintained calculated to take the vessel 5 miles off Diamond Shoals Light Vessel. The wind was southeasterly force 4 to 5 with a head sea, which reduced the vessel's speed through the water to approximately nine knots. At 4:00 A. M., the watch was changed and the chief officer took over. Shortly after 5 o'clock, fog set in with the visibility reduced to less than 2,000 feet. The master was called to the bridge and the engine room telegraph was placed on standby. Other than that, no reduction of speed was ordered. Regulation fog signals were sounded and at about 6:10 A. M., the first fog signal of the STEEL INVENTOR was heard on the ASTRA's starboard bow, and speed was then reduced to slow. Four more fog signals were subsequently heard from the STEEL INVENTOR, appearing to broaden, and shortly before the collision, the STEEL INVENTOR was sighted about four points on the starboard bow of the ASTRA, approximately three ship-lengths away, approaching at an angle, and apparently swinging left. At that time, Captain Jelstrup ordered full speed ahead on his engine and hard right rudder, thereby attempting to maneuver his vessel parallel to the STEEL INVENTOR, in order to minimize the effect of the collision. The vessels subsequently came together as described, at an angle of about 80 degrees. The location of the collision as determined by Dead Reckoning was Lat. 39° 11' north, Long. 74° 7½' west.

7. As to the final disposition of the ASTRA, she is considered a total loss. When the STEEL INVENTOR departed the scene at 10:20 P. M. on 30 March, the forward end was still afloat but her after-body was submerged and apparently touching bottom. The vessel subsequently settled with both topmasts above the surface in 76 feet of water, 10½ miles, 097.5 degrees true from Atlantic City Light, and was also marked by a buoy located 200 yards and 120 degrees true from the wreck. The damage to the STEEL INVENTOR was above water, and forward of her collision bulkhead, and is estimated at \$25,000.00."

4. The Board made the following Conclusions:

"1. It is evident that the actions of both navigators contributed to the collision, and the resulting major damage. The master of the STEEL INVENTOR, in proceeding at a speed of 8 knots or better, with a tail wind and in a trafficked area, should have realized that he was at a disadvantage to hear fog signals ahead, under the prevailing conditions, and governed himself accordingly. It is not considered that by reducing speed to 8 knots or better, he thereby placed his vessel in a position to maneuver effectively to avoid collision. Although he heard two fog signals of the ASTRA, the time interval, as

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Commandant

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well as his headway were such that any maneuver attempted after the ASTRA was sighted would be ineffective. He should have, after the vessel entered fog, made a more substantial reduction in speed, and indicated same on his engine room telegraph. Under the existing conditions it is not believed that the speed of the STEEL INVENTOR was moderate, and to that extent, Captain Cornwell is considered remiss under R. S. 4450, as amended. He was therefore charged with negligence with an appropriate specification and cited for hearing on 16 April, 1951.

2. As to the navigator of the ASTRA, it is equally evident that he did not navigate his vessel in accordance with the governing rule in fog. When his vessel entered fog, no appreciable reduction in speed was made until he heard the first fog signal of the STEEL INVENTOR. At this time he placed his engine room telegraph on slow. Further, although he continued to hear the oncoming vessel's fog signals, he was obviously unable to determine the position of the STEEL INVENTOR, and for that reason should have stopped his engines, if necessary, and navigated with caution until danger of collision was passed. There is no doubt, that had both navigators reduced their vessel's speed substantially or sufficient to maintain bare steerage-way, they would have been able to estimate more accurately their relative position during the approach, and thereby possibly avoided collision, or at least minimized its effect."

5. The board made the following Recommendation:

"1. In view of the disposition set forth in the above conclusions, and further, since no jurisdiction exists with respect to proceedings against the Danish master, no additional action is considered necessary. In recommending that the case be closed, the Board calls attention to the apparent practice of placing the engine order telegraph on standby while underway in fog. Whereas some slight reduction of speed by pre-arrangement is also made subsequent to the standby signal, the effect usually falls far short of the intent of the Governing Rule. It is suggested that this subject be publicized in the Council Proceedings, stressing the duty of navigators to substantially reduce speed in fog, and to use the engine order telegraph for its intended purpose, so that all engine maneuvers may be properly registered and acknowledged, and also recorded."

REMARKS

6. It is recommended that the Findings of Fact, Conclusions, and Recommendation of the Marine Board of Investigation be approved.

EDW. C. CLEAVE

Chief, XVI Division to
Commandant

26 April, 1951
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From: Chief, Office of Merchant Marine Safety (STEEL INVENTOR-ASTRA C-3 Ed)
To: Commandant

Forwarded, recommending approval.

/s/ H. C. SHEPHERD
H. C. SHEPHERD

APPROVED: May 4, 1951

/s/ MERLIN O'NEILL
MERLIN O'NEILL
Vice Admiral, U. S. Coast Guard
Commandant