



THE MERCHANT SHIPPING ACT, 1894

REPORT OF COURT

(No. 7962)

S.S. "Magdalena" O.N. 182955

In the matter of a Formal Investigation held at the Law Courts, London, on the 26th, 27th and 28th September, 1949, before J. V. Naisby, Esq., K.C., assisted by Captain W. A. Williamson, Captain J. W. Grimston and I. J. Gray, Esq., into the circumstances attending the stranding of the s.s. "Magdalena" at Ilhas Tijucas, near Rio de Janeiro, on the 25th April, 1949, and subsequent loss of the ship.

The Court, having carefully inquired into the circumstances attending the above-mentioned shipping casualty, finds, for the reasons stated in the Annex hereto, that the said casualty was caused by the fault of her master, Captain D. R. V. Lee, and of her first officer, Mr. C. J. Senior. The Court accordingly suspends the certificate of Captain Lee for a period of two years, and of Mr. Senior for a period of one year. Both periods to run from today.

Dated this 3rd day of October, 1949.

J. V. NAISBY, *Judge*.

We concur in the above report,

W. A. WILLIAMSON
JOHN WM. GRIMSTON } *Assessors*
IVOR J. GRAY

ANNEX TO THE REPORT

This Inquiry was held at the Law Courts, London, on the 26th, 27th and 28th September, 1949. Mr. R. F. Hayward, K.C. and Mr. Vere Hunt (instructed by the Treasury Solicitor) appeared on behalf of the Minister of Transport. Mr. Roland Adams, K.C., and Mr. Waldo Porges (instructed by Messrs. Parker, Garrett & Company) appeared on behalf of the owners, the Royal Mail Lines, Limited. Mr. K. S. Carpmael, K.C., and Mr. Peter Bucknill (instructed by Messrs. Holman, Fenwick and Willan), appeared for the master, Captain Douglas Robert Vernon Lee. Mr. H. I. Nelson, K.C., and Mr. Arnold Baker (instructed by Messrs. Ingledew, Brown, Bennison, Garrett and Company) appeared for the first officer, Mr. C. J. Senior; the third officer, Mr. Rutter; the chief engineer, Mr. Hobbs, and the second engineer, Mr. Wilson. Mr. J. B. Hewson and Mr. H. V. Brandon (instructed by Messrs. Ingledew, Brown, Bennison, Garrett and Company) appeared for the senior second officer, Mr. A. M. B. Ferguson.

The "Magdalena" was a twin-screw turbine steel clencher built vessel. She was built in 1948 by Messrs. Harland and Wolff, Limited, of Belfast; was owned by Royal Mail Lines, Limited; her registered manager being Mr. F. G. Spriddell, and at the time of her loss was on her maiden voyage. Her gross tonnage was

17,547, and her registered dimensions: Length, 551.2 feet, and breadth, 73.3 feet. The vessel was sub-divided into nine watertight compartments by eight transverse watertight bulkheads and had three holds forward and two aft. The "Magdalena" was equipped for the carriage of refrigerated cargo, and had a passenger certificate entitling her to carry 529 passengers, with a crew of 241 hands all told. At the time of the stranding the "Magdalena" was carrying about 347 passengers and a crew of 237.

The propelling machinery consisted of two sets of Parsons type triple-expansion turbines with double reduction gearing. The vessel was equipped with an electric-hydraulic steering gear controlled by telemotor from the wheel-house. The boats and life-saving apparatus were all in accordance with, or in excess of, the statutory requirements, and had been inspected and found satisfactory by a Ministry of Transport Surveyor in Belfast in February, 1949. The vessel was fitted with wireless apparatus, including a main and emergency transmitter; a direction finder, and a portable transmitter and receiver for use in lifeboats. She was also equipped with a radio telephone and radar, with a P.P.I. capable of being set at ranges of 1, 3, 9 and 27 miles. The compasses with which the vessel was equipped were as follows:—

One standard magnetic compass on the bridge over the wheel-house; one steering magnetic compass in the wheel-house; one magnetic compass on the poop; a gyroscopic compass with four repeaters, one immediately abaft the standard compass, one alongside the steering compass, one in the direction finder installation, and one in the radar installation.

The "Magdalena" was also equipped with a Hughes recording echometer, a Lord Kelvin patent sounding machine, and with a Walker "Trident" patent log, with a recorder in the chart room. The vessel was also equipped with an azimuth mirror, binoculars, and an adequate supply of charts and publications.

The "Magdalena" was classed +100 A.1 with freeboard at Lloyd's; her load line certificate having been issued in February, 1949, being valid for a period of five years.

The "Magdalena" sailed from Santos on the afternoon of the 24th April, 1949, taking her departure from a point south of the Isle of Moela at 1628 hours and setting a course to pass some two miles south of Boi Point on the Isle of San Sebastian. The draught on sailing was 27 feet 5 inches forward and 27 feet 7 inches aft.

It quickly became apparent that the vessel was, in fact, making a more northerly course than was intended, and at 1800 hours and again at 1900 hours, on the orders of her master, course was altered slightly to starboard, and at 1956 hours Boi Point was abeam at a distance of about two miles. The course was then altered to 62 degrees by gyro compass to pass about half-a-mile to the northward of Palmas Island Light off the entrance to the harbour of Rio de Janeiro. It was again found that the vessel was to the northward of her intended course, and at 2.30 a.m. the senior second officer, who was the officer of the watch, reported to the master that the vessel was some 2 or 2½ miles to the northward of her course line.

On leaving Santos the master was on the bridge, and remained either on the bridge or in his room immediately below the bridge, visiting the bridge from time to time until after passing Boi Point. He then went down to the saloon for his dinner, and returned to the bridge somewhere before half-past ten and, after conversing with the officer of the watch for some time, wrote up his night order book and turned in. The entry in the night order book which was timed 2245 hours was as follows:—

“Course, gyro, 062 degrees. True, 062 degrees. Standard 080 degrees. Compass error allowed 18 degrees W. Attend to Standing Orders. Inform me when Guaratiba Point Light bears 315 degrees”.

The designed service speed of the “Magdalena” was 18 knots at 105 revolutions per minute, but as the vessel was not required to arrive at Rio de Janeiro till after daylight, speed was reduced to 75 revolutions at 1900 hours on the 24th April, and further reduced at 2230 hours to 70 revolutions, which was expected to give a speed of about 13½ knots or a little more. When the master went below the officer in charge of the watch was the junior second officer, who was relieved by the second senior officer at 0050 hours on the 25th April. At 0230 hours the senior second officer, by cross bearings, ascertained that the vessel was some 2½ miles to the northward of her course, and reported this fact to the master by voice pipe. He also informed the master that the direct course from the ship's then position to the desired point of arrival off Palmas Island was 066 degrees, and was ordered to set a course of 066 degrees by gyro. Further cross bearings were obtained by the senior second officer at 0300 hours, 0330 hours and 0349 hours when Guaratiba Point bore 315 degrees. The first of these cross bearings showed a continued set to the northward, but the 0330 hours and 0349 hours positions seemed to indicate that the vessel was making the course desired. About 0349 hours, in accordance with the master's orders, he was called by the senior second officer on the voice pipe and informed that Guaratiba Point was bearing 315 degrees. He enquired as to the state of the weather and was told it was overcast and clear, with little or no sea, and a light wind, and that the vessel seemed to be making good the course of 066 degrees. The master thereupon instructed the senior second officer to pass on to his relief orders for the master to be called again at 0430 hours.

About 0400 hours the senior second officer was relieved as officer of the watch by the first officer who had with him as junior officer of the watch the third officer. The senior second officer informed his relief that the vessel had been set to the northward, showed him the positions on the chart, gave the course as 066 degrees by gyro, and pointed out to him that this course involved passing close to the Tijucas Rocks. He also informed the first officer that he had by stellar observation obtained a compass error, but that he was not satisfied as to its reliability. He also pointed out that Raza Light was temporarily obscured by Redonda Island, and passed on the master's orders that the master was to be called again at 0430 hours.

The “Magdalena” continued to steer her 066 degrees course. Not very long before 0430 hours, the light of Raza Island having come clear to the northward of Redonda, the first officer proceeded to the top of the wheelhouse to endeavour to obtain cross bearings to fix his position. He was able to get a bearing of Raza Light, but could not see Palmas Light. He was, however, able to obtain the bearing of a Light which he believed to be that on the monument on Corcovado. The first officer thereupon returned to the chart room and, after having laid off the bearings obtained on the chart, discovered that they put the vessel some half-a-mile to the northward of her course line; about 0430 hours he called the master by voice pipe and reported that the vessel was apparently half-a-mile to the northward of her course line and, in answer to the master, stated that the expected time of arrival at the position off Palmas Island was about seven or nine minutes past five. The first officer, not being very sure of the position that he had obtained, returned to the top of the wheelhouse in order to check his bearings. After doing so, he was returning to the bridge, having appreciated that the vessel was getting dangerously close to the Tijucas Rocks and having decided to haul out to starboard, when the third officer reported what he thought to be a patch of oil on the starboard bow. Immediately afterwards it was thought to be a vessel without lights, and an order of “Port”, followed by “3 degrees” was given. In fact, the object in question was part of the Tijucas Rocks, and a few seconds after the order to “Port” was given the vessel struck. There was some evidence that immediately before the vessel actually struck, an order of “Hard-a-starboard” was given. The Court is not able to decide whether this order was, in fact, given or not, but it is clear that, if given, it was only at the very last moment and had no effect on the heading of the vessel. When the master was called about 0430 hours he proceeded to dress for the purpose of going on the bridge but, before he completed dressing, the vessel struck. At the time of the stranding the weather was overcast but clear, the sea smooth, with a slight swell, and a very light wind, the tide being about half-ebb, the rise and fall being about 3 feet.

After stranding, an attempt was made to lay out the starboard anchor but, owing to rising wind and sea, was abandoned, and the vessel remained ashore until about 2334 hours. On the rising tide in very rough sea, with a heavy swell, the vessel came afloat and blew clear of the rocks when both anchors were let go. About 0650 hours on the 26th April, the anchors were hove up and, with tug assistance, an attempt was made to tow the vessel into port. The wind had risen, with considerable swell, and the “Magdalena” had made considerable water and was down by the head. Shortly after mid-day, whilst passing to the eastward of Cotuntuba Island, she struck the ground, bumped heavily and broke her back.

The “Magdalena” had proceeded at 70 revolutions until the vessel stranded, when the engine room telegraph was rung “stop”. As a result of the damage sustained whilst aground, the engines and steam pipes lifted, and about 1900 hours on the 25th April, steam had to be shut off. The engine room staff, however, remained on duty in the engine room and continued to work the diesel auxiliaries until the order was given to abandon ship.

As soon as the vessel stranded, steps were taken to disembark the passengers and the crew by the lifeboats, but it quickly became apparent that there was no immediate danger to life and, accordingly, messages were sent ashore for tugs and tenders to come and take off the passengers who were all safely disembarked during the course of the 25th April, without loss of life. At the Inquiry, Counsel for the

owners paid a tribute to the assistance rendered by the Brazilian Navy and civilian vessels in the transfer of the passengers.

As has already been stated, both before and after reaching Boi Point, the "Magdalena" was found to be to the northward of her course line. The master and officers attributed this fact to a set of tide or current but, in the opinion of the Court, it was caused, or at least contributed to, by the failure of those on board the "Magdalena" to make a proper allowance for compass error, and reference to her deviation book seems to confirm this. The error was not such as ought to have caused any difficulty or danger if proper care had been exercised. At 0230 hours in the morning, when the course was altered to 066 degrees, no attention seems to have been paid to the fact that the vessel had been consistently getting to the northward of her course line and, in our opinion, this was a fact to which attention should have been paid, and which called for close and careful observation thereafter to ensure that the vessel made the course ordered.

At the Inquiry there was uncontradicted evidence that the passage to the northward of Palmas Island was habitually used in clear weather by day and by night by large vessels of many nations, but the passage to the northward of this Island involved going through a narrow channel unlighted by navigation marks on the port side and, if attempted, demanded, in our opinion, the utmost care and attention. It was quite clear that when the master turned in, on the night of the 24th April, it was his intention to return to the bridge shortly after Guaratiba Light bore 315 degrees and, in our opinion, he ought to have done so about this time. The first officer was making his first voyage into Rio from the westward, at any rate since 1939, and the fact of the vessel having got to the northward of her course made the approach more difficult and dangerous. Even when called at 0430 hours the master had not reached the bridge after an appreciable time, although it is fair to say that, when called, he was given no indication of any emergency. In our opinion, however, this failure on the part of Captain Lee, particularly bearing in mind that he had under his command a new vessel, was a grave dereliction of duty. We have given anxious consideration to all the surrounding circumstances and feel that we cannot do less than suspend his certificate for a period of two years from today.

So far as the first officer, Mr. Senior, is concerned, the Court has some sympathy with him in the position in which he was placed, but the fact remains that on a clear night the vessel stranded at least ten minutes after he had obtained cross bearings which clearly indicated that to continue on her course would very shortly bring her on to, or in dangerous proximity to, unlighted rocks marked on the chart, and we feel that his failure to take earlier action cannot be excused. He said that he was not sure of the position which he obtained but, clearly, this was a reason for taking immediate action and not deferring it. Even though Raza Light was obscured for an appreciable time after he went on watch he had radar at his disposal. The radar was never used. A suspension of his certificate for a period of twelve months is the least penalty we feel should be visited upon him. The Court, however, is prepared to recommend that during the suspension of his master's certificate, he should be granted a certificate as second mate.

On behalf of the Ministry of Transport it was submitted that the senior second officer, Mr. Ferguson, was also in fault, and we should also deal with his certificate. Whilst we are of opinion that he ought, before turning in, to have conveyed to the master the uneasiness that he felt owing to the proximity of the course set to the rocks on which the vessel struck, it must have been clear to the master that the mere

fact that the vessel had gone off her course to the northward would bring her on her course of 066 degrees closer to Tijucas Rocks than he had originally intended. Moreover, after Mr. Ferguson handed over the watch, there was a period of something over half-an-hour before the vessel actually struck. We do not feel that in these circumstances we can impose any penalty upon Mr. Ferguson.

QUESTIONS AND ANSWERS.

The Court's answers to the questions submitted by the Ministry of Transport are as follows :—

Q. 1. By whom was the "Magdalena" owned at the time of her loss ?

A. Royal Mail Lines, Limited.

Q. 2. When, where and by whom was the "Magdalena" built ?

A. 1948. Belfast. Harland and Wolff, Limited.

Q. 3. With what compasses was the "Magdalena" fitted ? Were these in efficient working order previous to the stranding ?

A. One magnetic compass on the top of the wheel-house ; one magnetic compass in the wheel-house ; one magnetic compass on the poop ; and one gyroscopic compass with four repeaters. Yes, except that the repeater in the direction finder installation was out of order.

Q. 4. Was the "Magdalena" fitted with radar, patent log, echo-sounding apparatus and direction finding equipment ?

A. Yes.

Q. 5. Were these in efficient working order previous to the stranding, and were these or any of them being used and, if not, why ?

A. Yes. No. The officers on watch did not consider it necessary to use the radar or patent log. Echo-sounding apparatus would not have given any useful information. No suitable stations were available for the use of the direction finding equipment. In the opinion of the Court the use of radar would have been of assistance.

Q. 6. With what type of steering gear was the "Magdalena" fitted ?

A. Electric hydraulic controlled by telemotor.

Q. 7. Did the steering gear work satisfactorily at all material times ?

A. Yes.

Q. 8. Was the "Magdalena" seaworthy when she left London on her voyage, and did her life-saving appliances comply with the regulations ?

A. Yes.

Q. 9. Did her life-saving appliances work satisfactorily at all material times ?

A. Yes.

Q. 10. Were the necessary boat and fire drills carried out ?

A. Yes.

Q. 11. Did the "Magdalena" leave Santos for Rio de Janeiro on the afternoon of 24th April, 1949 ?

A. Yes.

Q. 12. Was a safe and proper course set for the voyage between Santos and Rio de Janeiro ?

A. The courses which it was intended that the vessel should make good were proper.

Q. 13. Was the "Magdalena" to the northward of her course line, and if so when and how much, and what were the causes ?

A. Yes. The "Magdalena" was to the northward of her course line throughout by varying

amounts. The master and officers attributed this fact to a set of tide or current, but the Court is of opinion that it was caused or contributed to by a failure to make proper allowance for compass error.

- Q. 14. Were prompt and proper steps taken from time to time and when to bring the "Magdalena" on to a safe course ?
- A. Not from 0230 hours onwards.
- Q. 15. Was the master properly informed as to the navigation of the "Magdalena" after he had left the bridge about 11 p.m. on the 24th April, 1949 ?
- A. See Annex to Report.
- Q. 16. On subsequently being informed that the "Magdalena" was to the northward of her course line did the master personally take any or sufficient steps to safeguard his ship, and if not should he have done so ?
- A. No. Yes.
- Q. 17. After going on watch at 0400 hours did the first officer ascertain that the "Magdalena" was to the northward of her course line, and if so did he take prompt and sufficient steps to safeguard the ship ?
- A. Yes. No.
- Q. 18. Did the "Magdalena" strand shortly after 0430 hours on the 25th April, 1949 ?
- A. Yes.
- Q. 19. What was the time and place of the stranding ?
- A. Shortly after 0440 hours. The exact time of stranding was not proved. Ilhas Tijucas.
- Q. 20. What was the state of the weather, wind and sea at the time of the stranding ?

- A. Overcast and clear. Light wind. Smooth sea with slight swell.
- Q. 21. Was the stranding due to the wrongful act or omission of the owners of the "Magdalena", her master, first officer, senior second officer, or any other persons ?
- A. The stranding was due to the wrongful omission of her master, Captain Lee, and of the first officer, Mr. Senior. The Court is also of the opinion that the senior second officer, Mr. Ferguson, ought specifically to have drawn to the master's attention before he went off watch the proximity of the course set at 0230 hours to the Tijucas Rocks.
- Q. 22. Were all necessary precautions taken to safeguard the lives of the passengers ?
- A. Subsequent to the stranding, yes.
- Q. 23. Did the "Magdalena" refloat shortly after 2330 hours on 25th April, 1949 ?
- A. Yes.
- Q. 24. How was she refloated ?
- A. By wind and sea.
- Q. 25. What steps were taken to save the "Magdalena" after refloating ?
- A. An attempt was made to tow the vessel into harbour.
- Q. 26. How was the "Magdalena" subsequently lost ?
- A. In the course of the towage into harbour the "Magdalena" which was becoming deeper in the water struck the bottom and broke her back.

J. V. NAISBY, *Judge*.

W. A. WILLIAMSON
JOHN WM. GRIMSTON } *Assessors*
IVOR J. GRAY

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