

FOR OFFICIAL USE

(No. 7883.)

"TAHITI" (S.S.)

THE NEW ZEALAND SHIPPING AND SEAMEN
ACT, 1908.REPORT ON A SHIPPING CASUALTY TO THE STEAMSHIP
"TAHITI."To the Honourable the MINISTER OF MARINE, New
Zealand.

I, the undersigned, Stipendiary Magistrate, having been on the fifth day of September, 1930, applied to by George Patterson Hall, esquire, Superintendent of Mercantile Marine at the port of Wellington, for a formal investigation pursuant to section 235 of the Shipping and Seamen Act, 1908, and other provisions of the said Act, respecting a shipping casualty to a certain British ship called the "Tahiti," of the port of London, on the seventeenth day of August, 1930, at sea between Wellington and San Francisco, did duly proceed with the said investigation, to wit, on the eleventh and twelfth days of September, instant, and had before me, and examined on oath, divers persons and witnesses, to wit, Robert Livingstone Gillies, Arthur Thomas Toten, Duncan John Roderick McKenzie, Norman Joseph Siepen, Robert Wilson, Frank Noble Davidson, Archibald Thomson, Charles James McPherson, David Andrew Gibb, George Borthwick, Thomas Alfred Rooke, John Degnan, and Phillip John Foster, the original depositions of whose evidence are hereunto annexed,* signed by me, being assisted therein by Captain L. C. H. Worrall, holding a certificate of competency, No. 26,841, from the Board of Trade, London, and W. Parker, Esq., engineer, holding a certificate of competency No. 42,669, from the Board of Trade, London, and George Huntley, Esq., A.I.N.A. and M.I.Mech.E., who were duly appointed by me to act as assessors; and upon such investigation and examination of witnesses as aforesaid, I find and report as follows, that is to say,—

I. That the official number of the said ship, called the "Tahiti," is 117,715, of which Arthur Thomas Toten is master, who holds certificate of master No. 036,722, issued by the Board of Trade, London, and which ship belonged to the Union Steamship Company of New Zealand, Limited.

II. That the loss or damage herein more particularly mentioned happened on the fifteenth day of August, 1930, at about 4.30 o'clock in the forenoon (western time) at sea in latitude 26° 43' south, longitude 166° 16' west, and the ship sank on the seventeenth day of August, 1930, at 4.42 p.m. (western time) in latitude 24° 44' south, longitude 166° 15' west.

III. That the loss or damage appears by the evidence to have been caused by a fracture of the starboard tail shaft.

IV. That the nature of the loss or damage done was the loss of the ship, valued at £150,000. That the vessel is insured for £100,000 in the Peninsular and Oriental Marine Insurance scheme. That the "Tahiti" is schooner rigged, her port of registry London, her registered tonnage 4,155 net. That no lives were lost through the casualty.

In the matter of a formal investigation held at Wellington on the eleventh and twelfth days of September, 1930, before me, assisted by the assessors above-mentioned, into the circumstances attending the loss of the "Tahiti," the Court, having carefully inquired into the circumstances attending the above-mentioned shipping casualty, makes the finding that is annexed hereto signed by myself and each of the assessors.

Dated at Wellington this fifteenth day of September, 1930.

E. PAGE,

Stipendiary Magistrate.

* Not printed.

FINDING OF THE COURT.

In the matter of The Shipping and Seamen Act, 1908, and In the matter of a formal investigation under Section 235 thereof into a shipping casualty involving the loss of the steamship "Tahiti." Mr. J. Prendeville appears for the Marine Department; Mr. C. G. White for the Union Steamship Company of New Zealand, Limited; Mr. E. K. Kirkcaldie and Mr. Evan Parry for the master and deck officers; and Mr. E. P. Hay for the engineers.

The twin screw steamship "Tahiti," official number 117,715 British registry, 4,155 net tonnage, was built on the Clyde in 1904 and was purchased by the Union Steamship Company of New Zealand, Limited, in 1911.

On the 12th August, 1930, with Captain A. T. Toten, master, she left Wellington with a crew of 149; 103 passengers; and 500 tons measurement of general cargo, in continuation of a voyage from Sydney to San Francisco.

At 4.30 a.m. on the 15th August (western time), she being approximately 480 miles south-west from Rarotonga (latitude 20° 43' south, longitude 166° 16' west), violent crashing noises were heard from the direction of the starboard main shaft tunnel, with very heavy vibration of the ship, followed by violent racing of the starboard engine.

The second and fifth engineers, who were on duty in the engine room, hastily shut off steam, the engine stopped abruptly, and the second engineer ran through the bulk-head door and along the starboard tunnel to locate the cause of the violence. The length of the tunnel is 100 feet, and the second engineer covered just over half the distance when he was met by a low wall of water that was rushing towards him. He could see to the far end of the tunnel and in the one quick look that he was able to give he saw that a rush of water was pouring across and upwards from the starboard side of the ship to the port side, the flow covering in area the whole end of the tunnel from the floor to the ceiling.

Though from long custom called a tunnel, the place in question has the appearance of a lower hold. It is 8 feet in height and extends from side to side of the ship, so that both port and starboard tail shafts are, in this region, covered by the one tunnel.

The second engineer raced back to the engine room to get the door in the bulk-head closed, the onward rush of water keeping pace with him so that before the door was closed water was pouring through it into the engine room.

Word was at once sent to the master, to the chief engineer, and to the officer on the bridge. Officers and all hands were called, all pumps were started, hand-pumps were rigged and manned, and wireless messages announcing the danger were sent out.

From then until the abandonment of the ship, two and a half days later, a long and dogged fight was put up against the waters. In addition to the pumps, bailing by means of 44 gallon drums worked on the winch wires was maintained throughout.

Boats were provided with increased provisions and with blankets, passengers were allotted to the different boats, and everything was prepared for a hurried abandonment of the ship. From time to time as the slowly rising waters created fresh danger points, a decision had to be made whether the limit of time had not been reached within which the abandonment of the sinking ship could with safety be effected.

At 10.10 p.m. on the second night (the 16th) the Norwegian steamer "Penybryn," which has responded to the "Tahiti's" wireless S.O.S. calls, and had picked up her position from the distress rockets sent up, arrived and stood by throughout the night with her flood lights thrown over the "Tahiti," and her crew ready to man their boats to go, if needed, to the assistance of those on the "Tahiti."

At 9.30 a.m. on the 17th the chief engineer reported that conditions were critical but that he hoped to be able to control the water for about an hour longer, and orders were then given by the master for the passengers to abandon the ship. Within 13 minutes all the passengers were got into

the boats and away from the ship, and they were shortly afterwards picked up by the American steamer "Ventura" which had also responded to the S.O.S. calls and had been rapidly approaching, and had sent word that she was ready to take care of all passengers and crew. All the other "Tahiti" boats were manned by the "Tahiti's" crew and brought alongside to save the first class mails and the luggage. From then till the early afternoon the fatigued crew, assisted by one of the "Penybryn" boats, carried out this work.

At 1.35 p.m. the vessel was settling rapidly, the engineers' position below became too dangerous to remain any longer, a final order was issued for remainder of crew to abandon the ship and after master and chief engineer had personally searched the ship to see that no one was left behind, the last boat containing the bo's'w'n, carpenter, wireless operator, the engineers, the mate and the second mate and the master, abandoned the ship.

Some little time afterwards the master and some of his officers, in a "Ventura" boat, returned and made a final rapid inspection to see the "Tahiti's" condition. The water was then over the tops of the engines and the vessel about to sink, and within 15 minutes of their leaving she sank. There was no loss of life. The bullion and the ship's papers were saved.

At the close of the evidence, Counsel for the Marine Department stated that the only question he would put to the Court was, "What was the cause of the casualty?"

We are of opinion, from the evidence, that the cause of the loss of the ship was the breaking of her tail shaft at a spot just forward of the stern tube, and that the breaking caused a puncture in the hull of the ship. The exact manner in which this puncture was brought about cannot be ascertained with certainty, but the indications are that the break was a diagonal, or scarf, break and that the driven end, overriding the other, and becoming twisted and distorted in alignment, as it revolved under pressure from the racing engine, flogged the bearing supports through the side of the ship.

The shaft, which was a spare one that had had previous use in the ship, had been put in at Sydney in July, 1929, at which time it was inspected and passed by the Company's own engineers and by the Commonwealth government surveyor and by Lloyd's surveyor.

Though the breaking of tail shafts in ocean-going vessels throughout the world is not uncommon, records show that cases in which, through such breaking, serious damage is done to the hull of the vessel, are exceedingly rare.

Notwithstanding the puncture in her side, the ship would have been saved but for another vital injury. The water-tight bulk-head that divides the tunnel and No. 3 hold from the engine room, and through which the shaft fits was torn at its base by the violence of the racing engine coupled with the disturbed alignment of the broken shaft. The rent in the base of the bulk-head was a horizontal one

and occurred just at the top edge of the bottom boundary angle, at which spot time and the elements had no doubt reduced to some extent the original strength and thickness of the plate.

Water in quantity immediately found its way into the engine room.

In addition, this injury to the bulk-head destroyed its stability and, notwithstanding the utmost efforts of the engineers and their staff in propping up and supporting the bulk-head, the increasing weight of water gradually caused the rent to extend and the seams to open. Efforts were concentrated throughout on the engine room, for on that room depended the maintenance of the fight.

But for this injury to the bulk-head there is no reason to doubt that the bulk-head would have fulfilled its purpose and confined the waters aft.

The ship had been throughout her life subjected to the usual surveys by government marine officers and by Lloyd's surveyors. Her last certificate of survey (by the Navigation Department of the Commonwealth of Australia) is dated 31st October, 1929, and would have remained in force till 29th October next.

Her last Lloyd's certificate is dated at Sydney, 12th June, 1930, and classifies her as $\frac{1}{2}$ 100 A.1.

In our opinion the ship was staunch and well found. Her loss was due to a peril of the sea which no reasonable human care or foresight could have avoided.

In the handling of the situation throughout, the master displayed resource and cool accurate judgment worthy of the highest praise, and all ranks under him responded to the example that he set.

His tenacity in staving off, despite the crises that from time to time arose and threatened her, the giving of the final order to abandon the ship which he knew throughout to be doomed and sinking ensured the safety of the lives entrusted to his keeping. Under a command less sure a different story might have had to be recorded.

On the engineers and the engine room and stoke hold staff under them fell the brunt of the fight. For close on sixty hours, without sleep and without respite the engineers directed and waged a gallant losing fight against the relentless waters, working for long periods deep in water and in imminent danger of the collapse of the strained and partly rent bulk-head that imprisoned the wall of water high above them. It was their courage and endurance that made it possible for the master to delay until the propitious moment, the giving of the final order to abandon the ship.

We deem it our duty to place on record this appreciation of the conduct of the master and all those under him.

Dated at Wellington this 15th day of September, 1930.

E. PAGE,

Stipendiary Magistrate.

L. WORRELL

W. H. PARKER

GEO. HUNTLEY

} *Assessors.*

(Issued by the Board of Trade in London
on Thursday, the 11th day of December, 1930.)

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