

UNITED STATES COAST GUARD

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



MVI

1 MAR 1955

(MORMACKITE - a-5 Bd)

Commandant's Action

ON

Marine Board of Investigation; foundering of SS MORMACKITE
off the Virginia Capes on 7 October 1954 with loss of life

1. Pursuant to the provisions of Title 46 CFR Part 136, 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.

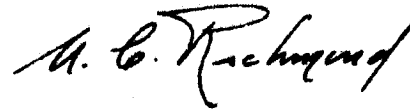
2. The SS MORMACKITE, a cargo vessel of 6195 g.t., on 24-25 September 1954 at Victoria, Brazil, took on board a cargo consisting of 9,003 tons of iron ore and 30 tons of bagged cocoa beans. The ore cargo was not trimmed. On 25 September the MORMACKITE departed for Baltimore and its voyage north until the morning of the 7th of October was uneventful, as the weather was good and the vessel rode satisfactorily. At about 0500 7 October, seas began coming over the bow and the lookout was shifted to the flying bridge and speed was reduced. At 0530 the vessel was rolling and some shifting of cargo was heard. At 0900 with wind northeasterly, force 30 knots, and swells running, a sea struck the starboard bow a hammer-like blow, causing the cargo to shift and the vessel by 0915 was listing 25° to port. The engines were stopped. The list to port progressively increased, the stack began taking water, and the crew abandoned the vessel by walking and jumping into the sea, and by 0945 the vessel rolled over on the port side and sank stern first. No orders were given either to prepare to abandon or to abandon ship. None of the officers who might have been authorized to order such abandonment, survived. The MORMACKITE was fitted with two 70-person motor lifeboats, one on each side of the vessel, under gravity davits, and the crew was trained in their launching and use. Since no orders were given to prepare to abandon or to abandon the vessel and in view of the heavy list that ultimately developed, the lifeboats went down with the ship, while the crew entered the water directly, wearing life preservers. No distress signals, either visual or wireless, were sent. The crew remained in the water from 0945 7 October until 0728 9 October, when the first survivors were picked up. Of the 48 persons comprising the crew of the MORMACKITE, 37 perished, mostly by drowning and exposure, and 11 survived. The survivors were picked up from the water in position Latitude 36° 17' North, and Longitude 73° 14' West.

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3. The Findings of Fact, Opinions, and Recommendations of the Marine Board of Investigation convened to investigate subject casualty are approved subject to the following remarks.

4. The Recommendations of the Board, paragraphs 2 and 3, that cargo vessels be required to carry additional buoyant apparatus consisting of life rafts or life floats to accommodate all persons so as to be readily accessible and easily launched, and fitted with radar reflectors, will be placed on the agenda for consideration by the Merchant Marine Council.



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

ORIGINAL FOR COAST GUARD HQ
MARINE BOARD OF INVESTIGATION
CONCERNING
FOUNDERING OF SS NORMACKITE

CONVICTED AT
NORFOLK, VA.

1955 JAN 1 AM 8 46

RECEIVED
MERCHANT VESSEL
INSPECTION DIVISION

After full and mature deliberation the board finds as follows:

FINDING OF FACTS

That all times used are Eastern Standard Time.

1. At about 9:45 a.m., 7 October 1954, the SS MORMACKITE, while enroute from the port of Victoria, Brazil, to Baltimore, Md., sank after taking a marked port list. On board were 48 persons, all of which were vessel's personnel. Eleven survived, twelve bodies were recovered, and twenty-five are missing and presumed dead. Cargo consisted of 9,003 tons of Brazilian iron ore in bulk and 30 tons of cocoa beans in bags (500 bags). Loss in figures of vessel and cargo is estimated at \$1,155,000.00. The exact position where the vessel sank has not been definitely established by the evidence. However, survivors were picked up from the water on 9 October 1954 in position, Latitude 36° 17' N and Longitude 73° 14' W.
2. That the steam vessel MORMACKITE, O.N. 247736, C2-SB-1, 6195 gross tons, 3589 net tons, registered length 438.9 feet, registered breadth 63.9 feet, registered depth 27.1 feet, was built in 1945 at Oakland, California and was owned and operated by the Moore-McCormack Lines, Inc., of 5 Broadway New York City.
3. That a Certificate of Inspection was issued to the MORMACKITE by the Officer in Charge, Marine Inspection, Baltimore, Md. on 14 July 1954, which permitted the vessel to be navigated on oceans.
4. That a Safety Radiotelegraphy Certificate was issued to the vessel by the Officer in Charge, Marine Inspection, Baltimore, Md., on 14 July 1954.
5. That a Safety Equipment Certificate was issued to the vessel by the Officer in Charge, Marine Inspection, Baltimore, Md., on 14 July 1954.
6. That the certificates listed in paragraphs 3, 4, and 5 were in force at the time of the casualty.
7. That the International Load Line Certificate No. I-10.030-2 was issued to the MORMACKITE by the American Bureau of Shipping on 20 September 1954 and this certificate was in force at the time of the casualty.
8. That the vessel is a standard C-2 type vessel with five hatches and deep tanks in Nos. 2 and 4 holds and two 'tween decks in Nos. 1, 2, 3, and 4 hatches and one 'tween deck in No. 5 hatch.
9. That the main deck hatch openings were covered by steel pontoons made watertight by canvas tarpaulins, battens, cross battens and wedges.
10. That the 'tween deck hatch openings were covered by means of steel beams with wooden hatch boards.

11. That the summer keel load draft of the vessel allowed by the load line certificate was 27' 3".
12. That the vessel was equipped with a port and starboard approved motor lifeboat located amidships, each having a capacity of 70 persons.
13. That the vessel was equipped with approved gravity-type lifeboat davits which were in good working order prior to the casualty.
14. That the vessel was equipped with more than 66 approved cork life jackets.
15. That in addition to the radio equipment on board in accordance with the Safety Radiotelegraphy Certificate the vessel was equipped with a lifeboat portable radio apparatus.
16. That the MORMACKITE arrived in Victoria, Brazil, in a light condition on 21 September 1954.
17. That the deep tank lids in Nos. 2 and 4 holds were covered, gasketed and bolted and dunnage was spread fore and aft prior to loading.
18. That at 7:00 p.m., 24 September 1954, the vessel commenced loading iron ore as she laid at the dock starboard side to, and the vessel finished loading ore at 6:15 a.m., 25 September 1954.
19. That the loading was accomplished by means of movable endless belt conveyors mounted on tracks which made it possible to move the conveyors about the hatch or from hatch to hatch without shifting the vessel at the dock.
20. That as the ore reached the end of each belt it spilled into a rectangular chute which guided the ore into the hold.
21. That this chute was about 17 feet long when extended and was fitted with two lines manned by workmen which could be pulled or directed for distributing the ore.
22. That other than the movable chute no trimming of the ore was performed.
23. That the ore cargo was distributed as follows:
 - No. 1 hold, 1691 tons ore
 - No. 2 lower 'tween, 700 tons ore
 - No. 3 upper 'tween, 430 tons ore
 - No. 3 hold, 2115 tons c.o.
 - No. 3 lower 'tween, 1245 tons ore
 - No. 4 lower 'tween, 660 tons ore
 - No. 4 upper 'tween, 500 tons ore
 - No. 5 hold, 1662 tons ore

24. That the density of the ore was approximately 13.1 cubic feet per ton and the ore varied in size from dust to pieces twice the size of a man's fist.

25. That for purposes of separation of the ore cargo, No. 2 upper 'tween deck hatch covers, No. 3 lower 'tween deck hatch covers and No. 4 upper 'tween deck hatch covers were in place.

26. That the cargo loading plan (Exhibit 2) indicates that the ore in No. 1 lower hold extended into the No. 1 lower 'tween deck and the ore in No. 3 lower 'tween deck extended into No. 3 upper 'tween deck and the ore in No. 5 hold extended into No. 5 'tween deck.

27. That after loading the ore the vessel loaded 30 tons of bagged cocoa beans in the after part of No. 5 'tween deck.

28. That in addition to a total cargo of 9033 tons at sailing, the loading plan (Exhibit 2) shows 5145 barrels of fuel oil and 270 tons of fresh water on board.

29. That the tanks into which this fuel and water were distributed were not determined during the investigation but the deep tanks in Nos. 2 and 4 holds were empty.

30. That when all cargo had been loaded on board, the shore workers covered Nos. 1, 2 and 5 hatches, leaving Nos. 3 and 4 hatches to be covered by the crew.

31. That when the crew covered Nos. 3 and 4 hatches, it was noted that the ore cargo was pyramided, several pyramids being observed in each hatch and rain tents and dunnage were seen under the wings.

32. That the mean keel draft at the time of departure from Victoria was 27 feet, 6 inches.

33. That the vessel had a slight port list at the time of departure from Victoria and this condition continued during the passage.

34. That from the time of departure from Victoria enroute Baltimore, Md., until the morning of 7 October 1934, the voyage was uneventful, the weather was good and the vessel rode satisfactorily.

35. That on 7 October 1954, about 5:00 a.m., wind and sea conditions increased and two seamen were ordered aft to secure a tarpaulin awning which had broken loose and was flapping in the wind.

36. That at about 5:30 a.m. the vessel was rolling "pretty bad" and the chief officer, Mr. Richardson, together with Charles Williams, O.S., went aft to No. 5 hatch to secure oil drums which were adrift on deck.

37. That after securing the oil drums, while in the vicinity of No. 5 hatch, Williams heard cargo "rattling" and said to Mr. Richardson, "I hear cargo rattling down there," but he heard no reply from Mr. Richardson.

38. That the noise in the cargo hold heard by Williams was heard only when the vessel rolled to port and the vessel rolled more to port than it did to starboard.

39. That beginning at 5:00 a.m. the lookout was stationed on the flying bridge instead of the bow because the vessel was taking seas over the bow.

40. That about 5:00 a.m. the vessel's speed was reduced and the vessel thereafter proceeded at various speeds until about 9:15 a.m. at which time the engines were stopped but the generator was allowed to run on atmospheric exhaust.

41. That at about 9:00 the seas struck the starboard bow of the vessel "like a great hammer" and the vessel rolled to port and the cargo shifted.

42. That by 9:15 a.m. the vessel had taken a port list of about 25° to a position where the port side of the weather deck at No. 4 hatch was awash.

43. That from this condition the port list continued to increase until the vessel took water into the stack and sank about 9:45 a.m.

44. That the vessel rolled over on the port side and sank stern first.

45. That the hatch covers were observed to be in place up to and at the time of sinking.

46. That about 9:15 a.m. at the time of the first permanent list, the crew procured life jackets and went on deck.

47. That life jackets were accessible to all hands.

48. That during the period of time from 8:00 a.m. until 9:15 a.m., two water hoses were rigged, one leading from the fire plug, starboard side main deckhouse aft, into the sounding hole of the forward starboard deep tank No. 4 hold and the other hose led from the fire plug on the masthouse aft of No. 4 hatch into the sounding hole of the after starboard deep tank No. 4 hold.

49. That the chief officer and the chief engineer, Mr. Wall, were handling the hoses and pressure was observed on these hoses.

50. That the chief officer was heard to say that as soon as they got water in the tanks she would straighten up.

51. That as the list increased some members of the crew congregated on the starboard side of the poop deck and others on the starboard side midships.

52. That at about 9:15 a.m. the radio operator was seen standing by the radio equipment, "working the radio."

53. That the radio operator stated to survivors shortly after the sinking of the vessel that he had sent a message but had received no answer; however, there is no evidence that a distress message or any message was ever heard by anyone.

54. That the lifeboat portable radio apparatus was retrieved while floating in the water shortly after the casualty and passed to the radio operator, who, under the circumstances, could not put the set in operation, since it was not designed to operate floating in the water.

55. That at the time the stack was taking water just prior to abandoning the ship the master on the starboard wing of the bridge was heard to say in a loud voice, "OK, let's go."

56. That the general alarm was not sounded, abandon ship stations not manned, and lifeboats were not prepared for launching; however, the evidence indicates that all hands were up and about.

57. That the persons involved in this casualty and whose names are listed in exhibits 8(1) through 8(4) were:

(a) Survivors, all of whom were picked up on 9 October 1954:

Thomas Leamy, Z-172344-D3, Messman
Remy Rosario, Z-10705-D1, Boatswain
Eldredge T. Lemell, Z-180839-D3, 2nd Electrician
John A. Davis, Z-379364-D1, Deck Utility
Tadeo DelValle, Z-64932, A.B.
Charles L. Williams, Z-208360, O.S.
Miguel A. Hernandez, Z-70016-D1, Ch. Steward
Shed Sullivan, Jr. Z-283866, Oiler
Charles Henry, Z-77438-D1, Messman
Pedro DeJesus, Z-596113-D1, Wiper
Manuel Roman, Z-1026935, Wiper

(b) Missing and presumed dead:

Patrick J. McMahon, License No. 40123, Master
William Rudolph, Z-118382-D1, 2nd Mate
Michael J. Grealish, Z-593991, 3rd Mate
George F. Alden, Z-472835, Jr. 3rd Mate
Edward T. Wall, Z-211157, Chief Engineer
Edward T. Hopkins, Z-497820, 1st Asst. Engineer
Lorrna A. Robinson, Z-407541, 2nd Asst. Engineer
Lawrence A. Berk, Z-335999, 3rd Asst. Engineer
Alfred N. Hinton, Z-864853, Jr. 3rd Asst. Engineer
Carleton C. Hiscok, Z-157560, Licensed Jr. Asst. Engineer
Marvin J. Knieger, Z-524519, Radio Operator
George W. Overton, Z-006096, Purser
Sidney Watler, Z-769910, A.B.
Richard B. Braithwaite, Z-785918, A.B.
Leonard Kelder, Z-484833, A.B.
Boyd Q. Dickerson, Z-690860, Oiler
Charles W. Clark, Jr., Z-898500, Oiler
Juan Pena, Z-120545, FWT
St. Elmo Hayes, Z-128914, FWT
Esequial Matos, Z-389113, Wiper
David B. Frost, Z-396753-B1, Cook/Baker
Carmen A. Cadiz, Z-161143, 3rd Cook
Firmino M. Laver, Z-272225, Deck Utility
George A. Leybourne, Z-67815, Messman
Wilbur E. Gibbs, Z-269815-D1, Messman

(c) Dead, bodies recovered:

Harold R. Richardson, Z-435810, Chief Mate
Lloyd Banks, Z-442405, Jr. Engineer
Ralph Pagan, Z-687717, Utility
Hilding W. Lord, Z-362274, A. B.
Gilberto Jimenez, Z-688319, Utility
George E. A. Morin, Z-380620-D1, A.B.
Zack Watts, Z-768715, Electrician
Luis E. Rodriguez, Z-1002839, O.S.
Cesferino Rodriguez, Z-447521, FWT
Oscar D. Lewis, Z-521809, Chief Cook
Earl W. Bennett, Z-19858-D1, O.S.
Angel Luis Acosta, Z-389486, Messman

58. That the wind, weather and sea conditions existing at the time the vessel took the port list and sank has not been definitely established by the evidence; however, witnesses state the wind and sea were of sufficient force and size to cause spray over the bow and that the vessel was rolling heavily in the swell and information from other vessels in the area as indicated on exhibit 14 shows the wind to have been NEly at about 30 knots. The vessel's course at 4:00 a.m. prior to the casualty was 317 degrees gyro and the speed was 15 knots.

59. That there was no evidence of structural failure of the vessel or inspected equipment.

60. That the survivors were sustained afloat by cork life jackets, flotsam consisting of dunnage, wood gratings, wood staging, spare hatch boards and wood ladders.

61. That the bodies recovered were sustained afloat by cork life jackets.

62. That some members of the crew were attacked by sharks.

63. That survivors in the water on 7 and 8 October saw passing surface vessels and aircraft.

64. That the last radio communication received by Moore McCormick Lines from the MORMACKITE was at 2:00 p.m., 6 October 1954. This message gave a position at 34° 20'N latitude and 71° 30' W Longitude, speed 16 knots.

65. That counsel for the vessel's owners stated that the master of the vessel was expected to report his position when he failed to make a standard days run or when there was any significant change in the vessel's estimated time of arrival.

66. That the first notification received by the Commander, Fifth Coast Guard District that the vessel was overdue was at 3:53 p.m., 8 October 1954, at which time the Norfolk agent of Moore McCormick Lines informed that the MORMACKITE was overdue at Cape Henry since 2 p.m., 7 October, and that the operating company had been unable to contact the vessel since that time.

67. That the Coast Guard Air Station, Elizabeth City, N.C., was ordered by telephone to dispatch a radar equipped plane which was airborne at 5:00 p.m., 8 October 1954, with orders to search the last known position of the MORMACKITE; and that another PBM, already airborne, was diverted at 4:18 p.m. to Cape Henry to search along the expected track.

68. That the Commander in Chief, Atlantic Fleet was contacted at 4:26 p.m., 8 October 1954 and requested to alert naval vessels in the area.

69. That at 4:54 p.m., 8 October 1954, an All Ships message on the 500 Kc calling frequency was sent and within minutes acknowledgments were received from a number of merchant vessels.

70. That Coast Guard surface vessels were alerted and were awaiting reports of the air search.

71. That the radar equipped plane returned at 9:07 p.m., 8 October 1954, having searched the area and having sighted twenty skips underway, which the plane was unable to positively identify.

72. That three Coast Guard cutters were ordered to get underway at this time and proceeded to Cape Henry to await additional orders which would include a search plan commencing at daybreak, 9 October 1954.

73. That planes were requested from the Navy and six planes were allocated for the forthcoming search.

74. That at 2:20 a.m. on 9 October the Greek SS MAKADONIA in position Lat. 36° 15' N, Long. 73° 11' W, radioted that voices had been heard in the water and that boats were being put over to search.

75. That two Coast Guard planes were ordered to this position to drop flares to assist the MAKADONIA.

76. That URGENT messages were sent informing all ships of the latest developments.

77. That the first survivor was picked up by the SS MAKEDONIA at 7:28 a.m., 9 October, in position Lat. $36^{\circ} 17' N$ and Long. $73^{\circ} 14' W$ after a sighting by a Coast Guard plane.

78. That the search continued all day 9 October by Coast Guard surface vessels and aircraft, naval surface vessels, aircraft and blimps and merchant vessels.

79. That a total of eleven survivors and twelve bodies were recovered and returned to Norfolk, Virginia.

80. That the search continued during daylight hours 10 October, using three Coast Guard vessels, three P-5Ms, two Navy blimps and one Navy aircraft and no further survivors or bodies were found.

81. That the search was terminated at dusk on 10 October 1954.

-OPINIONS-

1. That the ore cargo could not be trimmed out to the sides of the vessel in the 'tween deck spaces due to the method of loading without hand trimming.
2. That the ore was pyramided to some degree in all cargo spaces.
3. That the failure to trim on the 'tween decks and the pyramiding on all cargo spaces, combined with the adverse wind and sea conditions on the morning of the casualty caused the cargo to progressively shift, the vessel to list to port and founder.
4. That the GM of the vessel, calculated for conditions estimated to have existed just prior to the first marked permanent list, was 1.27 feet and is considered satisfactory under normal conditions; however, the conditions of seaworthiness were lost when the cargo shifted.
5. That after a review of the evidence it has been impossible to determine fully what was done by the master and his officers to preserve the vessel, except that the speed had been reduced, the vessel's heading altered and ballasting of No. 4 starboard deep tanks was started.
6. That after the first marked permanent list as the cargo continued to shift, increasing the list from the initial 25 degrees, the launching of the starboard lifeboat became impossible.
7. That after the first marked permanent list when the rough sea was level with the port side of the main deck, the port lifeboat was dangerous to launch.
8. That the master, Patrick J. McMahon, was negligent in allowing the cargo to be loaded in such a manner that shifting was possible.
9. That the master, Patrick J. McMahon, was negligent in not ordering preparations made to abandon ship.
10. That the master, Patrick J. McMahon, was negligent in not ordering the radio operator to send a distress message or any radio message in sufficient time to receive an acknowledgement therefor.
11. That all hands abandoned ship with the possible exception of the master.
12. That the loss of life would have been reduced if the Coast Guard had been notified earlier of the MORMACKITE incident and had instituted the search sooner.

-RECOMMENDATIONS-

1. That a complete study be made of the carriage of bulk ore and other similar cargoes to establish minimum standards for the proper stowage and safe transportation of such materials in general cargo vessels.
2. That all cargo vessels be required to carry additional buoyant apparatus consisting of life rafts or life floats to accommodate all persons and so as to be readily accessible and readily launched.
3. That the additional buoyant apparatus be equipped with radar reflectors.
4. That the lifeboat portable radio be designed in such a manner that it can be placed in operation without opening the watertight covers.
5. That the ship operators be instructed in the value of promptly notifying the Coast Guard of any unaccountable delay coupled with the loss of radio contact with the vessel.
6. That all masters be instructed in the value of promptly notifying the operating company and Coast Guard of any difficulty or situation which reduces the seaworthiness of the vessel.

R. M. Hoyle

R. M. HOYLE
Captain, U. S. Coast Guard, Chairman

W. J. Conley Jr.
J. CONLEY JR.
Commander, U. S. Coast Guard, Member

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

The board then, at 2:30 p.m., 24 January 1955, adjourned to await the action of the convening authority.

R. M. Hoyle

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Captain, U. S. Coast Guard, Chairman

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Lieutenant Commander, U. S. Coast Guard, Member and Recorder