

UNITED STATES COAST GUARD

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



MVI
(THORSHALL - WILLIAM T.
ROSSELL a-13 Bd)

Commandant's Action

31 OCT 1958

on

Marine Board of Investigation; collision of U. S. Army Corps of Engineers Dredge WILLIAM T. ROSSELL and MV THORSHALL (Norwegian), Coos Bay, Oregon, on 10 September 1957 with loss of life

1. Pursuant to the provisions of Title 46 C.F.R. 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. On the afternoon of 10 September 1957 the Norwegian freight vessel THORSHALL of 3,676 g. t. departed Coos Bay, Oregon, under the conn of a Coos Bay pilot, with a partial cargo of lumber, en route to Seattle, Washington. The weather was overcast, winds southwest, force 1 to 2, visibility good with an ebb tide.
3. The WILLIAM T. ROSSELL, a U. S. Army Corps of Engineers hopper dredge of 2,690 g. t. was engaged in dredging operations in the Coos Bay Entrance Range Channel which consisted of loading her hoppers with dredged material and dumping it offshore. Each evolution required one hour.
4. At the time of the THORSHALL's departure the ROSSELL was returning from dumping. The pilot boat GYGNET contacted the ROSSELL by radio advising that the THORSHALL was outbound. It was agreed that the ROSSELL would hold to the south of the center of the Entrance Range Channel to seaward of Guano Rock Lighted Whistle Buoy 4 (LL 879) and that the ROSSELL and the THORSHALL should exchange passing signals since the THORSHALL was not in radio communication with either vessel. The ROSSELL arrived abeam of Coos Bay Entrance Bell Buoy 1 A as the THORSHALL rounded the bend at the intersection of the Inside and Entrance Ranges. One blast passing signals were sounded by both vessels. The THORSHALL's signal was not heard aboard the dredge but a normal port to port passing appeared to be developing as the THORSHALL was observed hauling to her own right hand side of the channel after coming out of the turn. When the two vessels were approximately 1,200 feet apart the THORSHALL suffered a steering gear failure and, before any preventive action could be taken by either vessel, she came left into the ROSSELL colliding with her and penetrating her hull at nearly a 90° angle slightly aft of amidships in way of the hopper space. After impact the THORSHALL backed out of the ROSSELL which listed sharply to port, sunk and righted herself in about 30 feet of water with her superstructure awash in breaking seas.

5. Participating in the rescue of survivors was a helicopter owned and operated by Mr. [REDACTED] the pilot boat CYGNET, various privately owned small boats from the Coos Bay area and Coast Guard surface units.

6. As a result of this collision four members of the crew of the ROSSELL lost their lives and several others were injured or suffered from exposure to varying degrees. There were no personnel casualties reported aboard the THORSHALL.

REMARKS

7. As determined by the Board, the proximate cause of this collision was the failure of the electric steering gear aboard the MV THORSHALL. It appears that the steering gear motor controller, which was not of the type that automatically restarts after interruption of power, tripped out as the two vessels were approaching each other. The reason the motor controller tripped out was not definitely determined, but subsequent tests conducted by the Board demonstrated that vibration in the area of the controller housing could have been the cause.

8. The Board was of the opinion that the sinking of the ROSSELL would have been avoided had the watertight doors in bulkheads 48 and 78 which enclosed the vessel's hopper space been closed prior to the collision. However, a further review of the vessel's plans, curves of form and stability curves, Exhibits 29 through 35, indicates that the port and starboard void spaces are completely separated by the centerline dredging well. In view of this, it appears highly probable that the dredge would have capsized as a result of unsymmetrical flooding if the watertight doors to these spaces had been closed.

9. In accordance with the recommendation of the Board, a copy of the record in this case will be referred to the Coast Guard Board of Medals and Awards for formal consideration of the lifesaving achievements of Mr. [REDACTED], pilot of the helicopter and Boatswain's Mate, Third Class, [REDACTED] USCG, Coxswain of the Coast Guard motor lifeboat CG-36496.

10. Subject to the foregoing remarks, the report of the Marine Board of Investigation is approved.

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

After full and mature deliberation, the board finds as follows:

FINDINGS OF FACT

1. On 10 September 1957, at about 1700, P. S. T., the Norwegian Motor Vessel THORSHALL, outbound from Coos Bay, Oregon, and the United States Army Dredge WILLIAM T. ROSSELL, inbound from sea, collided on the Coos Bay bar, resulting in the sinking of the dredge and the loss of four (4) lives.

2. The vessels involved were:

a. The Norwegian Motor Vessel THORSHALL, a freight vessel of 3676 gross and 2040 net tons, with a dead weight capacity of 6230 tons, 376 feet in length and with a 53 foot beam, built of steel at Burntisland, Scotland in 1948, and owned and operated by [REDACTED] A/S, Oslo, Norway. International Stevedoring Company of Coos Bay, Oregon is the vessel's local agent. The THORSHALL is driven by a four-bladed screw with a 13.7 foot pitch, which is turned about 107 r.p.m. for full speed by a 5,500 h.p. Doxford oil engine. She normally carries a crew of 38 men and operates between the Pacific West Coast of the United States and the South Pacific islands, such as Tahiti and American Samoa. The vessel is fitted with deep tanks in No. 2 hold, with a capacity of 600 tons of bulk cargo. The THORSHALL is classed by the Norwegian Veritas and was last surveyed approximately one (1) week before this casualty. Her full speed is between 13½ knots and 14 knots, half speed is 11 knots, and slow speed is 7 knots. Her engine is capable of developing approximately 85 r.p.m. astern. [REDACTED] was serving as master of the vessel and [REDACTED] as pilot at the time of this collision.

b. The United States Army Dredge WILLIAM T. ROSSELL, hereinafter called "the dredge," a 2690 gross ton hopper-type dredge with a capacity of 1,434 cubic yards, approximately 268 feet in length by 46 foot beam by 25 foot in depth, built of steel in 1924 by the Sun Shipbuilding Co., Chester, Pa., owned by the United States of America and operated by the United States Army Corps of Engineers. She is a twin screw, twin rudder diesel electric vessel, with her engines controlled from the bridge. Her propellers have a pitch of 10.7 feet. Her engines develop 1,600 h.p., 800 h.p. per shaft. The vessel's normal crew consists of 52 men, and on the day of collision 50 men were on board. Her full speed, 110 r.p.m., is 10 to 10.5 knots; half speed, 75 r.p.m., is 7 knots; and slow speed, 50 r.p.m., is somewhat less than 5 knots. The dredge was inspected under the direction of OCMI, Portland, Oregon, on 17 May 1957, and issued a Certificate of Inspection. She also had a valid load line certificate. [REDACTED] was serving as master at the time of the collision. The dredge is transversely framed with the frames numbered from aft forward. Watertight thwartships bulkheads are installed on:

(1) Frame 20, from the bottom to the first platform where it is stepped aft to frame 12. This is the after bulkhead of the after engine-room.

(2) Frame 48, forming the forward bulkhead of the after engine-room.

(3) Frame 78, forming the after bulkhead of the forward engine-room.

(4) Frame 105, forming the forward bulkhead of the forward engine-room.

(5) Frames 117 and 119, forming a cofferdam and providing a collision bulkhead.

The space between frames 48 and 78 is the vessel's cargo or "hopper" space. Two longitudinal bulkheads, port and starboard, each 3' 06" from the fore and aft centerline; bulkhead 48; and bulkhead 78 form a "drag well," which separates the port hopper space from the starboard. The hoppers, four port and four starboard, are cubical in shape at the top but take the form of an inverted four sided pyramid about halfway down. The top of the pyramid is cut off at the top of the floors and a cubical trunk, 4' x 4' x 06", in which is fitted a "hopper door" and through which the load is discharged, extends to the vessel's bottom. The space around the lower (pyramidal) section of the hoppers forms a void. Each void has a volume of 411 tons of salt water. Through each void is a passageway between the engine-rooms. Access to the passageways is provided by watertight doors, two each, in bulkheads 48 and 78. The doors are fitted well outboard at the floor plate level (top of the floors) and are controlled locally manually or electrically and electrically from the pilothouse. These four doors are maintained in the open position at all times when the dredge is engaged in normal dredging and steaming and were at all times pertinent to this report open. The port passageway between the engine-rooms was used by the engineering personnel on watch in going from one space to the other. The starboard passageway was infrequently used because it was in part obstructed by piping. The time required to close the watertight doors electrically was estimated at substantially less than one (1) minute.

3. The weather at the time of the collision was: overcast; wind southwest, force 1 to 2; the sea was from the west with a height of approximately 10 feet in the vicinity of the casualty. The current was ebbing with a velocity of about 2.4 knots, which gave rise to an "ebb chop" on the water. Sunset was to occur at about 1745.

4. Coos Bay, Oregon, is a body of water formed by the mouth of the Coos River. The bay is entered from seaward on a course of 115° True. The center of the channel is marked by the "Entrance Range." The channel is protected by two (2) jetties extending from the North Spit, on the north, and Bastendorff Beach on the south, a distance of about one-half mile to seaward. The channel is nearly 200 yards wide at the seaward end of the jetties and narrows gradually to a width of 100 yards. The controlling depth of the entrance channel is 38 feet, or greater. Three (3) buoys are located to seaward of the North Jetty, north of and parallel to the centerline of the channel. The "1" buoy, a black bell, is about 1,500 yards north and west of the seaward end of the North Jetty; can buoy "1A," 1,000 yards; and black gong buoy "3", 500 yards. Approximately between the inshore ends of the jetties, on the south side of the channel, is located a red-lighted whistle buoy "4," which is commonly called the Guano Rock Buoy. Guano Rock, which is exposed at low water, is 150 yards southeast of No. 4 Buoy. No 5 Buoy, a lighted bell, is located on the north side and at the inland end of the entrance channel, approximately 700 yards east of Buoy No. 4. The channel then swings gradually northward to a true direction of 022° , which is marked by the "Inside Range." Buoy No. 6 marks the seaward end of the Inside Range channel and is located about 900 yards east of Buoy 5. The Sitka Dock is located on the southeast side of the channel, approximately 3,500 yards upstream from Buoy No. 6. The channel width in the turn between the Entrance Range and the Inside Range is nearly 200 yards.

5. The dredge ROSSELL had been engaged during the months of July and August in operations in the vicinity of the Coos Bay bar. The sand which she dredged from the bar and the river was carried offshore and dumped about one (1) mile west of the No. 1 Bell Buoy. The dredge could load her hoppers to capacity in about 30 to 45 minutes, and a round trip from the dredging area to the dump and return took slightly over one (1) hour. While dredging, she carried a watch consisting of one mate and one quartermaster in the pilothouse, a drag tender and a station man to operate the dredging equipment, and in the engineroom one licensed engineer, one electrician and two oilers. On 10 September 1957, the ROSSELL was engaged in dredging the south end of the Coos Bay range because of unfavorable weather conditions on the bar. Shortly after 1600, P.S.T., she departed the Coos Bay range with a full load of sand and deposited same in the dumping area at about 1640. Because of the weather, the dredge was dumping about one (1) mile northwest of the No. 1 Bell. After the load was discharged the hopper doors were closed. The vessel, in this condition, has a draft of about 15' 06" forward and 16' 06" aft. At about 1645, James D. Nation, second mate, went to the bridge of the dredge to relieve the watch. The vessel was inbound from the dump about a half mile northwest of No. 1 Bell Buoy and was steering a course of 160° True, at a speed of about 10 knots. Nation immediately altered course to 130° True.

6. The THORSHALL departed Pacific Georgia Pier, at Coos Bay, at about 1540, P.S.T., on 10 September 1957, en route Seattle, Washington. She had on board about 550 tons of lumber which gave her a draft of 9' 10" forward and 15' 06" aft. She was at all relevant times directed by [REDACTED] a Coos Bay pilot. Her steering gear was not checked prior to her departure, but she maneuvered through a winding channel on various courses and speeds with no difficulty and arrived off the Sitka Dock at about 1650. None of her crew were on the forecandle standing by the anchor. The THORSHALL was being preceded out the channel by the Coos Bay pilot boat CYGNET, which was being operated by Captain Dale W. Holden, senior pilot at Coos Bay.

7. At about 1650, Captain [REDACTED] on the CYGNET, called the dredge on the radio telephone and advised the mate on watch, Nation, that they were outbound with the vessel and were off the pulp mill (Sitka Dock). Nation inquired of [REDACTED] whether or not it would be best for the dredge to lay outside until the outbound vessel cleared the bar. [REDACTED] replied that in his opinion it was not necessary for the dredge to stay outside as long as the vessels did not meet at a turn in the channel. Nation informed Holden that he would lay to the south of the center of the channel, to seaward of the Guano Rock Buoy. Since Holden was not in communication with the THORSHALL he advised Nation to exchange regular "passing" signals with the freighter.

8. During the conversation with [REDACTED], Nation observed the THORSHALL with the Sitka Dock abeam. He then slowed his engine to one-half ahead and continued on course 130° True. The dredge arrived abeam of Buoy 1A while the THORSHALL was negotiating the turn between the Inside and Entrance ranges. The dredge was approximately in the center of the channel and Nation changed course to 120° True and set the engines on "Full ahead." The THORSHALL rounded the bend at full speed coming out of the turn somewhat to the south of the center of the entrance channel in the vicinity of No. 5 Buoy. At this time the ROSSELL was between the seaward ends of the jetties on the south edge of the entrance channel. Nation changed course to 115° True and sounded one blast on his whistle.

9. As the THORSHALL rounded No. 5, she was making full speed and swinging slowly to starboard. Since he was somewhat to the south or the left hand side of the channel, the pilot allowed the vessel to swing until she was heading for the North Jetty on a true course of about 305° or 310° True. Axelson heard the one-blast signal from the dredge and answered with one short blast. The THORSHALL's answer was not heard on board the dredge. The vessels approached one another with the dredge navigating the south edge of the channel and the THORSHALL cutting diagonally across the channel from south to north. The THORSHALL, while abeam of Guano Rock,

had crossed to the north side of the channel and the pilot ordered his helm "Port easy" to steady up in the channel. As the THORSHALL approached a heading of 295° True, [redacted] ordered "Midships" and then "Steady." The THORSHALL did not steady and continued to swing slowly to the left. Axelson ordered "Hard starboard" and the master, Captain [redacted], ran into the pilothouse and observed that the helmsman had the wheel hard right. The vessel is not equipped with a rudder angle indicator and the position of the rudder could not be observed by those in the pilothouse. Nation, observing the THORSHALL swinging left across the channel, ordered his quartermaster to course 120° and sounded a second one-blast signal on his whistle. When the starboard side of the THORSHALL came into view, Nation ordered his rudder "Hard right" and sounded the danger signal. [redacted] rang the THORSHALL's telegraph to "Full astern." Nation then realizing that collision was inevitable sounded the general alarm. He did not attempt to electrically close the watertight doors. The dredge swung to a course of about 150° True, and then Nation shifted the helm to "Hard left" and backed full on his port engine in an effort to swing his stern away from the THORSHALL's bow. The vessels collided at approximately right angles, the bow of the THORSHALL striking the dredge at frame 50 in the port hopper space. The THORSHALL's bow penetrated the dredge's hull to a depth of about 6 feet at the boat deck and $4\frac{1}{2}$ feet at the main deck. Ruptured shell plating was set in $3\frac{1}{2}$ feet at the 22' 06" waterline and downward to the 8' waterline, the lowest extent of the damage being at about the $4\frac{1}{2}$ foot waterline. The opening in the dredge's side was symmetrical fore and aft, centered on frame 50. Its greatest width, at the boat deck, was about $8\frac{1}{2}$ feet. At the main deck the opening was about 2 feet wide and below the main deck the width varied from 2 feet to less than a foot. The shell plating in way of bulkhead 48 was not substantially disturbed below the main deck. The bulkhead was buckled about 8 inches at the main deck.

10. The THORSHALL's engine was stopped at the moment of impact, there having been insufficient time for the engineer on watch to start it in the astern direction. Following the collision, the engineer on watch on the THORSHALL telephoned to the bridge and inquired whether or not they still desired "Full astern." He received an affirmative reply and the THORSHALL commenced backing. The two vessels drifted to seaward and the heading of each changed slowly to the left. The THORSHALL's chief mate ran to the bow, looked over at the dredge and returned to the bridge. Captain [redacted] considering his dredge in a sinking condition, ordered her abandoned. The THORSHALL backed clear and proceeded slowly upstream toward Coos Bay. The dredge immediately took a heavy port list and sank rapidly. Approximately five (5) minutes after the collision the dredge grounded and righted herself on the bottom with her boat deck awash. Her entire crew, except one (1) man who was trapped below decks, congregated at various topside positions.

11. The THORSHALL lowered a port lifeboat to the water. The pilot boat CYGNET proceeded immediately to the seaward side of the sunken dredge and endeavored to recover personnel who had fallen or jumped over the side. Captain [REDACTED] on the pilot boat CYGNET, was called by radio telephone from the THORSHALL and asked what, if any, assistance could be rendered. [REDACTED] advised the THORSHALL not to send their lifeboat because sufficient boats were or soon would be available. The master and pilot on the THORSHALL concurred in this conclusion and did not send their boat. The CYGNET recovered four persons from the water and took the dredge's after lifeboat in tow.

12. Immediately after the collision, as the THORSHALL was backing away from the dredge, the THORSHALL's electrician proceeded to the engineroom. While descending the ladder he heard the steering failure alarm buzzer sounding, whereupon he went to the steering engine room. He unlocked the door and went inside and found the steering engine stopped. The starter switch was in the "off" position. The electrician started the steering engine and observed that it appeared to function normally.

13. The lookout at the Coos Bay Lifeboat Station witnessed the collision and passed the word to the officer in charge, who dispatched the CG-36496 and a forty-footer to the scene. The Coast Guard vessels contacted fishing boats which were in the vicinity of Charleston and enlisted their assistance also. A Coast Guard motor lifeboat arrived at the sunken dredge approximately 10 minutes after the collision.

14. The crew of the dredge, about 80 percent of whom had obtained life-jackets, endeavored to launch the two starboard lifeboats. The port boats had been swamped as a result of the heavy list immediately following the collision and were useless. The forward starboard boat, with 13 men including the master, was launched successfully despite the fact that the forward fall was dropped and the boat lowered stern first. The after starboard boat, carrying six (6) men, while in the process of being lowered was launched and carried away by the sea.

15. A helicopter, owned and piloted by [REDACTED] of Portland, Oregon, and carrying Colonel [REDACTED] United States Army, Portland District Engineer, spotted the two vessels shortly after the collision. [REDACTED] proceeded to the scene and made repeated trips from the dredge to the shore, carrying one survivor each trip. The men were carried on the helicopter's skids and were picked off the top of kingposts and masts. The helicopter was at times flown underneath the vessel's radio antennae which were strung between the fore and main masts. Myron G. Colburn, Jr., BM3, USCG, coxswain of the CG-36496, observed Ernest Hartl, chief engineer; George Mansfield; Paul Valencik; and William Braswell clinging to the ROSSELL's after port davit. Each swell broke completely over the four men. Colburn placed the forefoot of the lifeboat against the ROSSELL's sheer and with the use of his engine drove the bow of the boat up onto

the ROSSELL's deck in the vicinity of the davit. He was immediately swept away by a breaking sea, but returned, repeated the operation and succeeded in getting Hartl on board before being swept away again by the sea. Despite the continuous battering by the breaking seas he repeated the maneuver thrice more and was successful in rescuing the remaining three men.

16. All of the crew of the dredge was recovered and taken ashore with the following exceptions:

a. Harry C. Peterson was washed overboard immediately after the collision and was drowned. His body was recovered.

b. Ong W. Tip succeeded in climbing part way up a kingpost, but was unable to maintain his grip and was washed overboard and drowned. His body, likewise, was recovered.

c. Andrew H. Ferguson was unable to extricate himself from the vessel's crew's messhall and was drowned. His body was recovered by skin divers a few days after the collision.

George N. Quinton was successfully taken ashore to the Coast Guard Lifeboat Station, where he suffered a heart attack and died. At least eleven other crew members were injured or taken ill as a result of exposure.

17. The THORSHALL returned to Empire, Oregon, about two miles upstream from the bar, and tied up. The electrician reported to the chief engineer that immediately following the collision the steering gear had been found turned off. The vessel was equipped with a Brown's Brothers Hydraulic steering engine and a conventional telemotor system. Power for the engine is controlled by a knife switch on the main switchboard in the engine room which feeds a manually operated DC starter in the steering engine room. There is no other starting switch for the steering engine. A steering failure alarm is located on the bridge. This alarm consists of a buzzer which sounds when the supply of power to the steering motor is interrupted. Examination of the buzzer subsequent to the collision indicated it was burned out and inoperative. A pilot light located on the bridge is provided to indicate that power is being supplied to the steering motor. Examination of this light subsequent to the collision indicated that the bulb was burned out. A similar buzzer and pilot light is located in the engine room. The light is in such a position as to be obscured to the engineer on watch. The buzzer was of insufficient intensity to be heard over the noise of the engine except in its immediate vicinity. It cannot be heard from the engine control stand.

18. During the course of testing the THORSHALL's steering gear after the collision it was discovered that a blow with the fist would cause the starter switch to release. Experiment showed that by striking the bulkhead or

the side of the switch with the fist the holding coil would release the control arm and de-energize the steering engine. The starting switch was renewed immediately. The steering gear had been surveyed by the Norwegian Veritas at Vancouver, B. C. approximately a week before the collision. Reportedly, the switch had been subjected to and satisfactorily passed an insulation test and visual inspection.

19. The THORSHALL suffered extensive damage to her bow forward of her collision bulkhead. Temporary repairs were effected at Coos Bay, Oregon and the vessel proceeded to Seattle, Washington, where a new bow was installed. The dredge is considered to be a total loss and no plans to salvage the vessel have been formulated.

20. On 18 March 1958, at San Francisco, California, representatives of the owners of both vessels and of the U. S. Coast Guard met to conduct an inspection and survey of the THORSHALL's steering engine starter switch which had been removed from the vessel following the collision. The nameplate data on the switch is "ST778 - 8 horsepower - 220 volts - 33 amperes." The overload coil trip was set at slightly more than 55 amperes. Resistance measurements from all connections to ground were infinite. The resistance of the holding coil was 4 ohms. The resistance of a new holding coil was 2.5 ohms. The holding coil was wired in series with the motor fields which have a resistance of 210 ohms. Consequently, when in service the holding coil carries a current of 1.03 amperes. The strength of the holding coil magnet was measured with a spring scale at various values of current. The coil would not release, due to low voltage, at 194 volts. The starter was subjected to a shock test by striking it with a rubber hammer and the palm of the hand. It was found that the starter would release to the off position when subjected to shock. The shock did not interrupt any of the electrical circuits. Consequently, a mechanical condition existed which permitted the releasing spring to overcome the pull of the holding coil magnet and return the switch to the off position. A new holding coil was installed and the tests repeated with substantially the same results. The overload release functioned properly at 60 amperes.

OPINIONS

1. The proximate cause of this collision was the failure of the steering gear on board the M/V THORSHALL while her rudder was an undetermined number of degrees left. This failure caused the THORSHALL to swing out of control to the left and into the WILLIAM T. ROSSELL. The most likely cause of the failure was the malfunction of the THORSHALL's steering engine starter switch due to vibration and shock as was demonstrated to be possible on

board the vessel after the collision, and, later under test conditions. Had the steering failure alarm on the THORSHALL's bridge been operative, her master and pilot would have been made aware of the steering failure immediately upon its occurring instead of after its result became apparent. Whether or not the additional time thus afforded would have permitted the THORSHALL to avoid colliding is speculative, but a distinct possibility. Under the circumstances as known to them, the master and pilot on board the THORSHALL are considered to have acted in a reasonable manner to avoid the collision.

2. The navigation of both vessels up until the failure of the THORSHALL's steering gear was reasonable and proper under the circumstances and in accordance with the applicable Rules of the Road. In the absence of the mechanical failure on the THORSHALL, the vessels would have passed uneventfully and well clear. The speed of the THORSHALL was not excessive.

3. The sinking and loss of the WILLIAM T. ROSSELL was caused by rapid flooding of her forward and after engine rooms through the port watertight doors in bulkheads 48 and 78. Were these doors closed prior to the collision, the sinking would have been avoided. Since the vessel may be navigated with the doors closed and they are opened solely for the convenience of the engineering personnel on watch it would seem that prudent management of vessels similar to the ROSSELL requires that the doors be closed at all times when the vessel is underway. The board did not determine with any degree of certainty whether or not there was sufficient time before the collision for the doors to have closed had Nation attempted to close them electrically at the instant he became apprehensive of the navigational situation as regards the two vessels. While he should have endeavored to do so, the board will be slow indeed to criticize severely the acts or omissions of any man who is unforeseeably placed in a position of immediate peril through no fault of his own.

4. The action taken by Nation to avoid the collision or minimize the resulting damage was reasonable under the circumstances.

5. Had the THORSHALL not backed out of the ROSSELL's side, the ingress of water into the ROSSELL and her sinking would have been retarded. Whether or not the delay would have been sufficient to materially aid those on the dredge cannot, of course, be determined. However, the board feels that there rests with the master (and pilot, if any) of any ship whose bow pierces the side of another a duty to utilize, before backing clear, every reasonable means to communicate with the master of the ship he has rammed and determine his desires as regards the foregoing. A master is relieved of this duty only where it is manifestly apparent that the best interests of the rammed ship will be served by the early separation of the two vessels or where, in order to save his own vessel from an apparent, immediate and great

danger, a master must back clear. We cannot say that such was the case here. However, once the two vessels were separated there was no reasonable manner in which the THORSHALL could have aided the stricken dredge. Under all the circumstances it is considered that a recommendation that disciplinary action be taken as regards the pilot, who was acting under authority of his state license, is not indicated.

6. The assistance rendered by the Coast Guard in this case was adequate. In particular, it is considered that [REDACTED] BM3, USCG coxswain of the CG-36496, exhibited exceptional skill and seamanship in rescuing four persons from the sunken dredge and should receive official recognition.

7. [REDACTED] pilot of the helicopter which participated in the rescue efforts, by operating continually at very low altitudes in close proximity of the sunken dredge with great disregard for his personal safety performed a highly commendable service and should receive official recognition for his acts.

RECOMMENDATIONS

1. It is therefore recommended that:

a. The United States Army Corps of Engineers consider, in the light of this casualty, the advisability of requiring dredges similar in arrangement to the ROSSELL to steam with their watertight doors closed.

b. The Commandant prepare a suitable letter officially commending [REDACTED] for his skill and seamanship as displayed while removing survivors from the sunken dredge.

c. The Commandant consider commending in a suitable manner [REDACTED] for his efforts in removing survivors from the dredge.

d. This case be closed and no further action be taken.

Signed Louis M. Thayer, Jr.
LOUIS M. THAYER, JR.
Captain, United States Coast Guard
Chairman

Signed Carol L. Mason
CAROL L. MASON
Lieutenant Commander, United States
Coast Guard, Member

[REDACTED]
Lieutenant (j.g.) United States Coast
Guard, Member and Recorder

The board then, at 1400 hours, Wednesday, 11 June 1958, adjourned to await the action of the convening authority.

Signed Louis M. Thayer, Jr.
LOUIS M. THAYER, JR.
Caotain, United States Coast Guard
Chairman

[REDACTED]
Lieutenant (j.g.) United States Coast
Guard, Member and Recorder