UNITED STATES COAST GUARD Washington, D. C.

22 OCT 1954

Commandant's Action

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Marine Board of Investigation; capsizing of passenger motorboat NORA V, Delaware Bay, on 15 July 1954 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, Conclusions, and Recommendations, has been reviewed.
- 2. The M/B NORA V, of 13 g.t., built in 1939, on 15 July 1954 at about 0820 departed Bowers Beach, Delaware, with eight passengers and one operator on board for a fishing excursion in the Delaware Bay. Weather and fishing were favorable until noon, when a wind sprang up and the Bay became choppy. Fishing was secured and the NORA V was headed back to port, and while so en route she evidently came in contact with a subsurface object which holed the vessel causing her to capsize at about 1315 on 15 July 1954 in approximate position 3.8 miles to the westward of Fourteen Foot Bank Light, Delaware Bay. All persons on board abandoned the vessel by entering the water directly, all wearing approved life preservers, and remained in the water for approximately 20 hours before being rescued by the Coast Guard. As a result of this casualty, three passengers perished. The weather at the time of the capsising was cloudy and clear, west wind 15 to 20 miles per hour, and sea choppy.
- 3. The Findings of Fact, Conclusions, and Recommendations of the Marine Board of Investigation convened to investigate subject casualty are approved.

(signed) A. C. Richmond

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

REPORT OF A

MARINE BOARD OF INVESTIGATION

Convened at the

U. S. COAST GUARD MOORINGS, CAPE MAY, NEW JERSEY

and

LEWES, DELAWARE

on

17 & 19 JULY, 1954

and at

BOWERS BEACH, DELAWARE

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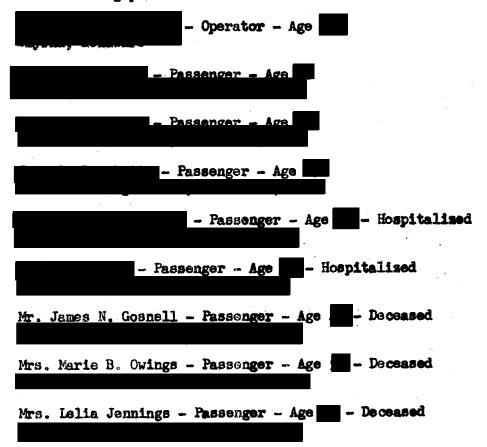
25 August, 1954

To Inquire into and Investigate the Circumstances Surrounding the Capsizing of the Passenger Motorboat NORA V in Delaware Bay, on or about 15 July, 1954, with loss of life

The Board arrived at the Following findings, Conclusions and Recommendations:

FINDINGS OF FACT:

- 1. At approximately 1315 EDST, 15 July 1954 the Motorboat MORA V sprung a major leak and shortly thereafter capsized about 3.8 miles, 247° True from Fourteen Foot Bank Light, Delaware Bay. The boat did not sink, however, and was later recovered. Of the nine persons on board at the time, three lost their lives and two were hospitalized for a period in excess of 72 hours due to shock and exposure. The bodies of the three dead were also recovered and the cause of death in all three instances has been recorded officially as drowning.
- 2. The following persons were aboard the boat when the accident occurred:



- 3. The weather at the time of the casualty was cloudy and clear, wind west 15 to 20 miles per hour and the sea choppy.
- 4. The NORA V., O.N. 238841, is an uninspected wood-hulled motorboat of 13 gross tons, gas screw, built in 1939, length 43 feet, beam 12 feet and depth 3 feet. Her construction is referred to as a Chesapeake Bay Deadrise type and has cross bottom planking. She has an open cockpit extending approximately 2/3 of her length and a small cabin forward. She is licensed to engage in the coastwise trade as a passenger and fishing vessel and is owned and operated by Harry G. Heideck, Smyrna, Delaware, who holds motorboat operator's license No. A-55743.
- 5. The MORA V. had been engaged for a day of fishing on 15 July 1954 by a group headed by . A severe storm had passed through the area during the previous night and when the first of the group arrived at the dock at Bowers Beach. Delaware, it was still raining. at that time that he was concerned about the weather and questioned the advisability of the trip. However, when the remainder of the party arrived approximately one hour later, the weather had moderated and the rain subsided. Although other party boats were observed departing, waited a while longer and when the decision was finally made to go out, the sun was shining and the wind and sea were calm. After leaving the dock at about 0820 the NORA V proceeded to the area about 1 1/2 miles SW of Fourteen Foot Bank Lighthouse. The fishing was good and the weather continued fair until shortly after moon when the wind sprang up from the west and the bay became choppy. turned on his radio and got a report of strong winds for that afternoon and continuing into the following day. The party was advised that it would be best to return and they agreed. At about 1245 the fishing was secured and the boat headed for Bowers Beach at a normal cruising speed of 10 to 12 miles per hour. The sea conditions at that time were described as choppy with no swell, and seems estimated the wind to be west about 15 to 20 miles per hour. Spray blew over the boat causing the passengers to gather under the sunshade, and as the NORA V proceeded, she slapped or occasionally pounded somewhat in the chop. Whenever a larger wave was encountered, speed was reduced and the boat was allowed to roll into it. The weather was not considered bad or unusual by the male passengers, all of whom had sailed with on the NORA V on prior occasions when conditions were much more severe. When the beat had been inbound approximately 25 minutes, the NORA V jarred sharply in a roll and upon reflection after the casualty, were of the opinion that the vessel had struck something at that time. However, since nothing was sighted, the incident was dismissed. An additional called five minutes elapsed when suddenly to water which was then over the floorboards within the cabin.

immediately to the engine box and threw off the cover in order to connect the belt drive to the bilge pump. He could see at a glance that the water was coming in too rapidly for the pump to be effective and instead ran forward to the radio and turned it on. While waiting for it to warm up, life preservers were distributed to all the passengers. They were advised to take extra ones then were directed to climb atop the sunshade and hold on to a line that was made fast to the sampson post forward. donned two life preservers, then sent a distress call on the Coast Guard frequency, but when he completed the transmission he heard another station drowning out his signal. Getting no reply he shifted to the commercial fishing boat frequency and got off one distress call before the power failed and again he heard no reply. It was approximately three minutes after the water had first been noticed in the cabin that the NORA V settled in the water and rolled over to starboard as she did so. The passengers continued to hold on to the bow line as directed, with the exception of who was last seen with two life preservers on swimming away from the scene. The bottom of the boat was slimy, providing no hold and fearing the passengers would be thrown against the hull by the seas. directed them to direction, the pasdrop the bow line and stay in a group. Under sengers then made a circle with the three women and the boy in the middle. each had extra life preservers which they put on in the and assistance. With their added buoyancy they assisted water with keeping the women upright in the water. also had an extra life preserver which he used to help support his wife. After checking the tie straps on the passengers' life preservers, then suggested he strike out alone in an effort to get help. After a brief discussion, all agreed set out toward a salvage vessel which he knew was operating near the main ship channel. The remainder of the group stayed together throughout the night; however, at approximately 0200, 16 July, Mrs. Owings said she could "hold on" no longer and shortly thereafter her head fell to one side and her husband believed her heart had given out. Shortly thereafter, Mrs. Jennings stated she didn't think she could make it, and in spite efforts to hold her head out of the water and give her additional buoyancy, she also quietly lost consciousness and apparently died. The group held on to the bodies of the two women and Mrs. Owings' life preserver was removed to give additional support to the boy. Boats had been seen in the area during the night, but none came close and it was not known whether they were searching or not. Some time after daybreak aircraft were seen apparently searching the area and shortly after one was observed to come very close the survivors and two bodies were finally picked up at 0930 EDST 16 July 1954 by Coast Guard patrol boat 40408.

6. carried by the tide after leaving the group was unable to reach any boats or light stations in the area, but was finally spotted by a Coast

Guard aircraft the following morning and rescued at 1030 EDST 16 July, by Coast Guard patrol boat 40409.

- 7. After swimming away from the NCRA V immediately after the casualty, James Gosnell was not seen alive again. His body was recovered by the Coast Guard boat CG 40409 at about 0800, 17 July 1954 while on a routine trip. All personnel who had been on board the NCRA V were thus accounted for.
- 8. Neither Mrs. nor her son were called to testify due principally to their condition at the time the Board convened, and in addition, it was considered that their testimony, under the circumstances, would add little or nothing to the evidence already adduced.
- 9. Shortly after 2300, EDST, 15 July the Coast Guard Group Office at Cape May, N.J. received a radio call from the fishing vessel JEREMIAH OEDEN stating that the NORA V had departed Bowers Beach, Delaware that morning, was last seen about noon in the vicinity of Fourteen Foot Bank Light but had not returned. Through the Coast Guard Lifeboat Station, Lewes, Delaware, it was determined that the NORA V left from the Good Morning Cafe at Bowers Beach and they were contacted for verification of the report. The Good Morning Cafe advised that the NORA V occasionally stayed out overnight but since she had a party aboard, was due back before dark and was therefore considered overdue. After getting a description of the NORA V, the Coast Guard Patrol Boat 83529 was dispatched at 0045 16 July for visual and radar search of the area. The CG 83529 was unsuccessful and at daybreak other Coast Guard air and surface craft joined the search and were assisted by privately owned boats and aircraft. At about 0730, 16 July the fishing vessel LUCKY advised by radio that the NORA V had been sighted overturned about one mile west of Fourteen Foot Bank Light. The Coast Guard Patrol Boat 83518 was nearest to the scene and arrived alongside at 0740. The MORA V was found to be overturned with a hole in the bottom measuring approximately 1 1/2 ft x 5 ft due to two displaced planks located on the starboard side amidships. One of the two planks was missing entirely and the other was still fastened loosely at the keel. This plank was removed and wedged into the hole to prevent loss. The boat was towed to deeper water and at 1100 was turned over to the USCGC GENTIAN. Examination of the boat by Coast Guard personnel at that time disclosed that two adjacent bottom planks which extend from the keel to the chine had fallen out. The planks were 1 3/4" thick and had been nailed at the outboard end to the chine and at the center of the boat to what appeared to be a keelson fitted to the side of the keel. The keel itself was not rabbeted. Between the keel and the chine was a longitudinal stringer to which the planks were also nailed. Further inspection disclosed that it had been fastened with 3 1/2" galvanised steel cut nails. Approximately 6 such

nails remained in the plank, three at the end where it joined the keelson, two at the chine and one apparently broken off where the plank was fastened to the stringer. Additional holes which had apparently accommodated other nails were also visible. There were no nails remaining in any of the longitudinal members and no evidence that any nails had pulled through the bottom planking. There was no rotting of the wood in evidence, either in the plank or the longitudinal members, and the condition of the nails, although corroded to some extent was satisfactory. The recovered plank was refastened and a new plank was fashioned to replace the one that was missing. In spite of the fact that the bottom of the boat was awash the repairs were accomplished satisfactorily and when the boat was righted and pumped out she was released to the fishing vessel EDLIN, owned by friends of

- 10. According to prior to putting the NORA V in the water in May, 1954, a new engine had been installed and the bottom was renailed. The fastenings adjacent to the keel were not touched, however, since they had been reworked in August, 1953.

 Set imated the size of the nails to be 3" and stated that where they passed through the stringers they were bent over for greater holding power.
- her bottom planking to be in satisfactory overall condition. Minor deterioration of the wood was observed in places, but none affected the seaworthiness of the vessel. There was no apparent evidence of the vessel having struck a submerged object. Efforts were made to remove several pieces of bottom planking in order to inspect the condition of the fastenings and internal members; however, the planking was too firmly secured to permit removal without splitting the wood and the cockpit decking prevented inspection from above. The life preservers recovered from the passengers as well as those still aboard the boat were found to be of the balsa wood and cork types. All life preservers examined were in satisfactory condition and of an approved make. Examination of the interior of the boat and her equipment disclosed no violation of law or regulation.
- 12. At the conclusion of the session on 19 July 1954 no further witnesses were called and after reconvening briefly on 5 August 1954 for the purpose of entering certain photographs in the record as exhibits the investigation was declared finished and the board adjourned to consider the evidence. After the testimony had been transcribed a copy was furnished Captain at his request on 16 August 1954. The following day, communicated with the Board advising that the testimony of the Coast Guard damage controlman who had made the temporary repairs to the NORA V had not correctly described the internal construction of the boat since there were actually two longitudinals between the chine and the keel instead of one. Stated further that he had since opened the boat and found a 2 1/2 foot section of one of the longitudinals broken out in way of

the two affected bottom planks. Accordingly, the investigation was reopened and on 25 August 1954 the Board reconvened at Bowers Beach, Delaware, for the purpose of further examining the internal structure of the NCRA V and to take additional testimony.

13. With a portion of the cockpit decking removed, the Board was able to thoroughly inspect the internal construction of the boat. As shown on Exhibit #8 of the record, it was found that the keel was a solid T-shaped timber measuring 10 1/2 inches across the top and 16 inches deep. The chine is a 4" x 6" member tapered slightly at the upper edge and in addition there were two longitudinal stringers spaced equi-distant between the chine and the keel. The bottom planking was nailed to the chine, to both stringers and to the under side of the cross bar of the T-shaped keel. Running thwartships from chine to chine over the top of the keel were timbers measuring 2 1/2" at the base with a 6" rise spaced approximately 3 ft. apart. They were fastened at the keel by one drift bolt and at the outboard ends were nailed to both the chine and to the ribs. The under edges of the timbers were notched 3/4" to accommodate the outboard stringers. These timbers, referred to in Exhibit #8 as "floors" had apparently served as such when the vessel was originally built; however, the present cockpit decking now rests on cross beams located approximately one foot higher. Examination of the internals in way of the affected bottom planks disclosed that the longitudinal stringer nearest the chine had been broken off for a distance of about 2 1/2 feet. Heither of the broken ends extended to the edges of the two affected planks. In addition, the 2 $1/2^n \times 6^n$ floor timber located directly above the missing bottom plank had broken off at the drift bolt and was also missing. Both the chine and the rib were cracked where the outboard end of the floor timber had been fastened. There was no damage to the cockpit decking above the affected planks. All internal members were of sound timbers throughout with no evidence of rot.

yard, the condition of the internals at the time the boat was first opened for repairs was the same as it was at the time of the Board's examination on 25 August. From the additional testimony of Damage Controlman who effected the temporary repairs, the fact that the vessel's bottom was awash at the time precluded internal examination for hidden damage. There nevertheless was no doubt that only one longitudinal stringer appeared in the affected area at the time the repairs were made.

CONCLUSIONS:

- Based on the evidence adduced, it is considered that the casualty was caused by the NORA V's striking an unidentified submerged object. Although the bottom showed no outward evidence of having been struck, with the exception of the two dislocated planks, the broken stringer and the broken floor timber which was directly over the missing plank could only have been carried away by the force of a sharp heavy object penetrating the bottom. This conclusion is supported by the testimony of and of whom had definite impressions that the vessel had come down on an unidentified object beneath the surface shortly before water was discovered in the cabin. In addition, the Board is of the opinion that a boat of the NORA V's design and build should normally be capable of withstanding sea conditions considerably more extreme than those encountered at the time of the casualty and there is no dispute among the witnesses that navigated with reasonable care to prevent possible damage from pounding.
- 2. Since the force necessary to penetrate the hull and shear the internal members would appear to preclude the possibility that the object encountered was affect, the District Engineer, Philadelphia District, Corps of Engineers was advised by letter of the possible existence of an uncharted menace to navigation and no further action is deemed warranted in this regard.
- 3. Notice was taken of the unanimous praise accorded by the passengers who were interrogated, and the Board was of the opinion that it was justly deserved. Had it not been for Heideck's prompt action and positive direction when the leak was discovered, the casualty could conceivably have been occasioned by loss of life at the outset. Equally commendable was the conduct of the passengers, whose calm adherence to instructions, particularly in the water, facilitated the mutual assistance and encouragement which undoubtedly was instrumental in keeping the loss of life at a minimum in spite of over 20 hours in the water.
- 4. Notwithstanding the official pronouncement of death by drowning, the manner in which Mrs. Jennings and Mrs. Owings died, as described by the witnesses, would appear to indicate the probable presence of antecedent causes, particularly since there was no evidence of asphyxiation in the case of either woman before consciousness was apparently lost. In this connection, it was noted that autopsies were not performed on any of the three deceased.

RECOMMENDATIONS:

1. These being no evidence of negligence, violation of law or any failure of Coast Guard approved equipment, it is recommended that no further action be taken and the case be closed.

(signed) L. H. Shackelford L. H. SHACKELFORD Captain, U. S. Coast Guard

(signed) J. A. Heikel J. A. HEIKEL Lt. Commander, U. S. Coast Guard

(signed) J. H. Hawley J. H. HAWLEY Lt. Commander, U. S. Coast Guard

At 4:30 p.m. the Board adjourned to await the action of the Convening Authority.

(signed) L. H. Shackelford L. H. SHACKELFORD Captain, U. S. Coast Guard Chairman

(signed) J. H. Hawley
J. H. HAWLEY
Lt. Commander, U. S. Coast Guard
Member and Recorder