UNITED STATES COAST GUARD

ADDRESS REPLY TO:

MVI
19 OCT 1956
(DREDGE NO. 906 - a-9 Bd)

Commandant's Action

on

Marine Board of Investigation; DREDGE NO. 906 in tow of M/V E. JAMES FUCIK, capsizing and foundering, Lake Michigan, 23 May 1956, 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. On 22 May 1956 the DREDGE NO. 906, approximately 685 g.t., a steel hulled, box type, non-selfpropelled vessel 110 ft. by 40 ft. by 11.5 ft., built in 1912, fitted with boom and dipper and necessary power, auxiliary machinery and equipment for dredging purposes, was engaged in dredging operations in Lake Michigan at Oak Creek, Wisconsin, approximately 11 miles south of Milwaukee. The dredge was fitted with a superstructure constructed of wood, housing the machinery and equipment and providing living accommodations and messing facilities for the personnel engaged in the dredging operations. No effective provision, either in design or construction, was made to prevent the ingress of water into the interior of the dredge through the many existent topside openings so as to withstand rough weather on a voyage on the open Lakes. During early evening on 22 May the wind began to shift to the northeast and the sea to pick up. At about 2250, due to worsening weather conditions, the decision was made to tow the DREDGE NO. 906, with her crew aboard, toward the shelter of Milwaukee harbor using the motor tug E. JAMES FUCIK, rather than to seek refuge for the dredge and crew at Oak Creek or to transfer the dredge personnel ashore at Oak Creek. While en route from Oak Creek to Milwaukee, the weather continued to worsen, the dredge began shipping seas and, due to the many topside openings, considerable water entered into the vessel. The dredge took a list, a guy wire parted causing the dipper boom to shift, increasing the list, and the dredge soon thereafter capsized and sank at about 0215 23 May 1956 approximately 2 1/2 miles off shore, 6.6 miles 130° T from Milwaukee Breakwater Light. The yawl boat on board was not launched and evidently all persons on board, except possibly one or two who may have been trapped in the vessel, entered the water directly, wearing life preservers. As a result of this casualty, 9 persons lost their lives, of which 7 lost their lives by drowning and exposure.

REMARKS

3. The Board recommended that the evidence and findings of the investigation be referred to the United States Attorney General for probable criminal action. The Board, however, did not cite any Statutes, criminal or otherwise, that may have been violated or identify any persons who may have been guilty of any such violations. It would appear, however, that Martin Walsh, the person in charge of the dredge, violated the provisions of 18 USC 1115 in that (a) while weather conditions permitted and facilities were available, he failed to transfer to shore at Oak Creek and security the 19 persons quartered on board the dredge and (b) he negligently ordered the dredge with 19 persons on board to be towed from Oak Creek to Milwaukee during rough weather, which dredge under the circumstances could not be expected to undertake such voyage or operation with safety to life, as the result of which negligence the lives of 9 persons were destroyed. The executive officer of the Merritt-Chapman & Scott Corporation charged with the control and management of DREDGE NO. 906 apparently also violated the provisions of 18 USC 1115 in that (a) he allowed the DREDGE NO. 906 to be navigated and operated on the open waters of Lake Michigan during rough weather with 19 persons on board, knowing that such vessel was structurally unsuitable and was not properly equipped for such navigation and operation, and (b) he allowed the DREDGE NO. 906 to be navigated and operated in the open waters of Lake Michigan during rough weather, which vessel under the circumstances could not be expected to undertake such voyage or operation with safety to life, as the result of which negligence the lives of 9 persons were destroyed.

4. In connection with the Board's recommendation that legislation be advocated for the extension of inspection and certification requirements to non-selfpropelled vessels equipped with machinery or pressure vessels, or carrying more than six persons, and operated in ocean, coastwise, or Great Lakes service, it should be observed that existing statutes and regulations thereunder now cover to a considerable extent the safety of non-selfpropelled vessels of the tonnage of the DREDGE NO. 906 operating or navigating on ocean or coastwise waters. Existing legislation will be reviewed in the light of the Board's recommendation and corrective action as found necessary will be instituted.

5. Subject to the foregoing Remarks, 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

Milwaukee, Wisconsin

to inquire into and investigate the sinking

of the DREDGE #906

in the vicinity of South Milwaukee, Wis.,

west shore of Lake Michigan

on 23 May 1956

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

FINDINGS OF FACTS

1. While bound for Milwaukee, Wisconsin, at or about 0200 (CST) 23 May 1956, the nonself-propelled dredge number 906, an uninspected, unregistered American vessel, dimensions: 110 feet by 40 feet by about 11 feet, six inches, sank 6.6 statute miles from Milwaukee breakwater light (LL 1657), bearing 130° T. The tug E. JAMES FUCIK, a registered, uninspected American vessel of 95 gross tons, was towing the dredge at the time of the casualty. Seven crew members of the dredge perished and two others are reported missing.

2. Description of vessels involved:

Name:	E. JAMES FUCIK	Dredge No. 906
Type:	Tug	Nonself-Propelled
ON:	227498	None
GT:	95	-
NT:	64	-
DIM:	79.8' x 21.1' x 11.3'	110' x 40' x 11'6" Fwd & 10'6" Aft
BUILT:	1928, Manitowoc, Wisconsin	1912, Manitowoc, Wisconsin
HP:	800	-
Home Port:	Chicago, Illinois	-
Owner:	Fitz Simons & Connell Dredge & Dock Company Division of Merritt-Chapman & Scott Corporation 10 South LaSalle Street Chicago, Illinois	Fitz Simons & Connell Dredge & Dock Company Division of Merritt-Chapman & Scott Corporation 10 South LaSalle Street Chicago, Illinois

3. The Fitz Simons and Connell Dredge and Dock Company was engaged in dredging the turning basin (see Exhibit 5) at the Wisconsin Electric Power Plant, Oak Creek, Wisconsin, on 22 May 1956.

4. At or about 1730 (CST), on 22 May 1956, engineer Dale Geiger, of the tug E. JAMES FUCIK, informed Mr. Richard E. Fox, a general foreman, that the La Fote weather forecast indicated the wind would be out of the northeast at 25 miles per hour during the second period (2300 (CST), 22 May 1956,

to 0500 (CST), 23 May 1956). Mr. Fox had already received a weather forecast at about 1615 from Mitchell Field. He later informed Captain Edward Selvick, daytime captain of the dredge, of the weather forecast in the presence of Captain Martin E. Walsh, in charge as of 1800 (CST), while they were eating supper at or about 1745.

5. Captain Affleck called Mr. Fox on the radiotelephone at about 2130 and asked him what he wanted to do concerning the change in shift time and moving the dredge into the slip. His answer was that it was up to the master of the dredge, Captain Walsh. The tug captain then called over to dredge coal passer Gerald Lesch and had him ask Captain Martin Walsh, a man of 40 years' experience on dredging work and five years as dredge master, whether they could change crews and go into the slip.

6. The answer of Captain Walsh, returned by Lesch, was, "No, we'll tow now to Milwaukee." Captain Walsh testified that after receiving the weather report at about 2130 indicating the wind would swing north and then northeast, he wanted to get out as fast as he could.

7. The self-unloader SIERRA of the Columbia Transportation Company was discharging a cargo of coal at the Oak Creek dock.

8. According to Captain Walsh, the wind shifted to northeast at about 2200.

9. At the time of departure, 2250, Captain Walsh stated the wind was north to northeast at about 15 miles per hour with waves of three to four feet. Captain Affleck testified that the wind was north northeast at 20 to 25 miles per hour with seas of about three and one-half feet. The anemometer at the Oak Creek dock indicated winds of 20 miles per hour, while weather bureau recordings at 2228 indicated winds out of the north at 32 miles per hour with gusts to 40 miles per hour. (See Exhibits 6, 8(1) and 8(2)).

10. The dredge was towed stern first. The dipper end, normally the forward end, became the stern during towing. A one and one-eighth inch towing cable with a scope of 900 feet fastened to a bridle was secured to the dredge's second timberhead on both sides. The cable on the tug was secured to a Johnson electric towing engine equipped with brake and automatic feed.

11. Sea conditions worsened as the tug and tow proceeded on a course of 023° T at 750 RPM (normally six and one-half miles per hour). At about 2300, operator Edwin Selvick, second in command, ordered the dredge crew to put on life preservers. Captain Walsh was standing by at the shovel lever controls in the lever house.

12. After being underway for about an hour, Edwin Selvick testified they were making water around the spud casings and behind the boiler, the after end of the dredge deckhouse. The after end of the dredge's wooden deckhouse had 12 by 12-inch timbers built up to a height of about

five feet to protect the house during towing. However, the sea was coming in through openings in these timbers and over the top, where it was breaking through the deckhouse planking.

13. The dredge, a vessel with steel hull, steel main deck, and wooden deckhousing, contained four athwartship compartments. (See Exhibit 4). Separating bulkheads were nonwatertight with open bilges that drained forward toward the dipper end. Watertight compartments surrounded the two spud casings on the dipper end. The vessel was equipped with two six-inch syphons near the centerline well-forward, a three-inch syphon in each of the two watertight compartments around the forward spud casings, and a gasoline driven pump with three-inch discharge, located forward in the engine room.

14. The operator reported to Captain Walsh that they were making water faster than they could get rid of it. Bags, old oilskins, wood, and other available items were used to plug leaks. With the sea washing out their plugs, operator Selvick again reported to Captain Walsh that there was almost four feet of water in the engine room, a height about even with floor plates, and that the water was coming higher.

15. About ten minutes later, the dredge captain blew the danger signal of five or more blasts on his whistle, but it was not heard on the tug FUCIK. There were no other distress signals on board the dredge.

16. The dredge had developed a starboard list, according to Captain Walsh, about one and one-half feet. At or about 0200 (CST), 23 May 1956, the port boom guy, a one and three-eight-inch cable, stranded and parted; the boom swung to the starboard, giving the dredge a greater list. Although steam pressure of about 145 psi was maintained, the dredge captain at the lever controls was unable to return the boom to its midship position.

17. Edwin Selvick untied the yawl boat's bowline, a wooden boat about 16 feet long that was located forward on the main deck of the dredge. Except for life preservers for everyone on board, the yawl or working boat was the only lifesaving equipment on board.

18. Seeing two barrels thrown up against the lever house that were trapping Captain Walsh, Selvick left the yawl and assisted the 62-year-old captain through one of the windows and up the deck, which was now at an angle of about 45 degrees. Other members of the crew were gathered on the high portside; Selvick shouted "Jump." Noticing their hesitation, the operator jumped first and the others followed. According to the testimony, all members were wearing life preservers.

19. About 45 seconds later, the dredge turned over and sank, between 0200 and 0205, in about 63 feet of water, on a bearing of 130° T from the Milwaukee breakwater light (LL1657) and at a distance of 6.6 statute miles. (See Exhibits 3 and 7). The tow had made good a course of 015° T at an average speed of 2.04 miles per hour.

20. Dredge lights remained on until it turned over.

21. According to Captain Walsh, the wind was about northeast, 30 to 35 miles per hour, with 12 to 14-foot waves. The tug captain estimated the wind at 35 to 40 miles per hour, with gusts to 55 and 14-foot seas. Weather bureau instruments indicated winds from the north at 29 miles per hour, with gusts to 38. (See Exhibits 9(1) and 9(2).) The anemometer at Oak Creek indicated winds of 18 miles per hour, with gusts to 23. (See Exhibit 6.)

22. Lake water temperature was between 45 and 50 degrees. (See Exhibit 8(2).)

23. Tug engineer Dale Geiger, noticing the dredge lights were off, said, "I believe the dredge is taking a list." Captain Affleck told the engineer to make sure that it was not just water in the dredge. Mr. Geiger then saw a flashlight blinking in the water. Deck hand Ekonick, in the towing room, was ordered by telephone to pull in the tow. After attempting to pull in the towline, he replied that the cable seemed to be leading down; Captain Affleck then told the deck hand to let the cable run off the drum.

24. The FUCIK turned and started back to where the dredge had been. Captain Affleck tried to call for help on his radio, but it would not work. He told the engineer to do whatever he could to repair the phone.

25. The tug captain used his searchlight to locate the cries coming from the water and proceeded to pick the dredge crew out of the water.

26. At or about 0240, the engineer called "May Day" over the radio and contacted the Port Washington radio station. Port Washington contacted the Milwaukee Coast Guard and relayed the distress call. Satisfactory communications could not be established directly with the Coast Guard, so Port Washington acted as relay station.

27. During the rescue operations, the steamer SAMUEL MITCHELL, a 293-foot vessel of 2,447 tons, called the FUCIK and asked if they desired her help. Captain Afflect answered "No," stating that he feared the consequences of this larger vessel in the dark waters filled with men in life preservers.

28. Hearing no more calls from the water and being unable to locate anyone else, the engineer, at Captain Affleck's order, requested permission to leave the area and take the survivors in for hospitalization and treatment.

29. A Coast Guard 40-foot utility boat met the tug returning from the scene. According to the tug captain, talking between vessels was almost impossible. The two vessels went into the Coast Guard Base where ambulances were waiting and took the 13 dredge crew members to Johnston Emergency and County General Hospitals, Milwaukee, Wisconsin.

30. Dead on arrival at the hospital were:

Deck Hand	Joseph M. O. Bradovich 504 - 139th Street Hammond, Illinois
Deck Hand	John E. Stranich 1011 Commercial Avenue Chicago, Illinois
Deck Hand	Arnie Wold 3408 West Belden Chicago, Illinois

31. A search was conducted from the air and sea, and the Coast Guard boat 30376 recovered the following bodies at about 0900, 23 May 1956:

Fireman	Paul D. McKee 1654 North Francisco Street Chicago, Illinois
Oiler	James E. Sullivan 327 Joliet Avenue Sturgeon Bay, Wisconsin
Craneman	John Selvick RFD 5, Box 18 West Sturgeon Bay, Wisconsin
Fireman	Alfred J. Herion 3325 West 64th Place Chicago, Illinois

These bodies were wearing Coast Guard approved-type life preservers when recovered. (See Exhibit 10.)

32. Still missing (31 May 1956) were:

Oiler	David O. Olson 1506 North Fairfield Chicago, Illinois
Second Cook	Samuel Kowrack 354 Walnut Street Aurora, Illinois

33. David Olson, oiler on watch, was last seen by the duty fireman, Patrick McHale, as the dredge was turning over. Olson was knocked back into the engine room by sea and debris while attempting to climb the forward engineroom ladder which led to the lever control house. McHale

was unable to open the portside engine-room door after ascending the ladder, so he climbed through a nearby window out to the high side of the dredge. Both men were wearing life preservers.

34. Samuel Kowrack, the second cook, was seasick and spent most of the trip in the linen locker on the dredge starboard side. Edwin Selvick saw him there with life preserver on about 45 minutes prior to the sinking. Deck hand Harold Hermansen saw Kowrack in the "bathroom" adjoining the linen locker about 10 to 20 minutes prior to the casualty. The second cook was still wearing a life preserver.

35. The following ten members of the dredge crew survived the casualty:

Chief Engineer, in charge of Dredge, (Also referred to as Captain)	Martin Walsh 10413 Ewing Avenue Chicago, Illinois
Deck Hand	Harold J. Hermansen 1449 North Artesian Chicago, Illinois
Coal Passer	Gerald G. Lesch 39 South Halsted Street Chicago, Illinois
Cook	John P. O'Conner 1339 Wellington Chicago, Illinois
Operator	Richard L. Sullivan RFD 6, Box 129 Sawyer, Wisconsin
Deck Hand	John R. Boehme Box 121 Bayfield, Wisconsin
Fireman	Patrick J. McHale 4710 Winthrop Avenue Chicago 40, Illinois
Deck Hand	Ragnvaid Kvass 4417 Altgeld Chicago, Illinois
Operator	Edwin Selvick 909 West Villa Drive Des Plaines, Illinois

Craneman	Bernard M. Selvick 4945 West Hirsch Street Chicago 51, Illinois

36. The dredge's log book was left on board the dredge.

37. Tug Captain Affleck testified that prior to the ill-fated trip from Oak Creek, they had had difficulty in transmitting and receiving on radio channel 1. Port Washington radio station told the tugmen that if they had difficulty on channel 1 to use channel 8 where reception was better. Seven to ten days prior to the casualty, the radio was serviced by Wisconsin Bell Telephone Company men who examined and tried the equipment, and then reported it was satisfactory. After the casualty, on 27 May 1956, it was again serviced by Wisconsin Bell Telephone men (See Exhibit 11) who increased the sensitivity received to 1 MV and made frequency checks on channels 7, 8, and 1.

38. The following witnesses were interviewed:

Dredge Captain	Martin Walsh 10413 Ewing Avenue Chicago, Illinois
Tug Captain	Robert D. Affleck 1833 Addison Street Chicago, Illinois
Dredge Operator	Edwin Selvick 909 West Villa Drive Des Plaines, Illinois
Tug Engineer	Dale Geiger 4565 North Pulaski Chicago, Illinois
Dredge Craneman	Bernard M. Selvick 4945 West Hirsch Street Chicago 51, Illinois
Dredge Fireman	Patrick J. McHale 4710 Winthrop Avenue Chicago 40, Illinois
Owner-Representative	Richard E. Fox 8309 Drexel Avenue Chicago 19, Illinois
Dredge Deck Hand	Harold J. Hermansen 1449 North Artesian Chicago, Illinois
Tug Deck Hand	Joseph Ekonick Tinley Park, Illinois

CONCLUSIONS

1. That Captain Walsh had knowledge of the weather forecast at or about 1745 (CST), 22 May, 1956.

2. That, although Captain Selvick was in charge at the time of receiving the weather forecast, he was to be relieved by Captain Walsh almost immediately.

3. That there was sufficient room at the Oak Creek Dock for the dredge and SIERRA to moor.

4. That the normal towing speed for this tug and dredge was six and one-half miles per hour. The trip to Milwaukee of about 15 miles should have been made in approximately two and one-half hours under favorable conditions.

5. a. That, if the dredge had departed Oak Creek by 1800, it could have made Milwaukee without encountering the prolonged and severe weather conditions actually met.

b. That, if the dredge had departed at 2030 (two and one-half hours before the start of the forecasted northeast winds), it would have encountered northerly winds of about 20 miles per hour for the first two hours, then winds from the north of about 32 miles per hour, with gusts of about 40 miles per hour, and the probability of very adverse conditions at the relatively-exposed Milwaukee Harbor entrance.

6. That Captain Walsh's judgment at the time of departure in selecting Milwaukee for refuge rather than Racine was sound. With a following sea, the tow would have been less seaworthy.

7. That, based on wind information available from the Oak Creek Power Plant, wind conditions at the Oak Creek Dock were not as severe as those encountered.

8. That, if the dredge had moored at the Oak Creek Dock along with the SIERRA, it could have survived the storm.

9. That the dredge departed on its journey at 2250 in the face of adverse weather conditions.

10. That the dredge captain had control as to when the dredge left the area.

11. That, once under tow, a condition of joint responsibility existed between dredge and tug captains.

12. That Captain Walsh used poor judgment in remaining at the dredging site too long after receiving knowledge of the weather forecast at about 1745 (CST), 22 May, 1956.

13. That, once having departed the immediate Oak Creek area, it was more prudent to continue into the general direction of wind and sea than to attempt to return or beach the dredge on the rocky shoal and bluff coast line.

14. That weather conditions encountered were more severe than forecast.

15. That, not knowing the wind and sea conditions which might have been encountered in the relatively-exposed slip at Oak Creek, and being of the opinion that they could make Milwaukee safely, Captain Walsh chose the latter course of action.

16. That the Dredge 906, although used in open waters around the lakes, is primarily used in protected waters, i.e., rivers and harbors.

17. That the breaking loose of the dredge's boom hastened the time of sinking.

18. That the dredge would have sunk before arriving at Milwaukee even if the boom guy wire had not broken.

19. That Captain Affleck's action during towing and after the dredge's sinking was in accordance with good seamanship practices.

20. That, to the best knowledge of Fitz Simons and Connell personnel, the tug's radio equipment was operating satisfactorily prior to departing Oak Creek on the ill-fated trip.

21. That the tug captain's decision not to risk the SS SAMUEL MITCHELL's presence in the area of the survivors is not questioned. Many survivors have been rescued by vessels as large as and larger than the MITCHELL; however, there have been cases in which survivors have lost their lives due to the difficulty of maneuvering such vessels.

22. That stranding and parting of the port boom guy was a physical failure.

23. That leaks through the spud-cable openings were design failures.

24. That leaks through the deckhouse were both design and physical failures.

25. That the casualty was due to poor judgment in delaying departure for Milwaukee, and then encountering more severe weather conditions than forecast.

26. That neither dredge nor tug personnel were required to be licensed or documented by law or as a condition of their employment.

RECOMMENDATIONS

1. That the evidence and finding of this investigation be turned over to the United States Attorney General for review, looking to any criminal liabilities disclosed.

2. That Headquarters advocate legislation to the effect that: The Coast Guard shall at least once in every two years inspect the hull and equipment of every nonself-propelled vessel, equipped with machinery or pressure vessels, or carrying more than six persons, and operated in ocean, coastwise, or Great Lakes service, and shall satisfy itself that such vessel is of a structure suitable for the service in which she is to be employed, has suitable accommodations for the crew, and is in a condition to warrant the belief that she may be used in navigation with safety to life. It shall then issue a certificate of inspection in the manner and for the purposes prescribed in 4421 and 4423 (46 USC 399, 400) of the Revised Statutes. (Note: U.S. Attorney Edward G. Minor, Eastern District of Wisconsin, was present throughout the board's investigation and expressed interest in legislation with regard to dredges of this type. He has asked Senators Wiley and McCarthy for laws to cover lifesaving equipment on dredges.) The purpose of this recommendation is to expand the present law contained in 46 USC 395 and bring under inspection vessels of this type not presently covered thereby.

(signed) Edward O. Clark
EDWARD O. CLARK
Commander, USCG - Chairman

(signed) Arthur E. Wilcox
ARTHUR E. WILCOX
Commander, USCG - Member

(signed) Edward R. Tharp
EDWARD R. THARP
Lieutenant Commander, USCG - Recorder