

# **PROCEEDINGS**

**OF THE MARINE SAFETY COUNCIL**



**DEPARTMENT OF TRANSPORTATION**

**UNITED STATES COAST GUARD**

Vol. 31, No. 9

CG-129

September 1974

# Tug Casualty Claims Six Lives

## Guidelines for Navigational Watchkeeping

Published monthly by the Commandant USCG, in the interest of safety at sea under the auspices of the Marine Safety Council. Special permission for republication, either in whole or in part, with the exception of copyrighted articles or work, is not required provided credit is given to the Proceedings of the Marine Safety Council. All inquiries and requests for subscriptions should be addressed to Commandant (G-CMC), U.S. Coast Guard, Washington, D.C. 20590. Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget, May 21, 1969.

### CONTENTS

#### FEATURES

Six Drown as Tug Sinks.....	171
Basic Principles and Operational Guidance for Navigational Watchkeeping .....	176

#### DEPARTMENTS

Marine Safety Council Membership.....	178
Maritime Sidelights.....	179
Coast Guard Rulemaking.....	180
Amendments to Regulations.....	182

#### FRONT COVER

The overturned life boat and half-submerged wheelhouse of the tug M/V *Maryland* tell a tale of tragedy in the front cover photo. A narrative account of the casualty which claimed six lives begins on page 171.

#### BACK COVER

Featured on the back cover is the M/V *North River*, built for the City of New York Environmental Protection Administration. Photo courtesy of the Maryland Shipbuilding and Drydock Company.

Admiral O. W. Siler, USCG  
Commandant

#### The Marine Safety Council of The United States Coast Guard

Rear Admiral R. A. Ratti, USCG  
Chief Counsel, Chairman

Rear Admiral J. A. Palmer, USCG  
Chief, Office of Public and International Affairs, Member

Rear Admiral W. M. Benkert, USCG  
Chief, Office of Merchant Marine Safety, Member

Rear Admiral J. F. Thompson, USCG  
Chief, Office of Boating Safety, Member

Rear Admiral J. W. Moreau, USCG  
Chief, Office of Engineering, Member

Rear Admiral R. H. Scarborough, USCG  
Chief, Office of Operations, Member

Rear Admiral R. I. Price, USCG  
Chief, Office of Marine Environment and Safety, Member

Captain Richard Brooks, USCG  
Executive Secretary

The membership may be expanded by the Commandant or Chairman, Marine Safety Council to deal with special problem circumstances.

Lieutenant (jg) G. D. Szcurek, Editor

DIST. (SDL No. 99)  
A: abcd(2), fhklmntuv(1)  
B: n(40); c(6); e(5); f(4); ghj(3); r(2); bkipq(1)  
C: gmp(1)  
D: i(5); adgklm(1)  
E: m(1)  
F: kp(1)  
Lists TCG-06, CG-13, CG-20

**THIS COPY FOR  
NOT LESS THAN  
20 READERS—  
PLEASE PASS IT  
ALONG**

# SIX DROWN AS TUG SINKS

In the pre-dawn blackness of December 18, 1971, the Tug *Maryland* drifted peacefully down the Alligator River on the Intracoastal Waterway toward Albemarle Sound. In command of her the 33-year-old vessel was the barge *Baltimore No. 2*, loaded with paper products. Though the trip from Charleston, S.C. had been uneventful for the seven-man crew, freshening winds that night brought the promise of choppy waters on Albemarle Sound.

At the mouth of the Alligator River the Mate on watch called the Master to change the tow from push to towing in preparation for entering the Sound. With the Master in control in the pilothouse, a 6-inch, 100-foot nylon towing hawser was attached to the barge's towing bridle and paid out to 150-200 feet. The remaining hawser was coiled up on a hawser rack on the stern. Following the shift evolution the Master and an assisting deckhand returned to the barge, leaving the Mate and another deckhand on watch.

Shortly after the change the vessel left the river bar and proceeded into the open waters of Albemarle Sound. Gale force winds immediately struck the *Maryland*, forcing a change of course and causing the vessel to shear from side to side. Though the Mate expressed concern about the shearing of the barge, he did not call the Master. An offer by the deckhand to lengthen the tow was rejected as too dangerous. Water was forming on the decks from the heavy spray made footing treacherous, and the 6 oil drums that had been stowed on the well deck had become loose. These drums had been

secured by laying them on their sides and using wooden chocks to wedge them against the bulwark under the caprail. The *Maryland* continued into Albemarle Sound at slow ahead, just holding her own.

At about 6:00 a.m. the Master and relief deckhand came on deck. After surveying the situation, the Master stopped the *Maryland's* direct drive engine to pay out more line, but the rolling oil drums made it impossible



The yacht *Georgetta* was the first vessel to spot the foundered *Maryland*. Crewmembers of the yacht rescued the lone survivor of the casualty, who was then airlifted by Coast Guard helicopter to Albemarle Hospital in Elizabeth City.

for the crew to safely reach the towing bitt and hawser. While the *Maryland* was dead in the water the wind and sea pushed the barge around and out of line with the tug, pulling her down aft and heeling her to starboard. When the Master tried to bring the tug in line with the barge, the engine would not start because the towing hawser had fouled the propeller.

The *Maryland* continued to be pulled down aft by the wind-driven barge. A discussion between the Master and Chief Engineer about the possibility of cutting the barge loose ended with a decision to keep the barge. The Chief Engineer returned below, followed shortly thereafter by the deckhand. When he entered the engineroom, the deckhand found the Chief and Assistant Engineer trying without success to start a portable gasoline-powered bilge pump. The deckhand noticed that water was entering the engineroom from the after part of the vessel, but he could not see where it was coming from. A crewmember came below to tell them that the radio would not work. No distress signal had been or could be made.

With the *Maryland* heeling about 45 degrees to port two crewmembers attempted to launch the lifeboat. As the securing gripes were released the lifeboat rolled over, coming to rest upside down alongside the tug. Slippery decks and crashing waves foiled efforts to right it. By this time the entire crew was gathered on the boat deck. Three of the seven men were wearing personal flotation devices, two had life rings, and two had nothing. A last attempt to use the radio confirmed that it was no longer working. It was shortly after dawn on a clear, cold, windy day.

Two men then went aft to the area of the towing bitt and capstan and attempted to take the hawser off the bitt and place it on the capstan. Shortly thereafter the men were sighted in the water, but it is uncertain whether they fell overboard, were washed overboard, or decided

to swim for the barge. Another crewmember followed the two men in the water and was last seen swimming for the barge. It was in these final minutes that the Mate observed that the scuttle plate for the lazarette was missing.

The remaining four crewmembers remained on board clinging to the tire fenders on the starboard side. By this time the *Maryland* was completely over on her port side with only the forward part of the starboard bulwark above water. As the vessel settled, the sea action on the tires knocked the remaining crewmembers into the water. The lone survivor of the seven men entering the Sound that morning said that the last thing he remembered was being near the barge but not attempting to board it because of the heavy seas.

## THE RESCUE

The Yacht *Georgetta*, enroute to Florida on the Intracoastal Waterway, entered Albemarle Sound at about 8:45 a.m. on December 18. Seas of 3 to 4 feet and winds of 20 to 30 knots were encountered by the 68-foot yacht. As the *Georgetta* neared the middle of the Sound the *Baltimore No. 2* was sighted. On a closer approach the Tug *Maryland* was observed with just the pilothouse above water. Barge and tug were still connected and moving in a southeasterly direction. The considerable debris in the water included a life ring and two life preservers.

The crew of the *Georgetta* sighted a body in a personal flotation device about 100 yards from the Tug. Because it appeared obvious to them that the person was dead, they began looking for survivors. As they moved closer to the barge, the deckhand was sighted. He was pulled aboard the yacht, given emergency first aid, and the Coast Guard was notified. The *Georgetta* then returned to retrieve the dead body, but efforts failed because of the high freeboard of the yacht.

A Coast Guard helicopter patched from Elizabeth City Air Station lifted the survivor from the yacht and transported him to Albemarle Hospital in Elizabeth City. During this time the *Georgetta* stayed at the scene to continue the search. At about 10:30 the barge broke free of the sinking tug and began drifting to the southeast. The barge continued drifting until it landed against the William B. Umstead Bridge over Croatan Sound. It was later removed and examined by a member of the Coast Guard's Board of Investigation. About 175 feet of the 6-inch towing hawser remained shackled to the towing bridle at that time. The parted end was frayed for a distance of about 4 feet.

At about 12:50 p.m. a Coast Guard utility boat arrived to join the search. The body first sighted by the *Georgetta* was found floating 100 yards down head up with about 4 inches above water. When the body was covered, no sign of life was present. The life preserver was found to be properly secured. The *Georgetta* released from the search at about 1:30 p.m. Coast Guard units continued their efforts until nightfall without success.

On December 19 the search was resumed. By pushing and pulling the Coast Guard utility boat was able to release the *Maryland's* lifeboat, which was still secured at its stern to the tug by a means that was never identified. The boat was righted, pumped out, and then tied off to the tug with a 25 foot painter that was found connected to the stern of the lifeboat.

After searching all day the painter boat returned to the tug to find the lifeboat afloat in the same condition it had been left. It was then towed to the Coast Guard Light Attendance Station, Coinjock, N.C. using the attached painter. Though the lifeboat capsized enroute, it was righted and pulled onto the shore at the Station. Inspection of the boat revealed that of the eight air tanks leaking, seven from deterioration and the eighth from a small drill-like hole of un-

ained origin. The hull drain fitting was pushed in and fractured when the boat was pulled ashore. Except for several indentations of apparent recent origin the hull was undamaged.

The Coast Guard air and sea search for the missing men was continued through December 21 without success. Periodic searches, searches for other activities and searches by local law enforcement agencies along the surrounding beaches continued until all bodies were recovered. All death certificates listed drowning as the cause of death. Two certificates also listed exposure as a cause.

## THE INVESTIGATION

On May 30, 1972, members of the Board of Investigation viewed the *Maryland* while in drydock at New Bern, N.C. The hull was intact except for some minor damage incurred during the lengthy salvage operations. The freeing ports per side were ob-

served. There were no hanging doors, bars or screens on any of the freeing ports to prevent a line or hawser from being washed overboard through any of the ports.

A section of the 6-inch nylon towing hawser led from on deck through the aftermost starboard freeing port to the propeller. At the propeller, at least five double turns of hawser were found wrapped around the shaft and into the area between the shaft and rope guard. Upon removal a distinct bight of line was found over one blade of the propeller. The number of turns of line remaining under the rope guard could not be determined due to its shredded condition. The hawser remaining when laid out measured about 750 feet.

Above deck considerable damage had been incurred during salvage. The 24-inch scuttle plate for the lazarette was still aboard. It was of non-tight plate construction which seated in an ungasketed recess in the deck. The securing strongback for this

scuttle was found in the lazarette. The drain from the lazarette to the shaft alley was found to be closed with a pipe cap. Several turns of the hawser were found on the capstan and on the towing bitt; however, the presence of other lines indicated that the hawser had been disturbed during salvage.

A fire axe was observed still in its bracket on the deckhouse forward of the towing bitt. A second fire axe was found in a deck gear locker. Below decks numerous fire extinguishers were still in place and three kapok life preservers, in good condition, were observed. In the machinery space the long period of immersion and machinery salvage efforts precluded any significant observation other than confirmation of the machinery arrangement.

The diver who performed the underwater work for the salvors testified that he found the starboard door to the engineroom and the port door to the galley open. Also, several of the machinery casing ports were hanging loose, not dogged tight. Four of the six dogs on the watertight door between the berthing space and the engineroom were down, but not tight, and the bottom two dogs were frozen in the open position.

On the after deck he found about three turns of hawser on the towing bitt. The hawser then led to the capstan where there were approximately three more turns. From there he followed the line down through the freeing port to the propeller. This line was cut in order to free it from the capstan and bitt and get it out of the way for salvage efforts. The scuttle plate to the lazarette was also found to be missing and the lazarette full of mud. The cover plate was later found on deck. Weather deck doors were found in satisfactory workable condition.

## CONCLUSIONS

The Marine Board of Investigation concluded that the casualty was caused by the failure of the master to



The unused section of the towing hawser washed overboard as the *Maryland* attempted to cross Albemarle Sound. When the tug stopped to lengthen the towline, a loose bight fouled the propeller as shown above.

cut the barge adrift. Had the towline been cut at any time during the significant time period which elapsed between the unsuccessful efforts to restart the tug's engine and the point where progressive flooding would have resulted in capsizing even without the tripping force of the tow, the tug could have remained afloat. Relieved of the tripping and stern pull-down forces of the wind-driven tow, the initial flooding could have been controlled. The reluctance of the master to cut free the barge was attributed to psychological factors related to the traditional blemish on the record of a master who abandons his tow.

The failure of the engine to restart, after initial efforts to pay out the towing hawser were abandoned, was caused by fouling of the propeller by the towing hawser. A bight of the free end of the hawser, initially stowed on the well deck hawser grating, was washed overboard through the aftermost starboard freeing port at some time after leaving the mouth of the Alligator River and encountering heavy weather, but prior to stopping the vessel to lengthen the hawser. When stopped, the drift of the tug caused the bight of trailing towline to tend under the tug in way of the propeller where it became fouled in the propeller when the direct driven diesel engine was cranked over for starting. Succeeding turns collected around the propeller shaft, between the propeller and stern frame, until sufficient restraining force developed to prevent further cranking of the engine.

Without propulsion the tug was towed stern first, heeling alternately to one side or the other, by the still attached wind-driven barge. This towing action typically pulled the stern down and under. Flooding initially occurred through the loose, or open, scuttle to the lazarette space thus further submerging the stern. Simultaneously, or shortly thereafter, water began to enter the machinery space through loosely closed portholes

and weather deck doors opened during the aborted towline lengthening operation.

Although initial flooding of the engine room was slow, electrical power was lost almost immediately. The initial entry of water must therefore have grounded out the switchboard rendering the electric bilge pump, radio and other essential electrical equipment inoperative. Without propulsive or electrical power, and with the tripping and stern pull-down forces of the towline still in effect, flooding of the machinery space progressed at an increasing rate until insufficient stability remained to resist capsizing forces of the wind and tow. The tug finally laid on her side but still afloat. In this position she experienced rapid flooding of other spaces, finally settling to the bottom in a more or less upright position with the barge still attached by the towline slowly dragging her over the bottom until chafing action parted the towline.

The Board also noted the following factors as contributing to the casualty:

a. The initial length of towing hawser determined by the master in the Alligator River was inadequate for the prevailing and forecast weather conditions in Albemarle Sound.

b. The securing of the lubricating oil drums stowed in the well deck was inadequate for the weather conditions. Even under fair weather conditions any heeling of the tug could have released the drums thereby making the well deck area unsafe for emergency action by the crew.

c. The failure of the mate to call the master as soon as he became concerned for the safety of the vessel upon entering Albemarle Sound precluded timely action on the part of the master before the situation became critical. This failure is attributed to psychological factors related to the mate's recent demotion from master status by reason of seniority practice.

d. The loose stowage of the unpermitted length of hawser in the well deck permitted the hawser to be washed overboard when heavy weather was encountered. Had the hawser been lashed or otherwise secured to prevent it being washed overboard, the propeller would not have become fouled and the master may have been able to get the tug and tow under control.

e. The non-tight scuttle to the lazarette and steering gear spaces permitted early flooding of those spaces. This flooding water reduced the stability thereby magnifying the effects of the towline pull upon the tug.

f. The open, unprotected, freeing ports permitted the bight of loose towing hawser to wash overboard. Had the freeing ports been provided with guards, screens or prevention bars which would have reduced the clear opening dimensions, without significantly reducing the effective area available for flow of water, the hawser may not have been washed overboard. Even if it had been washed overboard over the bulwarks, its position would not have been as susceptible to fouling the propeller under drifting conditions.

g. The common distribution of electrical power through the single switchboard made the electrical system susceptible to failure from a single incident involving that switchboard. Had the electrical arrangement provided for a direct battery source of power to vital auxiliary machinery and the radio, it may have been possible to bring flooding under control, or lacking that to have broadcast a call for assistance. A distress call broadcast prior to abandonment of the tug may have prevented or reduced the loss of life.

h. The lack of training in abandonment procedures and use of lifesaving equipment resulted in disorderly lifeboat launching efforts and failure to fully utilize all available lifesaving equipment.

Also noted by the Board was the fact that the *Maryland's* freeing ports were inadequate under the prevailing

ditions to keep the well deck reasonably clear of water, even though it met or exceeded current design requirements. The buildup of water on the well deck both hampered emergency action by the crew and contributed to the towing hawser being washed overboard.

The Board also stated that more might have been saved had the vessel been provided with an inflatable liferaft in place of the lifeboat. Though neither is required by law, an inflatable liferaft was cited as being easier to launch with a small crew or under adverse weather conditions.

The master and crew of the *Vergetta* were commended in the Board's report for their prompt recognition of the casualty and their search and rescue efforts on the day of the tragedy.

The Board recommended that the problem of freeing ports be studied to determine the adequacy of current standards. The Merchant Marine Technical Division of the Office of Merchant Marine Safety has been examining the pertinent data in this casualty.

The Towing Industry Advisory Committee, a group of experts appointed by the Commandant to provide advice regarding safe towing operations, will be asked to submit recommendations and advice regarding freeing ports and on proper procedures of hawser storage. In addition, the Board's recommendation that questions relating to the use and securing of hawsers be made a part of the towing vessel operator license examination is being acted upon.

The Marine Board report has been furnished to the Federal Communications Commission for their use in considering the possible need for a separate or alternate source of power for radio equipment installed on commercial vessels.

The Board's final recommendation was that legislation be sought which would prescribe minimum standards of design, arrangement and safety equipment for uninspected towing vessels. Legislation to place towing vessels under Coast Guard inspection has been introduced in Congress on several occasions.

The National Transportation Safety Board determined that the prob-

able cause of the casualty was the fact that the portside watertight door which led from the weatherdeck to the lower crew berthing compartment was left open at some time while the vessel was heeled over to port. This provided a relatively low point of water ingress, and the subsequent flooding sank the vessel.

The NTSB recommended that the Coast Guard:

a. Develop, in its study of towing vessel stability, stability criteria which would enable an unpowered vessel to withstand the combined effect of direct wind and of lateral forces of the towline. The application of these criteria would require establishing towline pull characteristics of barges under specified wind conditions, e.g., ocean and coastwise service and protected and partially protected waters. This would enable the capabilities of towing vessels to be matched with certified towline-pull characteristics of barges.

b. Determine, in its study of towing vessel stability, the effect of towline length on towing safety.

c. Structure the results of its towing vessel stability study into operating information which could be used as a guide by the operators of towing vessels.

d. Increase the frequency and scope of its examination program in regard to insuring that required life-saving equipment on towing vessels is in good and serviceable condition.

e. Seek authority to require adequate thermal, as well as buoyant, protection to provide for survival of seamen on all commercial vessels.

*NOTE: The above article is based upon the Marine Casualty Report of the incident, comprised of the U.S. Coast Guard Marine Board of Investigation Report and Commandant's Action and the action the National Transportation Safety Board released July 11, 1974. Copies of the complete report may be obtained by writing Commandant(G-MVI-3), U.S. Coast Guard, Washington, D.C. 20590.*

## A CLOSER LOOK AT THE MARYLAND

The tug *Maryland* was built in 1938 by the Speeden Shipbuilding Company, Inc. of Baltimore, Maryland, as hull 279, for the U.S. Army Corps of Engineers. The vessel's original name was the *Stephen F. Austin* which was later changed to the *Lieutenant Thomas B. Sollum*. Review of the official U.S. Coast Guard vessel documentation and admeasurement records established that the vessel was admeasured at 160 gross tons at the time of acquisition and was assigned her official number in November 1955. In January 1956, she was readmeasured to 166 gross tons because of the addition of a raised pilothouse and conversion of the old pilothouse to an accommodation space. The vessel was issued a permanent Certificate of Consolidated Enrollment and License for the coasting trade in March 1956. As a motor towing vessel operating in inland service, the *Maryland* was not subject to Coast Guard inspection under existing laws nor was she required to be manned by licensed officers. She was not classed by the American Bureau of Shipping. There was no record of a stability test ever having been conducted.

# BASIC PRINCIPLES AND OPERATIONAL GUIDANCE FOR NAVIGATIONAL WATCHKEEPING

At the international level, the Intergovernmental Maritime Consultative Organization (IMCO) is the specialized agency of the United Nations concerned solely with maritime affairs. In early 1970 an IMCO working group reported "that in view of the continuing alarming rise in maritime casualties and pollution, it is necessary for urgent action to be taken aimed at strengthening and improving standards of training and professional qualifications of mariners as a means of securing better guarantees of safety at sea and protection of the marine environment."

Accordingly, at its twenty-fourth session in October 1971, the Maritime Safety Committee of IMCO established a new sub-committee on Stand-

ards of Training and Watchkeeping. This new sub-committee has since met four times and has developed several documents dealing with the subject of personnel standards and qualifications. These documents were then submitted to the Maritime Safety Committee and finally to the IMCO Assembly for approval and distribution to member governments in the form of Recommendations.

One of the first documents so distributed is entitled "Recommendation on Basic Principles and Operational Guidance Relating to Navigational Watchkeeping." This document consists of two parts, Annex (A) "Basic Principles to be Observed in Keeping a Navigational Watch" and Annex (B) "Operational Guidance for Offi-

cers in Charge of a Navigational Watch." Annex (A) is reprinted herein; Annex (B) will appear in the next issue of the *Proceedings*.

Materials contained in these following documents, although of an advisory nature, should be given full attention by interested members of the maritime community. The documents may comprise the working papers of an international conference on the subject, tentatively scheduled for 1977. All industry will be given ample opportunity to express their views on this important matter. Comments are welcome and may be addressed to Commandant (G-MVP/82), U.S. Coast Guard, Washington, D.C. 20590.

## IMCO

RESOLUTION A.285(VIII)

Adopted on 20 November 1973

### RECOMMENDATION ON BASIC PRINCIPLES AND OPERATIONAL GUIDANCE RELATING TO NAVI- GATIONAL WATCHKEEPING

THE ASSEMBLY,

NOTING that Council at its twenty-fifth session decided that urgent consideration should be given to the question of training requirements and the principles relating to the keeping of a navigational watch,

TAKING INTO ACCOUNT the contents of Recommendation 39 adopted by the International Conference on Safety of Life at Sea, 1960,

RECOGNIZING the complexity of the problem and the urgent need to deal with it in a manner which should lead to its early and most effective solution,

HAVING EXAMINED AND APPROVED the reports of the twenty-seventh and twenty-eighth sessions of the Maritime Safety Committee,

RESOLVES to recommend to Member Governments that they implement as soon as practicable the measures contained in Annexes A and B to this Recommendation

### ANNEX A

#### BASIC PRINCIPLES TO BE OBSERVED IN KEEPING A NAVIGATIONAL WATCH

Member Governments shall direct the attention of shipowners, masters and watchkeeping personnel to the following principles which shall be observed to ensure that a safe navigational watch is maintained.

(a) The master of every ship is bound to ensure that

the watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under his general direction, the officers of the watch are responsible for navigating the ship safely during their periods of duty when they will be particularly concerned to avoid collision and stranding.

(b) The basic principles including but not limited to the following shall be taken into account by all ships:

(i) Watch arrangements

The composition of the watch, including the requirement for look-out(s), shall at all times be adequate and appropriate to the prevailing circumstances and conditions.

When deciding the composition of the watch on the bridge the following points are among those to be taken into account:

- (1) at no time shall the bridge be left unattended;
- (2) the weather conditions, visibility and whether there is daylight or darkness;
- (3) the proximity of navigational hazards which may make it necessary for the officer in charge to carry out additional navigational duties;
- (4) the use and operational condition of navigational aids such as radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the ship;
- (5) whether the ship is fitted with automatic steering;
- (6) any additional demands on the navigational watch that may arise as a result of special operational circumstances.

(ii) Fitness for duty

The watch system shall be such that the efficiency of the watchkeeping members of the crew is not impaired by fatigue. Accordingly the duties shall be so organized that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit when going on duty.

(iii) Navigation

- (1) the intended voyage shall be planned in advance taking into consideration all pertinent information and any course laid down shall be checked;
- (2) on taking over the watch the ship's estimated or true position, intended track, course and speed shall be confirmed;

any navigational hazard expected to be encountered during the watch shall be noted;

- (3) during the watch the course steered, position and speed shall be checked at sufficiently frequent intervals using any available navigational aids necessary to ensure that the ship follows the planned course;
- (4) the safety and navigational equipment with which the ship is provided and the manner of its operation shall be clearly understood; in addition its operational condition shall be fully taken into account;
- (5) whoever is in charge of a navigational watch shall not be assigned or undertake any duties which would interfere with the safe navigation of the ship.

(iv) Look-out

Every ship shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision, stranding and other hazards to navigation. Additionally, the duties of the look-out shall include the detection of ships or aircraft in distress, shipwrecked persons, wrecks and debris. In applying these principles the following shall be observed:

- (1) whoever is keeping a look-out must be able to give full attention to that task and no duties shall be assigned or undertaken which would interfere with the keeping of a proper look-out;
- (2) the duties of the person on look-out and helmsman are separate and the helmsman should not be considered the person on look-out while steering; except in small vessels where an unobstructed all round view is provided at the steering position and there is no impairment of night vision or other impediment to the keeping of a proper look-out;
- (3) there may be circumstances in which the officer of the watch can safely be the sole look-out in daylight. However, this practice shall only be followed after the situation has been carefully assessed on

(See IMCO RESOLUTION, p. 179)

# MARINE SAFETY COUNCIL MEMBERSHIP

John Fawdrey Thompson, Jr., was born on May 30, 1919, at Franklin, N.H., and graduated from Tilton Prep School, Tilton, N.H., in 1937, after which he attended Syracuse University, N.Y., as a freshman.

Entering the U.S. Coast Guard Academy, New London, Conn., with an appointment as cadet on August 15, 1938, he was graduated with a B.S. Degree and with a commission of Ensign on December 19, 1941, a few days after the bombing of Pearl Harbor. Because of the war emergency graduation was hastened six months ahead of the usual four years required for cadet training and study.

Ordered immediately to combat duty, he served his first assignment during World War II as Deck Watch Officer on board the Coast Guard Cutter *Campbell* on Atlantic convoy escort duty until August 1942. He next commanded Sub-Chaser 705 on the wartime Greenland Patrol, and served as Anti-Submarine Warfare Officer and Instructor on the staff of the Commander, Task Force 24 at Argentia, Nfld., until September 1943. During the next six months he was Attack Teacher Instructor at the Coast Guard Advanced Officers Training School, St. Augustine, Fla. For the remainder of the war he served first as Executive Officer and then as Commanding Officer of the Coast Guard-manned destroyer escort, USS *Harveson* on convoy escort duty both in the Atlantic and in the Pacific. At age 24, the youngest commanding officer of a destroyer escort, he was credited with sinking a German U-boat with some assistance from a British aircraft. For commanding the *Harveson*, he was awarded the Navy Commendation Medal.

From October 1945 to January 1946, he commanded the destroyer escort USS *Joyce* (DE-317) in the Atlantic. He served the next three years as Administrative Aide to the Chief, Office of Merchant Marine Safety at Coast Guard Headquarters, Washington, D.C. From October 1948 to October 1949, he was assigned to marine industry training at the Esso Company in New York. That was followed by one year of duty at the Coast Guard Marine Inspection Office, New York, as Deck and Machinery Inspector.

From October 1950 to October 1952, he served first as Executive Officer and then as Commanding Officer of the Cutter *Mendota* on search and rescue and ocean station patrol out of Wilmington, N.C. He then returned to his former duties at the Marine Inspection Office in New York where he remained one year. From October 1953 to July 1958, he served as Deck and Machinery Inspector

and as Senior Investigating Officer at the Marine Inspection Office at Jacksonville, Fla. He next commanded the Cutter *Cherokee* out of Norfolk, Va.

From October 1960 to August 1963, he served as Officer in Charge of the Coast Guard Merchant Marine Detail at Yokohama, Japan. While stationed at the Marine Inspection Office in Philadelphia, Pa., in the next four years he served as senior Inspector (Material) and Executive Officer for one year and then as Officer in Charge of that office for the remainder of that tour of duty.

In July 1967, the then-CAPT Thompson was transferred to the 7th Coast Guard District, Miami, where he served first as Chief, Operations Division until July 1968 and then as the District Chief of Staff until June 1970.



By nomination of the President on January 25, 1970, and confirmation of the Senate, he was appointed two-star flag officer to rank as permanent Rear Admiral from July 1, 1970. At that time he assumed the post of Superintendent of the U.S. Coast Guard Academy.

In August 1973, he returned to Headquarters to assume the post of Chief, Office of Boating Safety, in his present assignment.

RADM Thompson's wife is the former Marjorie Dunton of Boothbay, Me. They have three children, David, Sheri, and Mark.

# MARITIME SIDELIGHTS

## CARRIERS: IF YOU SPILL IT, REPORT IT

At a recent hazardous materials seminar the Department of Transportation commented on the small number of written hazardous materials incident reports (Department of Transportation Report Form F5800.1) submitted by a particular class of carriers. One attendee remarked that his company had no incidents which resulted in death, injury, or property damage exceeding \$50,000. It became apparent that many carriers misunderstood the reporting requirements to mean that a written report is required *only* when hazardous materials were involved in death, injury or property damage exceeding \$50,000.

A written report is required whenever there is *any* unintentional release of hazardous materials during transportation. Form DOT F5800.1 is used for package incidents and

Coast Guard Form CG 4752 is used for bulk cargo incidents. Where death, injury or property damage exceeding \$50,000 is involved, an immediate (telephonic) report is *also* required, but regardless of that immediate report, the written report on either Form F5800.1 or CG 4752 (as appropriate) must be submitted if there is any unintentional release of hazardous materials.

Since there are several thousand carriers who may be transporting hazardous materials, and only 725 carriers have submitted Hazardous Materials Incident reports over the past three years, this misunderstanding of the reporting requirements may be widespread. Remember, all carriers subject to the Department of Transportation Hazardous Materials Regulations must report in writing on the appropriate form *any* unintentional release of hazardous materials.

Coast Guard regulations, 46 CFR Subpart 2.20, identify the reports and forms required for reporting inci-

idents involving hazardous materials. The reporting requirements for incidents involving packaged hazardous materials are detailed in 46 CFR 2.20-70(a) for which the Form DOT F5800.1 is specified.

Incidents involving the transportation of bulk hazardous materials have separate reporting requirements detailed in 46 CFR 2.20-70(b), for which Coast Guard Form CG 4752 is specified.

### Where to Go

Do you need Navigation and Vessel Inspection Circulars but don't know where to get them? For information on NAVIC's, send your questions to the following address:

Commandant (G-M-3)  
U.S. Coast Guard  
Washington, D.C. 20590

## IMCO RESOLUTION

Continued from page 177

each occasion and it has been established without doubt that it is safe to do so. Full account shall be taken of all relevant factors including but not limited to the state of weather, conditions of visibility, traffic density, proximity of navigational hazards and if navigating in or near a traffic separation scheme.

- (v) Navigation with pilot embarked  
Despite the duties and obligations of a pilot, his presence on board does not relieve the the master or officer in charge of the watch from their duties and obligations for the

safety of the ship. The master and the pilot shall exchange information regarding navigation procedures, local conditions and the ship's characteristics.

- (vi) Protection of the marine environment

The master and officer in charge of the watch shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution particularly within the existing framework of existing international regulations.

# COAST GUARD RULEMAKING

(Status as of 1 August 1974)

	Notice of proposed rulemaking	Public hearing	Deadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
<b>1972 PUBLIC HEARING</b>							
Tailshaft inspection and drawing (67-71, 4-71).....	3-1-72	3-27-72	4-3-72	X			
<b>ANCHORAGE REGULATIONS</b>							
San Juan Harbor, P.R. (CGFR 72-12).....	2-1-72		3-4-72	X			
Juan DeFuca, Wash. (CGD 72-233).....	12-5-72		1-9-73	X			
Sodus Bay, NY (CGD 73-84).....	4-27-73		5-29-73	X		7-2-74	8-19-74
Puget Sound Area, WA (CGD 73-180).....	8-24-73		9-28-73	X			
Delaware Bay and R. (CGD 73-190).....	12-28-73		2-15-74			5-24-74	7-1-74
Indian River, Sebastian, FL (CGD 74-104).....	7-2-74		8-5-74				
<b>BRIDGE REGULATIONS</b>							
John Day R., Blind Slough, Clatskanie R., Oregon (CGD 72-231).....	11-28-72		1-2-73	X			
Sacramento R. et. al., CA (CGD 73-142).....	7-20-73		8-21-73	X			
Westchester Ck., NY (CGD 73-166).....	8-10-73		9-11-73	X			
Chesapeake Ck., NJ (CGD 73-162).....	8-10-73		9-11-73	X			
AIWW, Mile 342, Fla.; Drawbridge Operations (CGD 72-190P).....	9-30-72		11-1-72	X			
Rahway R., NJ (CGD 73-196).....	9-11-73		10-16-73	X		2-21-74	2-15-74 through 8-19-74
Back Bay of Biloxi, MS (CGD 74-37).....							
Little Manatee R., FL (CGD 74-41).....	2-21-74		3-19-74				
Grand R., Grand Haven, MI (CGD 74-42).....	2-21-74		3-19-74				
Sturgeon Bay, WI (CGD 74-97).....	4-9-74		5-14-74	X			
Galveston Channel, G.I.W.W., TX (CGD 74-85).....	4-10-74		5-14-74			7-31-74	9-2-74
New River Sound and Stranahan River, FL (CGD 74-115).....	4-22-74		5-20-74	X			
Genesee R., NY (CGD 73-203).....	9-13-73		10-16-73	X			
Navigable Waters in LA (CGD 73-214).....	9-27-73		10-30-73			5-30-74	7-1-74
Stony Ck., MD (CGD 73-242).....	10-12-73		11-20-73	X			
Lake Worth A.I.W.W., FL (CGD 74-117).....	5-2-74		6-25-74	X			
San Joaquin River, Georgiana Slough, Sacramento River, CA (CGD 73-172).....	5-24-74		7-2-74	X			
Buffalo R., NY (CGD 74-107).....	5-30-74		7-2-74	X			
AIWW, Hillsboro Inlet, FL (CGD 74-22).....	1-25-74		3-1-74				
Chuckatuck Ck., Va. (CGD 74-71).....	3-29-74		4-30-74				
Chesapeake & Del. Canal, Del. (CGD 74-72).....	3-29-74		4-30-74				
Mystic R., Mass. (CGD 74-48).....	3-25-74		4-30-74			6-5-74	7-8-74
Goosaw R., S.C. (CGD 74-58).....	3-11-74		4-12-74				
Tennessee R., Tenn. (CGD 74-61).....	3-11-74		4-12-74			6-17-74	7-22-74
New River, FL (CGD 74-114).....	4-22-74		5-20-74				
Manatee River, FL (CGD 74-101).....	4-22-74		5-20-74				
Chicago River, IL (CGD 74-137).....	6-3-74		7-16-74	X			
Nanticoke River, MD (CGD 74-154).....	6-17-74	7-24-74	8-7-74				

# Coast Guard Rulemaking—Continued

	Notice of proposed rulemaking	Public hearing	Deadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
<b>HAZARDOUS MATERIALS</b>							
Chlorobutene, Corrected, F.R. 9-20-72, Hazardous Cargoes (CGD 72-162PH).....	8-30-72	10-24-72	10-31-72	.....	.....	.....	.....
Certification of Cargo Containers for Transport under Customs Seal (CGD 72-139).....	11-17-72	.....	12-19-72	.....	.....	7-31-74	8-30-74
Miscellaneous Dangerous Cargoes (CGD 72-182).....	11-11-72	12-12-72	12-19-72	X	.....	.....	.....
Marking of radioactive materials packages (CGD 73-37).....	8-31-73	9-25-73	10-5-73	X	.....	.....	.....
Dangerous Cargo Regulations, miscellaneous (CGD 73-249).....	1-16-74	.....	3-4-74	.....	.....	.....	.....
Notice of arrival of laden vessels (CGD 73-253).....	6-25-74	.....	8-8-74	.....	.....	.....	.....
Sodium sulfide solution and sulfur dioxide (CGD 73-275).....	7-16-74	.....	10-29-74	.....	.....	.....	.....
Silver chloride (CGD 74-167).....	7-23-74	8-15-74	9-6-74	.....	.....	.....	.....
<b>MARINE ENVIRONMENT AND SYSTEMS (GENERAL)</b>							
Pollution prevention (CGFR 71-160, 161).....	12-24-71	2-15-72	4-21-72	X	.....	12-21-72	17-1-74
Marine Sanitation Devices (CGD 73-83).....	3-1-74	5-1-74	5-14-74	.....	.....	.....	.....
Traffic system, Puget Sound (CGD 73-158).....	8-6-73	8-30-73	9-17-73	.....	.....	7-10-74	9-30-74
Peapacke Bay entrance (CGD 73-152).....	12-18-73	2-11-74	1-23-74	X	.....	.....	.....
Boundary Lines of Inland Waters (CGD 73-241).....	4-8-74	.....	5-26-74	X	.....	.....	.....
	corrected 5-8-74	.....	.....	.....	.....	.....	.....
<b>MERCHANT MARINE SAFETY (GENERAL)</b>							
Hydrographic vessels, fire main systems (CGFR 72-20).....	2-4-72	.....	3-19-72	X	.....	.....	.....
Navigation lights, floating electric (CGFR 72-48).....	3-9-72	4-18-72	4-24-72	X	.....	.....	.....
Ship's Maneuvering Characteristics Data (CGD 72-162PH).....	8-22-72	9-28-72	10-13-72	X	.....	.....	.....
	Supp. Notice 7-20-73	.....	8-31-73	X	.....	.....	.....
Construction requirements for tank ships (CGD 72-245).....	Adv. Notice 1-26-73	.....	3-15-73	.....	6-28-74	.....	.....
	Supp. Notice 7-5-73	.....	.....	.....	6-28-74	.....	.....
Emergency Position Indicating Radio Beacons (CGD 73-24).....	3-5-73	4-18-73	4-30-73	.....	.....	3-18-74	3-1-75
Survival equipment specification (CGD 73-130).....	8-28-73	.....	9-28-73	.....	.....	6-13-74	7-15-74
	Supp. Notice 1-16-74	.....	2-16-74	.....	.....	.....	.....
Observer licensing (CGD 73-238).....	10-12-73	.....	11-30-73	X	.....	.....	.....
Portable tanks (CGD 73-172).....	12-5-73	1-15-74 New Orleans	1-21-74	.....	.....	6-25-74	10-1-74
Radio engineering amendments (CGD 73-248).....	12-11-73	.....	1-14-74	X	.....	.....	.....

Various effective dates precede that indicated. See Federal Registers of 12-21-72 and 8-24-73.

# Coast Guard Rulemaking—Continued

	Notice of proposed rulemaking	Public hearing	Deadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
Unmanned Platforms (CGD 73-177).....	1-8-74 Corrected 1-29-74	.....	2-25-74	×	.....	.....	.....
Releases, Lifesaving Equipment, Hydraulic and Manual (CGD 73-153).....	1-8-74	.....	2-25-74	×	.....	.....	.....
Light Intensity Standards (CGD 74-7).....	.....	.....	.....	.....	.....	1-25-74	7-1-74
Bulk Dangerous Cargoes, Inspection of Barges (CGD 73-271).....	3-11-74	4-15-74	4-30-74	.....	.....	.....	.....
Lifesaving Equipment Specification (CGD 73-246).....	3-18-74	.....	5-2-74	.....	.....	.....	.....
First Aid Certificates (CGD 73-272).....	4-2-74	.....	6-15-74	×	.....	.....	.....
CO <sub>2</sub> Fixed Fire Extinguishing Systems (CGD 74-100)....	5-8-74	.....	6-24-74	×	.....	.....	.....
Carriage of Solid Hazardous Materials in Bulk (CGD 74-13).....	5-15-74	7-16-74	8-31-74	.....	.....	.....	.....
Oily Ballast Discharge Requirements (CGD 73-58).....	5-15-73	.....	6-18-74	×	.....	5-30-74	7-1-74
Tank vessels in domestic trade (CGD 74-32).....	6-28-74 Corrected 7-23-74	7-23-74 Seattle Wash. D.C.	8-19-74	.....	.....	.....	.....
Small passenger vessels, subdivision requirements (CGD 72-180).....	6-5-74	.....	6-18-74	×	.....	.....	.....
Passenger vessels, subdivision requirements (CGD 72-181).....	6-5-74	.....	6-18-74	×	.....	.....	.....

NOTE: This table which will be continued in future issues of the Proceedings is designed to provide the maritime public with beneficial information on the status of changes to the Code of Federal Regulations made under authority granted the Coast Guard. Only those proposals which have appeared in the Federal Register as Notices of Proposed Rulemaking, and as rules will be recorded. Proposed changes which have not been placed formally before the public will not be included.

## AMENDMENTS TO REGULATIONS

### TITLE 46—SHIPPING

#### Chapter I—Coast Guard, Department of Transportation

##### SUBCHAPTER E—LOAD LINES [CGD-74; 153]

#### PART 42—DOMESTIC AND FOREIGN VOYAGES BY SEA DELEGATION OF AUTHORITY TO EXTEND CERTIFICATES

The purpose of this amendment is to delegate to the Commander, Ninth Coast Guard District, the authority vested in the Commandant by 46 CFR 42.07-45(d)(2) to extend

Great Lakes certificates for a period up to 90 days.

The delegation will speed up processing of applications and facilitate coordination with the Great Lakes Principal Surveyor, American Bureau of Shipping, in Cleveland.

Under 5 U.S.C. 553(b)(3)(A), no notice of proposed rule making is required in this case because a rule of agency organization is involved.

In consideration of the foregoing, Chapter I of 46 CFR is hereby amended as follows:

1. In § 42.07-45(d)(2), by strik-

ing out the word "Commandant" and inserting the words "Commander, Ninth Coast Guard District" in place thereof.

(46 U.S.C. 88a; 49 U.S.C. 1655(b)(1); 49 CFR 1.4(b) and 1.46(h))

*Effective date:* This amendment becomes effective on July 10, 1974.

Dated: July 3, 1974.

O. W. SILER,  
Admiral, U.S. Coast Guard  
Commandant.

(Federal Register of July 10, 1974.)

## MERCHANT MARINE SAFETY PUBLICATIONS

The following publications of marine safety rules and regulations may be obtained from the nearest marine inspection office of the U.S. Coast Guard.<sup>1</sup> Because changes to the rules and regulations are made from time to time, these publications, between revisions, must be kept current by the individual consulting the latest applicable Federal Register. (Official changes to all Federal rules and regulations are published in the Federal Register, printed daily except Saturday, Sunday, and holidays.) The date of each Coast Guard publication in the table below is indicated in parentheses following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

The Federal Register will be furnished by mail to subscribers, free of postage, for \$5.00 per month or \$45 per year, payable in advance. The charge for individual copies is 75 cents for each issue, or 75 cents for each group of pages as actually bound. Remit check or money order, made payable to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Regulations for Dangerous Cargoes, 46 CFR 146 and 147 (Subchapter N), dated October 1, 1973 are now available from the Superintendent of Documents price: \$5.80.

CG No.	TITLE OF PUBLICATION
101	Specimen Examination for Merchant Marine Deck Officers (Chief Mate and Master) (1-1-74).
101-1	Specimen Examinations for Merchant Marine Deck Officers (2d and 3d mate) (10-1-73).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (4-1-72). F.R. 7-21-72, 12-1-72.
115	Marine Engineering Regulations (6-1-73). F.R. 6-29-73, 3-8-74, 5-30-74, 6-25-74.
123	Rules and Regulations for Tank Vessels (1-1-73). F.R. 8-24-73, 10-3-73, 10-24-73, 2-28-74, 3-18-74, 5-30-74, 6-25-74.
129	Proceedings of the Marine Safety Council (Monthly).
169	Rules of the Road—International—Inland (8-1-72). F.R. 9-12-72, 3-29-74, 6-3-74.
172	Rules of the Road—Great Lakes (7-1-72). F.R. 10-6-72, 11-4-72, 1-16-73, 1-29-73, 5-8-73, 3-29-74, 6-3-74.
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (3-2-64).
175	Manual for Lifeboatmen, Able Seamen, and Qualified Members of Engine Department (3-1-73).
176	Load Line Regulations (2-1-71). F.R. 10-1-71, 5-10-73, 7-10-74.
182	Specimen Examinations for Merchant Marine Engineer Licenses (7-1-63).
182-1	Specimen Examinations for Merchant Marine Engineer Licenses (2d and 3d Assistant) (10-1-73).
184	Rules of the Road—Western Rivers (8-1-72). F.R. 9-12-72, 5-8-73, 6-27-73, 6-28-73, 3-29-74, 6-3-74.
190	Equipment List (8-1-72). F.R. 8-9-72, 8-11-72, 8-21-72, 9-14-72, 10-19-72, 11-8-72, 12-5-72, 1-15-73, 2-6-73, 2-26-73, 3-27-73, 4-3-73, 4-26-73, 6-1-73, 8-1-73, 10-5-73, 11-26-73, 1-17-74, 2-28-74, 3-25-74.
191	Rules and Regulations for Licensing and Certification of Merchant Marine Personnel (6-1-72). F.R. 12-21-72, 3-2-73, 3-5-73, 5-8-73, 5-11-73, 5-24-73, 8-24-73, 10-24-73, 5-22-74.
200	Marine Investigation Regulations and Suspension and Revocation Proceedings (5-1-67). F.R. 3-30-68, 4-30-70, 10-20-70, 7-18-72, 4-24-73, 11-26-73, 12-17-73.
227	Laws Governing Marine Inspection (3-1-65).
239	Security of Vessels and Waterfront Facilities (3-1-72). F.R. 5-31-72, 11-3-72, 7-8-72, 1-5-73, 1-23-74, 3-19-74, 4-2-74, 5-15-74, 5-24-74.
256	Rules and Regulations for Passenger Vessels (5-1-69). F.R. 10-29-69, 2-25-70, 4-30-70, 6-17-70, 10-31-70, 12-30-70, 3-9-72, 7-18-72, 10-4-72, 10-14-72, 12-21-72, 4-10-73, 8-1-73, 10-24-73, 12-5-73, 3-18-74, 5-30-74, 6-25-74.
257	Rules and Regulations for Cargo and Miscellaneous Vessels (4-1-73). F.R. 6-28-73, 6-29-73, 8-1-73, 10-24-73, 3-18-74, 5-30-74, 6-25-74.
258	Rules and Regulations for Uninspected Vessels (5-1-70). F.R. 1-8-73, 3-28-73, 1-25-74, 3-7-74.
259	Electrical Engineering Regulations (6-1-71). F.R. 3-8-72, 3-9-72, 8-16-72, 8-24-73, 11-29-73.
266	Rules and Regulations for Bulk Grain Cargoes (5-1-68). F.R. 12-4-69.
268	Rules and Regulations for Manning of Vessels (10-1-71). F.R. 1-13-72, 3-2-73.
293	Miscellaneous Electrical Equipment List (7-2-73).
320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (7-1-72). F.R. 7-8-72.
323	Rules and Regulations for Small Passenger Vessels (Under 100 Gross Tons) (9-1-73). F.R. 1-25-74, 3-18-74.
329	Fire Fighting Manual for Tank Vessels (1-1-74).
439	Bridge-to-Bridge Radiotelephone Communications (12-1-72).

### CHANGES PUBLISHED DURING JULY 1974

The following have been modified by Federal Registers:  
CG-176, Federal Register of July 10, 1974.

<sup>1</sup>Due to the paper shortage, certain publications may be temporarily out of stock. Titles 33 and 46, Code of Federal Regulations may be consulted for rules and regulations.

