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DEPARTMENT OF TRANSPORTATION

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PROCEEDINGS

IN THIS ISSUE . . .

Tug and Barge Collision with Chesapeake Bay Bridge and Tunnel . . .

EPIRB Regulations Promulgated . . .

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COVERS

FRONT COVER: This month's feature article relates the story of the Tug Carolyn and the barge Weeks No. 254 drifting into the Chesapeake Bay Bridge and Tunnel in September 1972. The photo on the front cover shows the bow of the barge and some of the damage done by the collision to the bridge. Damages were in excess of \$2 million.

BACK COVER: The Marine Section, National Safety Council is now accepting entries for its second bi-annual marine safety poster contest. A poster giving details is printed on our back cover.

OF THE

MARINE SAFETY COUNCIL

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Adminia C. L. Bender, USCG Commendant

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

Lieutenant (jg) A. W. Vander Meer, Jr., Editor

TUG AND BARGE COLLIDE WITH BRIDGE

The Chesapeake Bay Bridge and Tunnel (CBBT) complex is a vital link between two major portions of the east coast of the United States. On September 21, 1972, it was temporarily closed due to damages caused when the disabled tug, M/V Carolyn and the Barge Weeks No. 254 collided with the west side of one of the complex's trestles. The CBBT had to be closed to vehicular traffic for 14 days, and suffered damages in excess of \$2 million.

The series of events leading to the collision began on September 20, 1972, when the Carolyn, with the Weeks No. 254 in tow, enroute coastwise for New York, encountered severe weather. At 6 a.m., on that day, the National Weather Service forecast indicated that small craft warnings were in effect for the intended track line of the Carolyn and its tow. Twenty to 30 knot winds were forecast for the area from Cape May, N.J., to Virginia Beach, Va. The unlicensed master of the Carolyn described the early morning weather forecast as nothing to be alarmed about. His vessel, abeam of Chincoteague, Va., in the early morning hours, was experiencing relatively calm seas and low wind velocity.

As the morning progressed the *Carolyn* experienced worsening weather with the seas building and wind velocity increasing to about 35 knots from the northeast. The tug's master and mate became apprehensive about the influence the light

(21/2-foot draft) barge could exert on the tug. They concluded, after a radio communication with Coast Guard Station Chincoteague, that it would be hazardous to enter Chincoteague Inlet. The vessel, which had been brought about to head for the inlet, came about and headed up into the northeast winds. She was unable to make any headway on this course, however, and therefore came about yet another time to head southward toward the entrance of the Chesapeake Bay. The tug and tow made this southerly transit without difficulty until about 6:30 p.m., when the tug requested assistance in mooring

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in the Hampton Roads area. This was necessary because the tug had no Chesapeake Bay charts and no one on board was familiar with the area.

As commercial assistance was presently unavailable, two towing firms indicated they could send help to the *Carolyn* only after she and her tow arrived at the Hampton Roads Bridge Tunnel. Navigational assistance was provided to the *Carolyn* by radio, first from Coast Guard Station Little Creek, and then from the captain of the pilot boat *Hampton Roads*. The pilot boat got a visual sighting of the *Carolyn* between 9 and 9:30 p.m. After a radio communication between

The Vessels Involved

The tug Carolyn is a 59.2-foot, 93-gross ton towing vessel. She was not Coast Guard inspected nor was she required to be. She is of conventional design with all crew spaces on the main deck or above. Her below deck space was devoted almost solely to the engineroom and four fuel tanks. The fuel tanks consisted of a pair of tanks forward of the engineroom and a pair aft of the engineroom. All four tanks were interconnected by a $1\frac{1}{2}$ -inch I.P.S. pipe containing a shutoff valve for each tank. All four of the valves were known to be open on the day of the casualty. After the casualty, ullages were taken and found to be approximately equal in all the tanks. The tanks were slightly more than half full at this time.

The Carolyn was manned by a crew consisting of an unlicensed master, an unlicensed mate, two deckhands, and a cook. At the time of the casualty none of these persons was required to be licensed.

The Weeks No. 254 is a hinged single hold dump barge. It had been recently constructed, and its owners purchased the Carolyn at about the same time to deliver the barge from Port Arthur, Tex., to New York where both vessels would be placed in service. It was on this voyage that the casualty accurred. The barge was 234 feet long by 53 feet in breadth and had a freeboard of 20 feet. It had been inspected for certification on August 31, 1972.

The barge was made fast to the Carolyn with 1,200 feet of 2-inch diameter nylon towing hawser. The hawser was attached to the tug's towing bitts by use of shackles. About 400 feet of the hawser was then coiled down on the stern of the tug and the hawser was again secured to the bitts by a simple coiling arrangement. Thus, the effective towline connecting the tug and barge was about 800 feet long.

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the tug and the pilot boat, the tug was directed toward the entrance to Thimble Shoal Channel.

As the *Carolyn* and tow proceeded toward Thimble Shoals Channel, a commercial tug, M/V *Warrengas* became available to assist. Meanwhile the Coast Guard Cutter *Madrona* had already been diverted to the Chesapeake Bay entrance with orders to locate the *Carolyn* and to escort her through Thimble Shoals Channel until relieved by commercial assistance. At 10 p.m. the *Warrengas* was dispatched to rendezvous with *Carolyn*.

It was about 10:15 when the *Carolyn's* master with his tug in the vicinity of the Chesapeake Bay En-

By 11 p.m., the Carolyn was at the approximate position of the Cape Henry Wreck Lighted Buoy (LL 2674). The captain of the pilot boat advised the tug to come around farther to the west and to proceed in an established "Auxiliary Channel" north of the lighted channel. After being assured that there was plenty of water north of the lighted channel, the Carolyn's master steered the recommended course. By this time the combination of the barge's southerly leeway, the wind heel effect and the gravitating fuel was causing a noticeable port list. However, the master continued his western transit presuming he would encounter better weather inside.

gas requested that she remain near Old Point Comfort, Va., until the Carolyn and the Madrona progressed further up Thimble Shoals Channel. The Carolyn expressed displeasure with this arrangement, reporting that she was experiencing difficulty with her tow and was listing to port. The Warrengas, on hearing this report, agreed to continue outbound in the channel.

Between midnight and 12:15 a.m., on September 21, the *Carolyn's* master decided that he could no longer maintain a westerly course in light of his vessel's increasing port list and trim by the stern. The tug's port side was awash and her list was 20° to 30°. The master of the *Carolyn* hoped that



The barge Weeks No. 254, still attached to the Carolyn struck trestle A of the Chesapeake Bay Bridge and Tunnel some $2\frac{1}{2}$ miles from the shoreline. The barge drifted southward along the west side of the trestle, repeatedly striking the structure, until it finally fetched up approximately halfway through the bridge roadway. The photos above show the final position of the barge with respect to the bridge.

trance Junction Buoy (LL 155.05) first voiced apprehension about maintaining the vessel on a westerly heading. On this heading the tug and tow had the wind and seas on the starboard beam. The light barge thus exposed a tremendous sail area, and the tug was subjected to an appreciable wind heel effect. The tug began listing to port and the barge was being set in a southerly direction. These conditions aggravated an already undesirable gravitational capability resulting from cross connection of the tug's four fuel tanks. At about 11:15 p.m. the cutter Madrona made radio contact with the troubled tug. The Carolyn indicated she was lined up to enter the channel and did not indicate that she was in distress or required any assistance. The two vessels subsequently rendezvoused in the vicinity of Thimble Shoals Channel Buoy "4", and the Madrona successfully escorted the tug through the opening in the CBBT.

By now the weather included 55 knot northerly and northeasterly gusts and seas in excess of 4 feet to the west of the CBBT. As a result, the *Warren*- by heading into the wind, fuel would be transferred back to the starboard side fuel tanks and the list would be corrected. At approximately 12:15 a.m. the *Carolyn* attempted to come around to starboard to head into the winds and seas. At nearly the same time, the master requested the *Warrengas* to take *Weeks* No. 254 in tow. During the ensuing discussion a significant misunderstanding developed over the size of the nylon towing hawser, as the *Carolyn* expressed its size in inches diameter and the *Warrengas* assumed this dimension to be inches in circumference. This was important to a decision whether to cut the hawser.

The Carolyn had neared or reached her intended northerly heading when its port engine failed. First the deckhand and then the master tried unsuccessfully to restart the engine and keep it running. During these efforts, the deckhand started the electric bilge pump; however, the pump could not take suction due to the small amount of water in the bilges, the vessel's list, and the bilge suction location on the tug's centerline.

As the master worked in the engineroom, the deckhand took the wheel. He had difficulty steering, discovering that he was unable to hold the vessel around to the starboard with only the starboard engine. The vessel began to fall off to the port and drifted slowly to the southeast. On his way back from the engineroom, the master discovered a bight of his towing hawser streaming out through a freeing port on the porthand side of the stern. It had apparently fouled in the port screw.

During this time sporadic discussions continued between the Carolyn. and the Warrengas concerning the relinquishment of the Weeks No. 254 to the latter tug. As a result of the conversations and observation of the Carolyn and tow by the Warrengas' master, it was determined that the Warrengas could not get a line on the barge or take control of the existing towline. The Warrengas neither discovered nor was informed of the existence of a tripping line, attached to the housed anchor chain on the barge, and streaming into the water at the barge's stern.

Shortly before 12:45 a.m. the *Carolyn's* starboard engine failed, leaving the tng and tow at the mercy of the north, northeasterly winds and the ebbing tide. The *Carolyn* immediately dropped its 75-pound Danforth ancher. The anchor was attached to the tug by 150 feet of $1\frac{1}{4}$ -inch diameter polypropylene line. It

offered little resistance, however, and the vessels continued to drift east, southeasterly. The Carolyn now advised the cutter Madrona that the tug's screws were fouled by the towing hawser. The disabled vessel and tow were about 1,500 yards from the CBBT. The commanding officer of Madrona ordered his crew to general quarters. Portable pumps were broken out. The Carolyn came up on the radio again requesting immediate Coast Guard assistance. When the Madrona asked the Carolyn what was the problem, the response was that the Carolyn was sinking and her crew should be evacuated.

The Madrona learned from the Warrengas that the barge was still attached to the Carolyn. The Madrona therefore asked the Warrengas to stand clear while the cutter removed the Carolyn's crew. The men on the Carolyn on being informed of the Madrona's intent to evacuate them began preparing to abandon ship. The Coast Guard dis-

patched the cutter Point Martin to the scene at approximately 1 a.m.

The Madrona made her approach to the Carolyn from the windward side. As the cutter continued in a southeasterly direction, the starboard side of the tug was presented. Thus conditions were right for a direct approach of the Madrona's starboard bow to the starboard quarter of the tug. Crewmembers aboard the Madrona were able to pass a heaving line from the forecastle of their vessel to the stern of the tug. Since the Carolyn crew were apparently unaware that the line had been passed, the Madrona crew shouted something like "grab the line" or "get the line." Crew on the Carolyn reported they had been instructed by the Madrona to "cut the line." The master of the Carolyn assumed this instruction was directed to the anchor line due to possible interference with the cutter's approach, and he ordered the anchor line cut. The deckhand did so, exposing the disabled tug to the



The Carolyn finally grounded on the beach east of the bridge. The top of her wheelhouse apparently sheared off when she passed under the bridge.

undampened effects of the wind and current.

The cutter was placed at or near the starboard stern of the Carolyn, and the tug's crew stepped from the Carolyn to the waist (or buoy deck) of the Madrona. The commanding officer of the Madrona summoned the master of the tug to the bridge in order to get an accurate assessment of the tug's condition. He was informed that it would be useless to use pumps on the tug because she was sinking—due more to a fuel than a water problem. The Madrona backed away from the tug—now just 1,000 yards from the CBBT.

The Madrona began her efforts to gain control of the tug and barge, and informed Coast Guard Group Norfolk of the impending danger to the bridge-tunnel complex. Traffic over the CBBT was stopped from each end. The Madrona first tried to control the drifting vessels by securing the towline between them with a grapnel. Failing this, she then tried placing her bow against the towline to work the line up onto the cutter's forecastle. This attempt also failed, as did lassoing-type throws at the barge's bitts. Nor could the Madrona retrieve any of the lines visible on the starboard side of the barge's deck. The barge had drifted within 125 feet of the bridge by now, so the Madrona backed away. Again, the crew of the Madrona were not told of the barge's anchor tripping line, and they did not spot it in their brief observation of the barge's stern.

The Carolyn was driven by wind, seas and ebbing tide into trestle A of the CBBT at approximately 1:40 a.m., on September 21, in the vicinity of 3-mile post. This is some $2\frac{1}{2}$ miles from the shoreline. The Weeks No. 254 struck the same structure, immediately thereafter. The barge was streamed to the south of the tug, still attached to her by the towing hawser. Drifting southward along the west side of the trestle, the tug and barge repeatedly struck the structure until the tug passed under the bridge in the vicinity of 2-mile post.

Meanwhile, the cutter Point Martin arrived on scene and made a pass at the Weeks No. 254 in an effort to get a line on the barge. She was unable to do so, and experienced difficulties from the seas. The commanding officer of the Madrona recalled the Point Martin, and the latter vessel eventually departed the scene.

As the Carolyn passed on to the southwest, the towing hawser fetched upon a pile bent, constraining the tug at some short distance to the east with the barge remaining against the west side of trestle A. The Carolyn was aground on the beach east of the CBBT, and the barge was aground near the junction of trestle A with the Virginia shoreline. The barge continued to strike the trestle as it surged with the now flooding tide. Structural sections of the bridge tumbled onto the barge as it finally fetched up approximately halfway through the bridge roadway as the tide began to recede and water being pumped into the barge exerted a dampening effect. The ebbing tide left the barge high and dry-above the usual high water mark on the CBBT because the high tide had been at least 3.6 feet above normal.

At noon that day Coast Guardsmen boarded the grounded Carolyn. Her lights were burning normally under power of a still-running generator, and she was sitting upright. It was observed that the towing hawser dangling out a freeing port at the tug's stern was fouled in both screws, and that another line of about 11/2inch diameter was wrapped around the rudder. The boarding party noted that the tug was largely intact, except that the top of the wheel house was sheared off. Little water was found in the deckhouse or the engineroom bilges. It was noted later that a high water mark existed on the engineroom bulkheads, some 2 inches above the deck plates.

Damage to the Carolyn and Weeks No. 254 were reported in excess of \$50,000. No one, however, was killed or injured.

The Coast Guard Marine Board of

Investigation which considered the accident concluded that "the proximate cause of the casualty was the fault of the *Carolyn* master for an act of poor seamanship which provided a source of disablement for his vessel. Such action manifested itself in his failure to effectively secure the vessel's towing hawser notwithstanding his knowledge of an impending deterioration of the weather".

The National Transportation Safety Board (NTSB) in determining the cause of the casualty stated:

> Transportation The National Safety Board determines that the probable cause of the casualty was: (1) The failure of the master of the Carolyn to inform the Madrona or the Warrengas of the existence of a quick-release anchor on the barge and (2) the incorrect decision made by the commanding officer of the Madrona not to take the Carolyn in tow as a last resort. Contributing to the failure was the fatigued state of the master of the Carolyn; contributing to the incorrect decision was a statement by the master of the Carolyn to the commanding officer of the Madrona that the tug was sinking.

> Contributing to the collision were the absence of standards or guidelines for safe procedures in towing operations and the absence of a Federal regulation to require that unmanned barges have an expeditiously controlled anchoring capability.

The NTSB recommended that the Coast Guard:

1. Expedite the promulgation of regulations regarding vessel control in the vicinity of the Chesapeake Bay Bridge and Tunnel.

2. Determine the effects of fatigue on personnel error as a cause of marine casualties, with particular reference to the sizes of crews carried on towing vessels.

3. Publish and make available to towboat operators guidelines for safe operating procedures for towing operations. These guidelines should include methods of preplanning a voyage, the proper use of towing hawsers, and actions to be taken in various emergency situations.

4. Determine the need for anchors on unmanned barges and practical methods of controlling such anchors in order to prevent damage to any vessel, bridge, or other structure, or other loss to bystanders on the navigable waters of the United States. 5. Place additional emphasis in its search and rescue procedures on protecting bridges from vessel impacts.

The Marine Board concluded:

* * * * *

2. That, a principal contributing cause of the casualty was the Carolyn common fuel oil line arrangement which provided a gravitation capability between all four tanks.

3. That, an additional contributing cause of the casualty was the failure of the *Carolyn* to have charts of the Chesapeake Bay area on board thereby exposing the vessel to the elements for a much longer period of time than necessary. Specifically, Coast Guard Cutter Madrona or M/ V Warrengas of the presence of an anchor "tripping line" extending down from the Weeks No. 254.

5. That, the misundersanding between *Carolyn* and *Warrengas* regarding the size of the towing hawser did not contribute to the cause of the casualty nor materially effect the scope of the casualty. Subsequent events to the discourse over line sizes indicate that other factors, such as weather and actual towline retrieval options available, exerted the major influence ou any *Warrengas* attempt to relieve the *Carolyn* of its tow. 6. That, the order to cut the anchor line presumed to have



Much of the trouble with the Carolyn resulted from the fact that a portion of the towing hawser had slipped overboard and fouled in both screws. Additionally, another smaller line dangling out a freeing port was wrapped around the rudder. Both the hawser and the smaller line are visible above.

such charts would have permitted the vessel to effect a more direct approach to the bridge opening thus reducing the period that fuel would be gravitating from the starboard fuel tanks to the vessel's port fuel tanks.

4. That, a principal contributing factor to the casualty was the *Carolyn* master's failure to advise the

7. That, the Carolyn master's concern about his vessel turning over and his action in coming around to head his vessel into the wind was a rational response. His subsequent evaluation of the tug's condition as "sinking", however, reflected his lack of knowledge regarding vessel stability. Such lack of knowledge precluded salvage attempts by the *Madrona*, which can only be concluded as likely to be successful, and thus contributed to the casualty.

8. That the reported equal fuel tank ullages and absence of water in the engineroom bilges of the grounded *Carolyn* was a function of the leveling effect of the grounding. This effect provided the running bilge pump with a suction and permitted the fuel to gravitate to an equal level.

9. That, the casualty may have been prevented if the *Madrona* or *Warrengas* had placed a towline on the *Carolyn* with or without an attendant sinking of the tug.

10. That, the evacuation of the *Carolyn* crew was executed in a timely and professional manner which reflects favorably upon the *Madrona* commanding officer and her officers and crew.

11. That, there is no evidence of violation of any laws administered by the Coast Guard.

12. That, there is no evidence that any personnel of the Coast Guard or any other governmental agencies caused or contributed to the cause of the casualty.

13. That, a continuing dialog between all of the parties concerned with vessel casualty influence on the CBBT should be useful and might result in a practical contingency plan.

In his action on the report of the Marine Board of Investigation, the Commandant of the Coast Guard remarked:

> 1. The casualty resulted from the loss of power on the Tug Carolyn after the towing hawser fouled her screws. The failure of the crew of the Carolyn to properly secure the vessel for sea allowed the improperly stowed hawser to wash overboard aud into the screws. Good seamanship will help reduce the hazards of incidents of this kind. Publicity of this casualty may serve to cause others to be watchful to prevent recurrences of similar incidents.

> 2. A principal contributing cause of the casualty was the beam wind and sea buffeting the M/V Carolyn while on a westerly heading, which resulted in a port list of the tug and provided for a gravitational flow of fuel through the vessel's cross connected fuel tanks, which aggravated that list.

3. The state of mind of the master of the Tug Carolyn and his decisions throughout the chain of events leading up to the casualty were of extreme importance. While navigating on the planned coastwise route, the wind and sea conditions were such that he felt it necessary to seek a harbor of safe refuge. Although navigational assistance was being provided, he was attempting to transit an unknown channel without the use of the appropriate charts, at night and under severe weather conditions. Further the tug was experiencing a list sufficient for the port main deck to be awash. The above factors certainly affected the master's state of mind in which he feared for the safety of his own life and that of his crew. The decisions he made to seek a harbor of safe refuge; to request pilotage assistance; to request the tug Warrengas to relieve him of his tow; to turn his vessel upwind; and, to attempt to anchor the vessels when the tug lost both her engines are considered to be the decisions of a reasonably prudent man.

4. The personnel of the tug Carolyn misunderstood an attempt by the CGC Madrona to put a towline aboard. This resulted in the anchor line being cut, and nltimately in the loss of control over the situation. If the Madrona had been told about the anchor tripping line on the barge the vessels may have been successfully brought under control.

5. The Chesapeake Bay Bridge and Tunnel complex is a vital link between two major portions of the East Coast of the United States. In addition to repair costs to the bridge and to the vessel, disruption of service on this complex has a rather significant economic impact on the affected areas. The Coast Guard has under consideration a number of measures, particularly dealing with vessel operation and anchorage requirements, which are designed to protect the bridge. Regulations have been implemented which will require towing vessels to be under the direction and control of persons licensed by the Coast Guard. Also, the Coast Guard will continue to cooperate with State and local officials and other interested

parties in the development of other safety measures which are within their authority to implement.

6. The Towing Industry Advisory Committee will be requested to provide recommendations and advice relative to proper towing hawser stowage, methods of obtaining control and/or towing a drifting barge, and cross connected fuel tanks. In order to provide further public dissemination of the above hazards this casualty report will be published in the "Proceedings of the Marine Safety Council."

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 by National Transportation Safety Board released February 27, 1974. Copies of the full Marine Casualty Report may be obtained by writing Commandant (G-MVI-3), U.S. Coast Guard, Washington, D.C. 20590. ‡

safety as others see it

Seagoing Rats

A representative of the U.S. Public Health Service recently informed us of some very interesting facts about rats that may board your vessel in a bale of sisal or other commodity.

There are about 2,000 species of these gnawing mammals of the family Rodentia. They have one pair of chisel-like teeth in each jaw that grow throughout their life. These teeth must be kept worn down by gnawing, or they will grow to such length that they will prevent the animal from eating and result in starvation. Rodents range in size from pygmy mice, which are the smallest mammals in the world, to the Capybara, which may attain a length of 4 feet and a weight of 100 pounds.

Rattus Rattus, commonly known as the black rat, has long ears and tail. This rat, originally native in Southern Asia, frequents ships and has reached most of the ports of the world. It is known as the chief disseminator of hubonic plague hy being host to infected fleas. It has predaceous habits, an omnivorous diet and great fecundity. They bear 4 or 5 times a year, a litter averaging 4 to 6 blind young, and have been known to have up to 13 in a litter. These young can breed at 6 months and the gestation period is only 20 days.

It doesn't take a mathematical genius to see how quickly a ship can be populated with rats. Use rat guards on mooring lines and eliminate harborage on board. After loading cargo, it is advisable to place a few traps on top of the stow. Bait the traps with a segment of apple and place a few drops of oil on the trap, in front of the trap to make a slippery surface.

Other than the health hazard posed by allowing a population of

rats to exist on your ship, there is the danger of being attacked. A cornered rat will attack by jumping for your throat. They are extremely fast and dangerous. The mother rat is especially dangerous should she feel her young are threatened.

Never approach the corner of a hold on the diagonal line of the space. It is much safer to follow the bulkheads, thus allowing an avenue of escape for any rat that may be hiding there. This rule is especially important when making cargo hold inspections.

Paint the lower portion of the accommodation ladder or gangway white. Maintain good housekeeping practices and sanitary conditions on board as measures to prevent rodent infestation. The U.S. Public Health Service recommended preventive rat trapping program for vessels appears on another fact sheet of this series. —Courtesy National Safety Council

COAST GUARD PROMULGATES EPIRB REGULATIONS

Effective March 1, 1975, certain inspected vessels engaged in ocean and coastwise service will be required to carry Coast Guard approved emergency position indicating radiobeacoos (EPIRB's) as a part of their lifesaving equipment. The Coast Guard published requirements for the carriage, marking, and periodic testing of the device in the Federal Register of March 18, 1974. Technical specifications for approved devices were published by the Federal Communications Commission on the same date. The full text of the Coast Guard regulations is reprinted below.

The device itself is a battery-powered transmitter, activated either manually or automatically, which sends out a distinctive signal on both 121.5 and 243 MHz, emergency frequencies currently in use by civil and military aircraft. The regulations specify that the device must be stowed in a location that is easily accessible, and from which it will float free if the vessel sinks. It is essential that these devices be activated only in actual distress conditions or during prescribed test periods, and that the maximum care be taken to prevent misuse and inadvertent activation.

The lifesaving potential of EPIRB's has long been recognized. A 1957 Coast Guard study showed electronic search methods using emergency beacons to be significantly more effective and less costly than conventional visual searches, and recommended that seagoing vessels be required to carry EPIRB's operating on 121.5 and 243 MHz.

The Coast Guard took this proposal to the 1960 Safety of Life at Sea (SOLAS) Conference. The conference also recognized the potential benefits of EPIRB's and recommended that governments encourage their use. Since that time the main obstacle to the establishment of requirements, both within the United States and internationally, has been disagreement on operating frequencies.

Several reports of Marine Boards of Investigation have noted the need for EPIRB's. Among these are the SS Marine Sulphur Queen which disappeared with all hands in February 1963; the Daniel J. Morrel which broke in two and sank with only one survivor in November 1966; and most recently the SS Texaco Oklahoma which broke in two and sank with the loss of 31 lives in March 1971. Other cases are on file which support the need for such a device. These cases indicate that many lives probably could have been saved through an early distress alert and prompt rescue of survivors, and that millions of dollars expended on search efforts could have been saved.

The new rules apply to inspected vessels engaged in ocean and coastwise service in the following classifications: Tank vessels, passenger vessels, cargo and miscellaneous vessels, small passenger vessels, and oceanographic vessels. The only exemption to be allowed applies to a coastwise vessel whose Certificate of Inspection is endorsed for a route that does not extend more than 20 miles from a port of safe refuge, but then only if that vessel carries a VHF radiotelephone that meets FCC requirements.

Although the present regulations do not require EPIRB's on uninspected vessels, the FCC regulations permit their use by all U.S. vessels expected to operate in international waters beyond the range of marine VHF distress coverage (i.e., approximately 20 miles). The Coast Guard strongly recommends that operators of such vessels obtain authorization from the FCC and carry EPIRB's.

TITLE 46-SHIPPING

Chapter I—Coast Guard, Department of Transportation

[CGD 73-24R]

EMERGENCY POSITION INDI-CATING RADIOBEACON

Carriage, Operational Testing, and Approval

These amendments require certain inspected vessels in ocean and coast-

May 1974

wise service to carry a Coast Guard approved emergency position indicating radio-beacon (EPIRB) on board as part of their lifesaving equipment. Also, minimum tests are prescribed to ensure that the equipment is operable. These requirements were proposed in the March 5, 1973, Federal Register at pages 5968–5970. The Federal Communications Commission has also proposed requirements for EPIRB's in the same Federal Register at pages 5970–5972.

Comments were received concern-

ing the proposed requirement to test an EPIRB weekly. The commenters said that, because of the reliability of solid state devices, frequent testing would be unnecessary and would shorten battery life. The final rule requires only monthly testing of EPIRB's as recommended by these comments.

Several commenters opposed the proposed requirement that an EPIRB be stowed in a manner so that it would float free if the vessel sank. The commenters said that compliance

with this float free requirement would expose the EPIRB to adverse effects of weather, to theft, and to the possibility of unauthorized activation. One manufacturer has told the Coast Guard that when these regulations become effective he will have EPIRB's available that can withstand adverse effects of weather. Theft and unauthorized activation of an EPIRB are problems that each vessel should he able to solve. The importance of the float free requirement is readily demonstrated by the recent loss of two Norwegian vessels, the Norse Variant and the Anita. Each vessel had a floatable, automatically activated EPIRB. However, Norwegian regulations required stowage of the device inside the wheelhouse. Both vessels sank immediately with only one survivor, and the EPIRB's were not activated. Because of the importance of the float free requirement, it is retained in the final rule.

The EPIRB regulations being issued by the Federal Communications Commission (FCC) incorporate the equipment and marking requirements proposed in §§ 161.011–10 and 161.-011–15 of the Coast Cuard notice of proposed rulemaking. Accordingly, the final rule contained in this document deletes these requirements, and comments directed to the Coast Guard concerning §§ 161.011–10 and 161.011–15 have been forwarded to the FCC for consideration in their rulemaking proceeding for EPIRB's.

Several comments opposed the proposed requirements to carry EPIRB's on small passenger vessels operating in certain coastal waters. The final rule provides that a coastwise vessel which has a Certificate of Inspection endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge is not required to carry an EPIRB if it has a VHF radiotelephone on board that meets the FCC requirements for these radios.

Though EPIRB requirements for public nautical school ships were not proposed, requirements have been included in the final rule. Notice of proposed rulemaking is not required since the public nautical school ships to which the EPIRB requirements will apply are owned by the United States.

Three comments suggested the use of EPIRB's on survival craft. The Coast Guard currently has this suggestion under consideration.

The statement in the notice of proposed rulemaking concerning the authority to require EPIRB's was incomplete and should have read as follows:

Though these regulations will not apply to uninspected commercial vessels, or to vessels that are defined to be boats under the Federal Boat Safety Act of 1971, these vessels when operating beyond the range of marine VHF radio distress coverage are encouraged by the Coast Guard and permitted under FCC's proposed EPIR'B regulations to carry EPIRB's as part of their lifesaving equipment.

The Coast Guard received several comments pertaining to the proposed FCC requirements. These comments have been referred to the FCC.

Several minor revisions involving no substantive changes have been made to the proposed amendments for the purpose of clarity.

In considertion of the foregoing, chapter I of title 46 of the Code of Federal Regulations is amended as follows:

PART 33-LIFESAVING EQUIPMENT

1. By adding subpart 33.60 to part 33 to read as follows:

Subpart 33.60—Emergency position indicating radiobeacon (EPIRB) T/OC

§ 33.60–1 Emergency position indicating radiobeacon (EPIRB) T/OC.

(a) Each vessel in occan and coastwise service must have an approved class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where is it readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel-

 That carries a VHF radiotelephone that complies with the FCC requirements; and

(2) Whose Centificate of Inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

PART 35-OPERATIONS

2. By adding § 35.10–25 to part 35 to read as follows:

§ 35.10–25 Emergency position indicating radiobeacon (EPIRB)—T/OC.

The master shall ensure that-

(a) The EPIRB required in § 33.60-1 of this subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(b) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regulations in 47 CFR part 83 to be marked on the outside of the EPIRB.

§ 35.40-40 [Amended]

3. By amending § 35.40-40(a) of part 35 by adding ", EPIRB," after the words "life preservers."

PART 75—LIFESAVING EQUIPMENT

4. By adding subpart 75.60 to part 75 to read as follows:

Subpart 75.60—Emergency Position Indicating Radiobeacon (EPIRB)

\$ 75.60–1 Emergency position Indicating radiobeacon (EPIRB).

(a) Each vessel in ocean and coastwise service must have an approved class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where it is readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel—

(1) That carries a VHF radiotelephone that complies with the FCC requirements; and

(2) Whose certificate of inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

PART 78-OPERATIONS

5. By adding § 78.17-35 to part 78 to read as follows:

§ 78.17—85 Emergency position indicating radiobeacon (EPIRB).

The master shall ensure that-

(a) The EPIRB required in § 75.60-1 of this subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(b) The EPIRB's battery is replaced after the EPIRB is used and hefore the date required by FCC regulations in 47 CFR, part 83 to be marked on the outside of the EPIRB.

6. By adding § 78.47-72 to part 78 to read as follows:

§ 78.47—72 Emergency position indicating radiobeacon (EPIRB).

The EPIRB required in § 75.60–1 of this subchapter must be marked with the vessel's name.

PART 94—LIFESAVING EQUIPMENT

7. By adding subpart 94.60 to part 94 to read as follows:

Subpart 94.60—Emergency Position Indicating Radiobeacon (EPIRB)

§ 94.60–1 Emergency position indicating radiobeacon (EPIRB).

(a) Each self propelled vessel in ocean and coastwise service must have an approved class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where it is readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel-

(1) That carries a VHF radiotelephone that complies with the FCC requirements; and

(2) Whose certificate of inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

PART 97-OPERATIONS

8. By adding § 97.15-65 to part 97 to read as follows:

§ 97.15–65 Emergency position indicating radiobeacon (EPIRB).

The master shall ensure that-

(a) The EPIRB required in § 94.60-1 of this subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(b) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regulations in 47 CFR, part 83 to be marked on the outside of the EPIRB.

9. By adding § 97.37-55 to part 97 to read as follows:

§ 97.37–55 Emergency position indicating radiobeacon (EPIRB).

The EPIRB required in § 94.60–1 of this subchapter must be marked with the vessel's name.

PART 161—ELECTRICAL EQUIPMENT

10. By adding subpart 161.011 to part 16 to read as follows:

Subpart 161.011—Emergency Position Indicating Radiobeacons

Sec. 161.011-1 Purpose.

161.011-5 Classes.

161.011-10 EPIRB approval. AUTHORITY: R.S. 4488, as amended (46 U.S.C. 481); 49 CFR 1.4(b) (1) (ii) and 1.46(b).

Subpart 161.011—Emergency Position Indicating Radiobeacons

§ 161.011-1 Purpose.

This subpart prescribes approval requirements for emergency position indicating radiobeacons (EPIRB).

§ 161.011-5 Classes.

EPIRB's are classed as follows:

(a) Class A—an EPIRB that has been type approved or type accepted by the FCG as a class A EPIRB. These EPIRB's are capable of floating free of a vessel and activating automatically if the vessel sinks.

§ 161.011-10 EPIRB approval.

(a) An EPIRB that has been type approved or type accepted by the FCC as a class A EPIRB is hereby approved by the Coast Guard to meet the requirements of §§ 33.60-1, 75.60-1, 94.60-1, 167.35-72, 180.40-1, and 192.65-5 of this chapter.

(b) An application for type approval or type acceptance as a class A EPIRB should be submitted to the Federal Communications Commission in accordance with 47 CFR, part 2.

(c) Manufacturers receiving type acceptance or type approval for a class A EPIRB may request listing in USCG Publication CG-190, Equipment Lists, by addressing a request to COMDT (G-MMT-3/83), 400 Seventh Street SW., Washington, D.C. 20590.

PART 167—PUBLIC NAUTICAL SCHOOL SHIPS

11. By adding § 167.35-72 to part 167 to read as follows:

§ 167.35–72 Emergency position indicating radiobeacon (EPIRB).

(a) Each vessel in ocean and coastwise service must have an approved Class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where it is readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel---

(1) That carriers a VHF radiotelephone that complies with the FCC requirements; and (2) Whose Certificate of Inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

§ 167.55-5 [Amended]

12. By amending § 167.55-5(j) (1) of part 167 by adding "EPIRB," after "life preservers".

13. By adding § 167.65-1(c) (3) to part 167 to read as follows:

§ 167.65–1 Station bills, drills, and log book entries.

*

*

* *

(c) * * *

(3) The master shall ensure that—

(i) The EPIRB required in § 167.35-72 is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(ii) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regulations in 47 CFR Part 83 to be marked on the outside of the EPIRB.

PART 180-LIFESAVING EQUIPMENT

14. By adding § 180.05–1(b) (10) to read as follows:

- § 180.05–1 Equipment of an approved type.
 - * *

(b) * * *

(10) Type A EPIRB's____ 161.01115. By adding subpart 180.40 to part 180 to read as follows:

Subpart 180.40—Emergency Position Indicating Radiobeacon (EPIRB)

§ 180.40–1 Emergency position indicating radiobeacon (EPIRB).

(a) Each vessel in ocean and coastwise service must have an approved class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where it is readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel—

(1) That carries a VHF radiotelephone that complies with the FCC requirements; and

(2) Whose certificate of inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

PART 185—OPERATIONS

16. By adding § 185.25–20 to part 185 to read as follows:

§ 185.25–20 Tests of emergency position indicating radiobeacon (EPIRB).

The licensed operator of the vessel shall ensure that—

(a) The EPIRB required in 180.-40-1 of this subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(b) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regulations in 47 CFR, part 83 to be marked on the outside of the EPIRB.

17. By adding § 185.30–30 to part 185 to read as follows:

§ 185.30–30 Emergency position indicating radiobeacon (EPIRB).

The EPIRB required in §180.40-1 of this subchapter must be marked with the vessel's name.

PART 192—LIFESAVING EQUIPMENT

18. By adding subpart 192.60 to part 192 to read as follows:

Subpart 192.65—Emergency Position Indicating Radiobeacon (EPIRB)

§ 192.65–1 Emergency position indicating radiobeacon (EPIRB).

(a) Each vessel in ocean and coastwise service must have an approved Class A emergency position indicating radiobeacon (EPIRB) that is—

(1) Operative;

(2) Stowed where it is readily accessible for testing and use; and

(3) Stowed in a manner so that it will float free if the vessel sinks.

(b) Compliance with this section is not required for a coastwise vessel—

(1) That carries a VHF radiotele-

phone that complies with the FCC requirements; and

2 Whose Certificate of Inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge.

PART 196-OPERATIONS

19. By adding § 196.15-65 to part 196 to read as follows:

§ 196,15-65 Emergency position indicating rodiobeacon (EPIRB).

The master shall ensure that-

(a) The EPIRB required in § 192.-65-1 of this subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and

(b) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regutlations in 47 CFR, Part 83 to be marked on the outside of the EPIRB.

20. By adding § 196.37-49 to part 196 to read as follows:

§ 196.37—49 Emergency position indicating readiablescon (EPIRB).

The EPIRB required in § 192.65-1 of this subchapter must be marked with the vessel's name.

(R.S. 4488, as amended (46 U.S.C. 481); 49 CFR 1.4 b (1) (ii) and 1.46(b))

Effective dete. These amendments become effective on March 1, 1975.

TITLE 47—TELECOMMUNI-CATION

Chapter I—Federal Communications Commission

[Docket No. 19693; FCC 74-228]

PART 2—FREQUENCY ALLOCA-TIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

PART 83—STATIONS ON SHIP-BOARD IN THE MARITIME SERVICES

Permission for Use of Frequencies

(The complete text of these regulations appeared in the Federal Register of March 18, 1974, 39 F.R. page 10140).

MARINE SAFETY COUNCIL MEMBERSHIP

This is the second of a series of articles highlighting the members of the Marine Safety Council. The present Council member of longest standing is Alternate Chairman, Rear Admiral William F. Rea III. Admiral Rea has served on the Marine Safety Council since its formation in 1971. Previously he was chairman of the Council's predecessor, the Merchant Marine Council, dating from July 1970 when he assumed his present post of Chief, Office of Merchant Marine Safety. Prior to that, he had been a member of the Merchant Marine Council while he was at Coast Guard Headquarters as Chief, Merchant Vessel Inspection Division, and then as Deputy Chief, Office of Merchant Marine Safety.

Admiral Rea has had a long and distinguished career as a Coast Guard Officer, with a special concentration in the Merchant Marine Safety field. Born in Philadelphia on October 8, 1918, Admiral Rea graduated from the U.S. Coast Guard Academy with a B.S. Degree and a commission as ensign in 1941. The war emergency had shortened his term as cadet from the usual 4 to 3 years. His first tour of duty was aboard the Coast Guard Cutter North Star as watch officer. He then became navigator aboard the CGC Storis. His other sea duty included positions as executive officer and commanding officer of the destroyer escort Koiner and as commanding officer of the CGC Tamaroa.

Admiral Rea has served as hull inspector at Marine Inspection Offices at Norfolk, Va., and at Port Arthur, Tex., as hull inspector and senior investigating officer at Marine Inspection Office, New Orleans and as Officerin-Charge, Marine Inspection Office, New York. He also spent a year in Merchant Marine Industry training with the Texas Co., Port Arthur, and spent 19 months in Korea, assisting in the organization and training of the Korean Coast Guard.

At Headquarters, in addition to his posts already mentioned, Admiral Rea served for 2 years as Chief, Vessel Inspection and Manning Requirements Branch after which he became Assistant Chief, Merchant Vessel Inspection Division. He also was traveling vessel inspector.

Rear Admiral Rea was appointed to his present rank by nomination of the President, to rank from July 1, 1968.



At that time, he became Commander, 9th Coast Guard District, having operational jurisdiction over Coast Guard activities in the Great Lakes region. For his services in that post he was awarded the Meritorious Service Medal. He has since been awarded the Legion of Merit for his services as Chief, Office of Merchant Marine Safety. He is a member of the Society of Naval Architects and Marine Engineers, the U.S. Naval Institute, and the Propeller Club.

By nomination of the President, Admiral Rea has been appointed Vice Admiral to rank as such from July 1, 1974. He will assume duties as Commander, Atlantic Area and Commander, 3rd Coast Guard District at that time.

COAST GUARD RULEMAKING

(Status as of 1 April 1974)

	Notice of proposed rulemaking	Public hearing	Deadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
1972 PUBLIC HEARING							
Tailshaft inspection and drawing (67-71, 4-71) Portable foam firefighting equipment—tank vessels (CGD 72-138)	3–1–72 3–1–72	3-27-72 3-27-72	4-3-72 4-3-72	×		2-28-74	·····
ANCHORAGE REGULATIONS							
Henderson Harbor, NY (CGD 74-6). San Juan Harbor, P.R. (CGFR 72-12). Wilmington River, Ga. (CGD-259). San Diego Harbor (CGD 72-228). Juan De Fuca, Wash. (CGD 72-233). Milwaukee Harbor, WI (CGD 73-48). Sodus Bay, NY (CGD 73-84). Potts Harbor, ME (CGD 73-124). Puget Sound Area, WA (CGD 73-180). Delaware Bay and R. (CGD 73-190).	$\begin{array}{c} 1-11-74\\ 2-1-72\\ 11-25-71\\ 12-5-72\\ 12-5-72\\ 3-19-73\\ 4-27-73\\ 6-19-73\\ 8-24-73\\ 12-28-73\end{array}$		2-15-74 3-4-72 12-27-71 1-8-73 1-9-73 4-16-73 5-29-73 7-20-73 9-28-73 2-15-73	******		3-29-74	4-30-74
BOATING SAFETY (GENERAL)							
Termination of unique vessels (CGD 73-40)	3-14-73	5-6-73	5-14-73			3-18-74	4-17-74
BRIDGE REGULATIONS							
 Nansemond R., Va. (CGD 72-224). John Day R., Blind Slough, Clatskanie R., Oregon (CGD 72-231). Nanticoke, Del. (CGFR 71-142). Ogden Slip, Chicago, Ill. (CGFR 72-16). Pascagoula R., MS (CGD 73-140). 	11–11–72 11–28–72 11–24–71 2–2–72		12–15–72 1–2–73 12–24–71 3–7–72	× ×××		12-6-73	12-1-73 through
Sacramento R. et. al., CA (CGD 73-142). Westchester Ck., NY (CGD 73-166). Cheesequake Ck., NJ (CGD 73-162). AIWW, Mile 342, Fla.; Drawbridge Operations (CGD 72-190P). Long Island Inland Waterway (CGD 73-23).	7-20-73 8-10-73 8-10-73 9-30-72 2-12-73		8-21-73 9-11-73 9-11-73 11-1-72 3-30-73 5 19 79	*** ***			4-15-74
Shaws Cove, CT (CGD 73-72). Scuppernong R., NC (CGD 73-111). Rahway R., NJ (CGD 73-196). Alabama R., AL (CGD 73-195). Ashepoo R., SC (CGD 73-198). Red River, LA & AR (CGD 73-197). Corte Madera CK, CA (CGD 73-199). Back Bay of Biloxi, MS (CGD 74-37).	4-18-73 corrected 5-1-73 5-29-73 9-11-73 9-11-73 9-11-73 9-11-73		7-3-73 10-16-73 10-16-73 10-16-73 10-16-73 10-16-73	× :××××		3–13–74 	4-15-74
Little Manatee R., FL (CGD 74-41) Grand R., Grand Haven, MI (CGD 74-42)	2-21-74 2-21-74		3–19–74 3–19–74	• • • • •			8–13–74

Coast Guard Rulemaking—Continued

	Notice of proposed rulemaking	Public hearing	Deadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
Genesee R., NY (CGD 73-203). Navigable Waters in LA (CGD 73-214) Stony Ck., MD (CGD 73-242). Lake Washington Ship Canal, WA (CGD73-255) Copper R., NJ (CGD 74-17). AlWW, Hillsboro Inlet, FL (CGD74-22). Chuckatuck Ck., Va. (CGD 74-71). Chesapeake & Del. Canal, Del. (CGD 74-72). Mystic R., Mass. (CGD 74-48). Coosaw R., S.C. (CGD 74-48). Coosaw R., S.C. (CGD 74-58). Tennessee R., Tenn. (CGD 74-61). English Bayou, La. (CGD 74-59). Onancock R., Va. (CGD 74-65). Wicomico R., Md. CDG 74-66).	$\begin{array}{c} 9-13-73\\ 9-27-73\\ 10-12-73\\ 11-13-73\\ 1-23-74\\ 1-25-74\\ 3-29-74\\ 3-29-74\\ 3-29-74\\ 3-11-74\\ 3-11-74\\ \end{array}$		$10-16-73 \\ 10-30-73 \\ 11-20-73 \\ 12-18-73 \\ 2-19-74 \\ 3-1-74 \\ 4-30-74 \\ 4-30-74 \\ 4-30-74 \\ 4-30-74 \\ 4-12-74 \\ 4$	×××××		3-13-74 3-13-74 3-13-74 3-13-74	3–13–74 3–13–74 3–13–74
HAZARDOUS MATERIALS Dichlorobutene, Corrected, F.R. 9-20-72, Hazardous Cargoes (CGD 72-162PH) Certification of Cargo Containers for Transport under Customs Seal (CGD 72-139) Miscellaneous Dangerous Cargoes (CGD 72-182) Marking of radioactive materials packages (CGD 73- 137) Dangerous Cargoes, miscellaneous amendments (CGD 73-173) Dangerous Cargo Regulations, miscellaneous (CGD 73-249) MARINE ENVIRONMENT AND SYSTEMS	8-30-72 11-17-72 11-11-72 8-31-73 9-5-73 1-16-74	10-24-72 12-12-72 9-25-73 9-25-73	10-31-72 12-19-72 12-19-72 10-5-73 10-5-73 3-4-74	× ×× × ×	· · · · · · · · · · · · · · · · · · ·		
(GENERAL) Oil pollution prevention (CGFR 71-160, 161) Marine Sanitation Devices (CGD 73-83) Vessel traffic system, Puget Sound (CGD 73-158) Security Zone, New London CT (CGD 73-182) Captain of the Port Areas and Marine Inspection Zones, Fifth Coast Guard District (CGD 73-31) Authority and procedures for exemption to Bridge-to- Bridge Radiotelephone regulations.	12-24-71 3-1-74 8-6-73 8-23-73 corrected 9-4-73 12-18-73	2-15-72 5-1-74 8-30-73 2-11-74	4-21-72 5-14-74 9-17-73 9-28-73 1-23-74	× × ×	· · · · · · · · · · · · · · · · · · ·	12-21-72 3-6-74 3-8-74	7-1-743
MERCHANT MARINE SAFETY (GENERAL) Compressed Gas Cylinders (CGD 72-115PH) Oceanographic vessels, fire main systems (CGFR 72-20) Water lights, floating electric (CGFR 72-48) Ship's Maneuvering Characteristics Data (CGD 72- 134PH)	8-31-72 2-4-72 3-9-72 8-22-72 Supp. Notice	9-28-72 4-18-72 9-28-72	10-2-72 3-19-72 4-24-72 10-13-72	XXX X			
Unmanned Barges: hull construction (CGD 72-130)	10-31-72	12-19-72	12-29-72	×			

¹ Various effective dates precede that indicated. See Federal Registers of 12-21-72 and 8-24-73.

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Coast	Guard	Rulemaking—Continued

	Notice of proposed rulemaking	Public hearing	Dcadline for comments	Awaiting final action	Withdrawn	Published as rule	Effective date
Construction requirements for tank ships (CGD 72-245).	Adv. Notice 1-26-73 Supp. Notice 7-5-73		3-15-73		******		
Emergency Position Indicating Radio Beacons (CGD 73-24). Firemen's outfits on manned tank barges (CGD 73-11).	3–5–73 4–26–73	4–18–73 On	4			3–18–74 10–3–73	3–1–75 1–3–74
Drv chemical fire extinguisher requirements (CGD 73-73). Great Lakes pilot rules (CGD 73-100). Lifeboat winches for merchant vessels (CGD 73-103) Lifesaving equipment specification (CGD 73-130)	6-8-73 8-1-73 8-21-73 8-28-73 Supp.		7-10-73 9-3-73 9-28-73 9-28-73	 ×		10-3-74 3-29-74 3-27-74	1 –3–74 3–29–74 3–27–74
Inflatable liferafts (CGD 73–160). Lifeboats for merchant vessels (CGD 73–116). Radar observer licensing (CGD 73–238). Pressure vessels (CGD 73–133). Portable tanks (CGD 73–172).	Notice 1-16-74 9-27-73 10-3-73 10-12-73 10-12-73 12-5-73	1–15–74 New	2-16-74 10-31-73 11-2-73 11-30-73 11-16-73 1-21-74	×× ×		3–13–74 	4–12–74 3–7–74
Marine engineering amendments (CGD 73-248) Umnanned Platforms (CGD 73-177)	12-11-73 1-8-74 Corrected	Orleans	1–14–74 2–25–74	××		·····,	•••••••••••
Releases, Lifesaving Equipment, Hydraulic and Manual (CGD 73-153) Light Intensity Standards (CGD 74-7) Miscellancous Deletions to Subchapter C, Uninspected	1-29-74	· · · · · · · · · · · · · · · · · ·	2-25-74	×		1-25-74	7-1-74
Vessels (CGD /4-43). Bulk Dangcrous Cargoes, Inspection of Barges (CGD 73-271). Lifesaving Equipment Specification (CGD 73-246)	3–11–74 3–18–74	4–15–74	4–30–74 5–2–74	****	••••••	3-7-74	3-7-74

Note: This table which will be continued in future issues of the Proceedings is designed to provide the maritime public with better 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 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of Transportation

[CGD-73-31R]

PART 3—COAST GUARD AREAS, DISTRICTS, MARINE INSPECTION ZONES, AND CAPTAIN OF THE PORT AREAS

Fifth Coast Guard District

These amendments revise the descriptions of the three captain of the port areas and the three marine inspection zones of the Fifth Coast Guard District.

In § 3.25-10 the Portsmouth Marine Inspection Zone is renamed to be the Hampton Roads Marine Inspection Zone; and its office location is changed from Portsmouth to Norfolk, Va. The boundaries of the marine inspection zones described in \$\$ 3.25-10(b) and 3.25-20(b) are revised to clarify the location of their intersection with the North Carolina seacoast by describing the location in terms of geographic coordinates.

The Hampton Roads Area Captain of the Port is renamed to be the Hampton Roads Captain of the Port. The boundaries of the three captain of the port areas are revised to make them coincide with the boundaries of the marine inspection zones in which the captain of the port offices are located. Thus, these revisions substantially enlarge the captain of the port areas which at present comprise only the cities in which their offices are located and the area in the immediate vicinity of these cities. The descriptions of the three captain of the port areas, as amended in this document, are transferred to §§ 3.25-10, 3.25-15, and 3.25-20. Accordingly, §§ 3.25-55, 3.25-60, and 3.25-65, which contain the present descriptions of these areas, are deleted.

Since these amendments are matters relating to agency organization, they are exempt from the notice of proposed rulemaking requirements in 5 U.S.C. 553(b).

In accordance with the foregoing, part 3 of chapter I of title 33 of the Code of Federal Regulations is amended as follows:

1. Section 3.25-10 is revised to read as follows:

\$ 3.25–10 Hampton Roads Marine Inspection Zone and Captain of the Port.

(a) The Hampton Roads Marine Inspection Office and the Hampton Roads Captain of the Port Office are located in Norfolk, Va.

(b) The boundary of the Hampton Roads Marine Inspection Zone, and of the Hampton Roads Captain of the Port Area, starts at the intersection of the Virginia-Maryland boundary and the coastline and follows the Virginia-Maryland boundary to a point 37°57.2' N. latitude, 76°03' W. longitude on Chesapeake Bay; thence to a point 37°56.5' N. latitude, 76°10.5' W. longitude; thence to a point 37°55' N. latitude, 76°16.8' W. longitude; thence to a point 37°55' N. latitude, 76°-28.2' W. longitude; thence to a point 38°19.5' N. latitude, 77°25.2' W. longitude; thence to a point 39°06' N. latitude, 78°30' W. longitude on the Virginia-West Virginia boundary; thence southerly along the Virginia-West Virginia boundary to the Tennessee boundary; thence eastward along the Virginia-Tennessee boundary to the Virginia-North Carolina boundary; thence eastward along the Virginia-North Carolina boundary to Kerr (Buggs Island) Lake; thence along the shoreline of Kerr Lake in North Carolina back to the Virginia-North Carolina boundary; thence eastward along the Virginia-North Carolina boundary to the west bank of the Chowan River; thence southerly along the west bank of the Chowan River to a point 36°00' N. latitude, 76°41' W. longitude; thence generally southerly and easterly along the border of Washington, Beaufort, and Hyde Counties to a point 35°37' N. latitude, 76°32' W. longitude; thence easterly to a point 35°37' N. latitude, 76°00.5' W. longitude: thence generally southwesterly to a point 35°01.5' N, latitude, 76°20' W. longitude; thence easterly to a point 35°01.5' N. latitude, 76°10' W. longitude; thence southeasterly to the sea at 34°59.8' N. latitude, 76°07.8' W. longitude.

2. Section 3.25-15 is revised to read as follows:

§ 3.25–15 Baltimore Marine Inspection Zone and Captain of the Port.

(a) The Baltimore Marine Inspection Office and the Baltimore Captain of the Port Office are located in Baltimore, Md.

(b) The boundary of the Baltimore Marine Inspection Zone, and of the Baltimore Captain of the Port Area, starts at the intersection of the Delaware-Maryland boundary and the coastline and follows the Delaware-Maryland boundary west and north to the Pennsylvania boundary but includes the Chesapeake and Delaware Canal and the reaches of the Nanticoke River; thence due west along the Pennsylvania-Maryland boundary to the West Virginia boundary; thence south and eastward along the Maryland-West Virginia boundary to the Virginia boundary; thence southwestward along the Virginia-West Virginia boundary to a point 39°06' N. latitude, 78°30' W. longitude; thence to a point 38°19.5' N. latitude, $77^{\circ}25.2'$ W. longitude; thence to a point $37^{\circ}55'$ N. latitude, $76^{\circ}28.2$ W. longitude; thence to a point $37^{\circ}55'$ N. latitude, $76^{\circ}16.8'$ W. longitude; thence to a point $37^{\circ}56.5'$ N. latitude, $76^{\circ}10.5'$ W. longitude; thence to a point $37^{\circ}57.2'$ N. latitude, $76^{\circ}03'$ W. longitude on Chesapeake Bay; thence along the Maryland-Virginia boundary to the sea.

3. Section 3.25-20 is revised to read as follows:

§ 3.25–20 Wilmington Marine Inspection Zone and Captain of the Port.

(a) The Wilmington Marine Inspection Office and the Wilmington Captain of the Port Office are located in Wilmington, N.C.

(b) The boundary of the Wilmington Marine Inspection Zone, and of the Wilmington Captain of the Port Area, starts at the sea at 34°59.8' N. latitude, 76°07.08' W. longitude, and follows a line northwesterly to a point 35°01.5' N. latitude, 76°10' W. longitude; thence westerly to a point 35°01.5' N. latitude, 76°20' W. longitude; thence northeasterly to a point 35°37' N. latitude, 76°00.5' W. longitude; thence westerly to a point 35°37' N. latitude, 76°32' W. longitude; thence north and westerly along the border of Hyde, Beaufort, and Washington Counties to a point 36°00' N. latitude, 76°41' W. longitude; thence northerly along the west bank of the Chowan River to the North Carolina-Virginia boundary; thence westerly along the North Carolina-Virginia boundary to Kerr (Buggs Island) Lake; thence along the shoreline of Kerr Lake in North Carolina to the North Carolina-Virginia boundary; thence westerly along the North Carolina-Virginia boundary to the Tennessee boundary; thence southwesterly along the North Carolina-Tennessee boundary to the Georgia boundary; thence easterly along the North Carolina-Georgia boundary to the South Carolina boundary; thence easterly along the South Carolina-Georgia boundary to the sea.

\$\$ 3.25-55, 3.25-60, 3.25-65 [Deleted]

4. Sections 3.25–55, 3.25–60, and 3.25–65 are deleted.

(5 U.S.C. 552; 14 U.S.C. 633; Sec. 6, Pub. Law 89-670, 80 Stat. 937 (49 U.S.C. 1655(b)); 35 FR 4958-59, 49 CFR 1.45 and 1.46)

Effective date: March 6, 1974. (Federal Register of Mar. 6, 1974.)

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of Transportation [CGD 73–100R]

PILOT RULES FOR THE GREAT LAKES AND INLAND WATERS

Lights and Day Signals; Passing a Floating Plant; Pilat Vessels

These amendments to the Pilot Rules for the Great Lakes add regulations for-

a. Lights and day signals for vessels, dredges, and vessels working on wrecks and obstructions, etc.;

b. Passing a floating plant working in a navigable channel; and

c. Lights for Great Lakes pilot vessels.

These regulations are identical to the regulations in part 201 of title 33 which are administered by the U.S. Army Corps of Engineers. The Corps of Engineers has revoked part 201 in the Federal Register of May 16, 1973 (38 FR 12804). The effective date of that revocation is the effective date of the regulations published in this document.

Though part 201 applies to both the Great Lakes and Western Rivers, the regulations in this document apply only to the Great Lakes. Sections 95.52 through 95.66 of the Pilot Rules for Western Rivers already contain regulations similar to those in part 201.

These amendments are based on a notice of proposed rulemaking published in the Wednesday, August 1, 1973, issue of the Federal Register (38 FR 20467). Interested parties were invited to comment on the proposal. No comments in response to the notice of proposed rulemaking were received. Accordingly, the proposed amendments are adopted in this document without substantive change.

The proposed regulations were numbered in the notice of proposed rulemaking as §§ 90.31 through 90.46. In this document they have been renumbered as §§ 90.22 through 90.37 to provide organization that is consistent with the organization of the Pilot Rules in part 80 and part 95 of title 33. To accomplish the renumbering of these regulations, the present §§ 90.22 through 90.30 in part 90 are renumbered as §§ 90.38 through 90.46.

This document also deletes the footnotes in title 33 that immediately precede § 80.18 of part 80 and § 95.-51 of part 95. These footnotes explained that some of the Pilot Rules for the Great Lakes were contained in part 201. Notice and public procedure on these amendments to part 80 and part 95 are unnecessary because the amendments are clerical in nature and do not amend any regulations.

In accordance with the foregoing, chapter I of title 33 of the Code of Federal Regulations is amended as follows:

PART 80—PILOT RULES FOR INLAND WATERS

1. The note immediately preceding § 80.18 and following the centerhead after § 80.17 entitled "Lights And Day Signals For Vessels, Dredges of All Types, And Vessels Working on Wrecks and Obstructions, Etc." is deleted.

(Sec. 1, Pub. L. 85-656, 72 Stat. 612 (33 U.S.C. 157); Sec. 6, Pub. L. 89-670, 80 Stat. 937 (49 U.S.C. 1655(b)(1)); 49 CFR 1.46(b))

PART 90-PILOT RULES FOR THE GREAT LAKES

2. Sections 90.22 through 90.30 grouped under the centerhead entitled Miscellaneous are redesignated as §§ 90.38 through 90.46 and grouped under the same centerhead.

3. New §§ 90.22 through 90.37 to be grouped under the centerhead entitled "Lights and Day Signals for Vessels, Dredges, and Vessels Working on Wrecks and Obstructions, Etc." are added to read as follows:

LIGHTS AND DAY SIGNALS FOR VESSELS, DREDGES, AND VESSELS WORKING ON WRECES AND OBSTRUCTIONS, ETC.

Sec.

- 90.22 Signals to be displayed by a towing vessel when towing a submerged or partly submerged object upon a hawser when no signals can be displayed upon the object which is towed.
- 90.23 Steam vessels, derrick hoats, lighters, or other types of vessels made fast alongside a wreck, or moored over a wreck which is on the bottom or partly submerged, or which may be drifting.
- 90.24 Dredges held in stationary position by moorings or spuds.
- 90.25 Self-propelling suction dredges under way and engaged in dredging operations.
- 90.26 Vessels moored or anchored and engaged in laying cables or pipe, submarine construction, excavation, mat sinking, bank grading, dike construction, revetment, or other bank protection operations.
- 90.37 Lights to be displayed on pipelines.
- 90.28 Lights generally.
- 90.29 Vessels moored or at anchor.
- PASSING FLOATING PLANT WORKING IN NAVIGABLE CHANNELS
- 90.30 Passing signals.
- 90.31 Speed of vessels passing floating plant working in channels.
- 90.32 Light-draft vessels passing floating plant.
- 90.33 Aids to navigation marking floating-plant moorings.
- 90.34 Obstruction of channel by floating plant.
- 90.35 Clearing of channels.
- 90.36 Protection of marks placed for the guidance of floating plant.
- 90.37 Lights for Great Lakes pilot vessels.

AUTHORITY: Sec. 3, 28 Stat. 649, as amended (33 U.S.C. 243); Sec. 6(b) (1), Pub. L. 89-670, 80 Stat. 937 (49 U.S.C. 1655(b) (1)); 40 CFR 1.46(b), unless otherwise noted.

LIGHTS AND DAY SIGNALS FOR VESSELS, DREDGES, AND VESSELS WORKING ON WRECKS AND OBSTRUCTIONS, ETC.

§ 90.22 Signals to be displayed by a towing vessel when towing a submerged or partly submerged object upon a hawser when no signals can be displayed upon the object which is towed.

(a) The vessel having the submerged object in tow shall display by day, where they can best be seen, two shapes, one above the other, not less than 6 feet apart, the lower shape to be carried not less than 10 feet above the deck house. The shapes shall be in the form of a double frustrum of a cone, base to base, not less than 2 feet in diameter at the center nor less than 8 inches at the ends of the cones, and to be not less than 4 feet lengthwise from end to end, the upper shape to be painted in alternate horizontal stripes of black and white, 8 inches in width, and the lower shape to be painted a solid bright red.

(b) By night the towing vessel shall display the regular side lights, but in lieu of the regular white towing lights shall display four lights in a vertical position not less than 3 feet nor more than 6 feet apart, the upper and lower of such lights to be white, and the two middle lights to be red, all of such lights to be of the same character as the regular towing lights.

§ 90.23 Steam vessels, derrick boats, lighters, or other types of vessels made fast alongside a wreck, or moored over a wreck which is on the bottom or partly submerged, or which may be drifting.

(a) Steam vessels, derrick boats, lighters, or other types of vessels made fast alongside a wreck, or moored over a wreck which is on the bottom or partly submerged, or which may be drifting, shall display by day two shapes of the same character and dimensions and displayed in the same manner as required by § 90.22(a), except that both shapes shall be painted a solid bright red, but where more than one vessel is working under the above conditions, the shapes need be displayed only from one vessel on

each side of the wreck from which they can best be seen from all directions.

(b) By night this situation shall be indicated by the display of a white light from the bow and stern of each outside vessel or lighter not less than 6 feet above the deck, and in addition thereto there shall be displayed in a position where they can best be seen from all directions two red lights carried in a vertical line not less than 3 feet nor more than 6 feet apart, and not less than 15 feet above the deck.

§ 90.24 Dredges held in stationary position by moorings or spuds.

(a) Dredges which are held in stationary position by moorings or spuds shall display by day two red balls not less than 2 feet in diameter and carried in a vertical line not less than 3 feet nor more than 6 feet apart, and at least 15 feet above the deck house and in a position where they can best be seen from all directions.

(b) By night they shall display a white light at each corner, not less than 6 feet above the deck, and in addition thereto there shall be displayed in a position where they can best be seen from all directions two red lights carried in a vertical line not less than 3 feet nor more than 6 feet apart, and not less than 15 feet above the deck. When scows are moored alongside a dredge in the foregoing situation they shall display a white light on each outboard corner, not less than 6 feet above the deck.

§ 90.25 Self-propelling section dredges under way and engaged in dredging operations.

(a) Self-propelling suction dredges under way and engaged in dredging operations shall display by day two black balls not less than 2 feet in diameter and carried in a vertical line not less than 15 feet above the deck house, and where they can best be seen from all directions. The term "dredging operations" shall include maneuvering into or out of position at the dredging site, but shall not include proceeding to and from the site.

(b) By night they shall carry, in addition to the regular running lights, two red lights of the same character as the white masthead light and in a vertical line beneath that light, the red lights to be not less than 3 feet nor more than 6 feet apart and the upper red light to be not less than 4 feet nor more than 6 feet below the masthead light, and on or near the stern two red lights in a vertical line not less than 4 feet nor more than 6 feet apart, to show through four points of the compass; that is, from right astern to two points on each quarter.

§ 90,26 Vessels moored or anchored and engaged in laying cables or pipe, submarine construction, excavation, mat sinking, bank grading, dike construction, revetment, or other bank protection operations.

(a) Vessels which are moored or anchored and engaged in laying cahles or pipe, submarine construction, excavation, mat sinking, bank grading, dike construction, revetment, or other bank protection operations, shall display by day, not less than 15 feet above the deck, where they can best be seen from all directions, two balls not less than 2 feet in diameter, in a vertical line not less than 3 feet nor more than 6 feet apart, the upper ball to be painted in alternate black and white vertical stripes 6 inches wide, and the lower ball to be painted a solid bright red.

(b) By night they shall display three red lights, carried in a vertical line not less than 3 feet nor more than 6 feet apart, in a position where they can best be seen from all directions, with the lowermost light not less than 15 feet above the deck.

(c) Where a stringout of mnored vessels or barges is engaged in the operations, three red lights carried as prescribed in paragraph (b) of this section shall be displayed at the channelward end of the stringout. Where the stringout crosses the navigable channel and is to be opened for the passage of vessels, the three red lights shall be displayed at each side of the opening instead of at the outer end of the stringout. There shall also be displayed upon such stringout one horizontal row of amber lights not less than 6 feet above the deck, or above the deck house where the craft carries a deck house, in a position where they can best be seen from all directions, spaced not more than 50 feet apart so as to mark distinctly the entire length and course of the stringout.

§ 90.27 Lights to be displayed on pipe lines.

Pipe lines attached to dredges, and either floating or supported on trestles, shall display by night one row of amber lights not less than 8 feet nor more than 12 feet above the water, about equally spaced and in such number as to mark distinctly the entire length and course of the line, the intervals between lights where the line crosses navigable channels to be not more than 30 feet. There shall also be displayed on the shore or discharge end of the line two red lights, 3 feet apart, in a vertical line with the lower light at least 8 feet above the water, and if the line is to be opened at night for the passage of vessels, a similar arrangement of lights shall be displayed on each side of the opening.

§ 90.28 Lights generally.

(a) All the lights required by §§ 90.22 to 90.27, except as provided in §§ 90.22(b) and 90.25(b), shall be of such character as to be visible on a dark night with a clear atmosphere for a distance of at least 2 miles.

(b) The lights required by § 90.22(b) to be of the same character as the regular towing lights, and the lights required by § 90.25(b) to be of the same character as the masthead light, shall be of such character as to be visible on a dark night with a clear atmosphere for a distance of at least 5 miles.

(c) All floodlights or headlights which may interfere with the proper navigation of an approaching vessel shall be so shielded that the lights will not blind the pilot of such vessel.

§ 90.29 Vessels moored or at anchor.

Vessels of more than 65 feet in length when moored or anchored in a fairway or channel shall display between sunrise and sunset on the forward part of the vessel where it can best be seen from other vessels one black ball not less than two feet in diameter.

PASSING FLOATING PLANT WORKING IN NAVIGABLE CHANNELS

§ 90.30 Passing signals.

(a) Vessels intending to pass dredges or other types of floating plant working in navigable channels, when within a reasonable distance therefrom and not in any case over a mile, shall indicate such intention by one long blast of the whistle, and shall be directed to the proper side for passage by the sounding, by the dredge or other floating plant, of the signal prescribed in the local pilot rules for vessels under way and approaching each other from opposite directions, which shall be answered in the usual manner by the approaching vessel. If the channel is not clear, the floating plant shall sound the alarm or danger signal and the approaching vessel shall slow down or stop and await further signal from the plant.

(b) When the pipeline from a dredge crosses the channel in such a way that an approaching vessel cannot pass safely around the pipeline or dredge, there shall be sounded immediately from the dredge the alarm or danger signal and the approaching vessel shall slow down or stop and await further signal from the dredge. The pipe line shall then be opened and the channel cleared as soon as practicable; when the channel is clear for passage the dredge shall so indicate by sounding the usual passing signal as prescribed in paragraph (a) of this section. The approaching vessel shall answer with a corresponding signal and pass promptly.

(c) When any pipeline or swinging dredge shall have given an approaching vessel or tow the signal that the channel is clear, the dredge shall straighten out within the cut for the passage of the vessel or tow.

Note. The term "floating plant" as used in §§ 90.30 to 90.36, includes dredges, dertick boats, snag boats, drill boats, pile drivers, maneuver boats, hydraulic graders, survey boats, working barges, and mat sinking plant.

§ 90.31 Speed of vessels passing floating plant working in channels.

Vessels, with or without tows, passing floating plant working in channels, shall reduce their speed sufficiently to insure the safety of both the plant and themselves, and when passing within 200 feet of the plant their speed shall not exceed 5 miles per hour. While passing over lines of the plant, propelling machinery shall be stopped.

§ 90.32 Light-draft-vessels passing floating plant.

Vessels whose draft permits shall keep outside the buoys marking the ends of mooring lines of floating plant working in channels.

§ 90.33 Aids to navigation marking floating-plant moorings.

Breast, stern, and bow anchors of floating plant working in navigable channels shall be marked by barrel or other suitable buoys. By night approaching vessels shall be shown the location of adjacent buoys by throwing a suitable beam of light from the plant on the buoys until the approaching vessel has passed, or the buoys may be lighted by red lights, visible in all directions, of the same character as specified in § 90.28(a).

§ 90.34 Obstruction of channel by floating plant.

Channels shall not be obstructed unnecessarily by any dredging or other floating plant. While vessels are passing such plant all lines running therefrom across the channel on the passing side which may interfere with or obstruct navigation shall be slacked to the bottom of the channel.

§ 90.35 Clearing of channels.

When special or temporary regulations have not been prescribed and action under the regulations contained in §§ 90.30 to 90.34 will not afford clear passage, floating plant in narrow channels shall, upon notice, move out of the way of vessels a sufficient distance to allow them a clear passage. Vessels desiring passage shall, however, give the master of the floating plant ample notice in advance of the time they expect to pass.

NOTE.—If it is necessary to prohibit or limit the anchorage or movement of vessels within certain areas in order to facilitate the work of improvement, application should be made through official channels for establishment by the Secretary of the Army of special or temporary regulations for this purpose.

§ 90.36 Protection of marks placed for the guidance of floating plant.

Vessels shall not run over anchor buoys, or buoys, stakes, or other marks placed for the guidance of floating plant working in channels; and shall not anchor on the ranges of buoys, stakes, or other marks placed for the guidance of such plant.

§ 90.37 Lights for Great Lakes pilot vessels.

(a) A power driven pilot vessel when engaged on pilotage duty and under way:

(1) Shall carry a white light at the masthead at a height of not less than 20 feet above the hull, visible all round the horizon at a distance of at least 3 miles and at a distance of 8 feet below it a red light similar in construction and character. If such a vessel is of less than 65 feet in length the vessel may carry the white light at a height of not less than 9 feet above the gunwale and the red light at a distance of 4 feet below the white light.

(2) Shall carry the sidelights prescribed by Great Lakes Rule 3 (33 U.S.C. 252) or by the Act of April 25, 1940 (46 U.S.C. 526b), as appropriate, and a white light at the stern showing an unbroken light over an arc of the horizon of 135° , so fixed as to show the light $67\frac{1}{2}^\circ$ from right aft on each side of the vessel, and of such a character as to be visible at a distance of at least 2 miles.

(3) Shall show one or more

flareup lights at intervals not exceeding 10 minutes. An intermittent white light visible all round the horizon may be used in lieu of flareup lights.

(b) A sailing pilot vessel when engaged on pilotage duty and underway:

(1) Shall carry a white light at the masthead visible all round the horizon at a distance of at least 3 miles.

(2) Shall be provided with the sidelights prescribed in paragraph (a)(2) of this section or the portable lanterns prescribed by Great Lakes Rule 8 (33 U.S.C. 257), as appropriate, and shall, on the near approach of or to other vessels, have such lights ready for use, and shall show them at short intervals to indicate the direction in which the pilot vessel is heading, but the green light shall not be shown on the port side nor the red light on the starboard side. The vessel shall also carry the stern light prescribed in paragraph (a) (2) of this section.

(3) Shall show one or more flareup lights at intervals not exceeding 10 minutes.

(c) A pilot vessel when engaged on pilotage duty and not under way shall carry the lights and show the flares prescribed in paragraph (a) (1) and (3) or (b) (1) and (3) of this section, as appropriate, and if at anchor shall also carry the anchor lights prescribed in Great Lakes Rule 9 (33 U.S.C. 253).

(d) A pilot vessel when not engaged on pilotage duty shall show the lights or shapes for a similar vessel of the same length.

PART 95—PILOT RULES FOR WESTERN RIVERS

4. The Note immediately preceding § 95.51 and following the centerhead after § 95.45 entitled "Lights and Day Signals for Vessels, Dredges of All Types, and Vessels Working on Wrecks and Obstructions, Etc." is deleted.

Effective date. March 29, 1974. (Federal Register of Mar. 29, 1974.)

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of Transportation

SUBCHAPTER C-UNINSPECTED VESSELS

[CGD 74-43]

PART 26-OPERATIONS

Miscellaneous Amendments

The purpose of this amendment to the Coast Guard regulations governing the operation of uninspected vessels is to delete a number of inaccurate and unnecessary sections which prescribe certain prohibited acts and the penaltics under the Motorboat Act, 46 U.S.C. 526-526u (Motorboat Act). Sections 5261 and 526m of that act have been repealed by the Federal Boat Safety Act of 1971, 46 U.S.C. 1451 et. seq. (FBSA '71) and replaced by sections 1461, 1483, and 1484 of the FBSA '71.

Sections 26.03–1 and 26.05–5 of 46 CFR repeat the provisions of the now repealed sections of the Motorboat Act and are therefore deleted.

Section 26.05–1 of 46 CFR simply repeats the provisions of section 526(o) of the Motorboat Act and is deleted as unnecessary.

§§ 26.03-1, 26.05-1, 26.05-5 [Deleted]

In consideration of the foregoing 46 CFR part 26 is amended by deleting § 26.03-1 and subpart 26.05 consisting of §§ 26.05-1 and 26.05-5.

Effective date. This amendment becomes effective March 7, 1974.

(Federal Register of Mar. 7, 1974.)

TITLE 46-SHIPPING

Chapter I—Coast Guard, Department of Transportation SUBCHAPTER F—MARINE ENGINEERING

[CGD 73-133R]

PART 54—PRESSURE VESSEL Allowable Stress Values

On October 12, 1973, a notice of proposed amendments to Coast Guard regulations for allowable stress values for certain pressure vessels was published in the Federal Register (38. FR 28300).

Nobody requested a hearing, and there was only one comment. The comment was in favor of the amendments, as proposed.

Accordingly, the proposed regulations are hereby adopted without any changes, as set forth below.

Effective date. These amendments are effective March 7, 1974.

(Federal Register of Mar. 8, 1974.)

1. By revising § 54.25-10(c) to read as follows:

§ 54.25–10 Low temperature operation ferritic steels (replaces UCS-65 through UCS-67).

(c) Design. Pressure vessels must meet the requirements for class I-L and II-L construction. (See table 54.01–5(b) for applicable requirements.) Except as permitted by § 54.05–30, the allowable stress values used in the design of low temperature pressure vessels may not exceed those given in table UCS-23 of the ASME

Code for temperatures of 0° F. to 650° F. For materials not listed in this table allowable stress values are determined in accordance with appendix P of section VIII of the ASME Code

2. By revising $\S54.25-15(c)$ to read as follows:

§ 54.25–15 Low temperature operationhigh alloy steels (modifies UHA-23(b) and UHA-51). *

*

(c) Except as permitted by § 54.05-30, the allowable stress values used in the design of low temperature pressure vessels may not exceed those given in table UHA-23 of the ASME Code for temperatures of -20° F. to 100° F.

3. By revising $\S54.25-20(e)$ to read as follows:

§ 54.25–20 Low temperature operationferritic steels with properties enhanced by heat treatment (modifies UHT-5(e), UHT-6, UHT-23, and UHT-82). -#

(e) Except as permitted by § 54.05-30, the allowable stress values may not exceed those given in table

UHT-23 of the ASME Code for temperatures of 150° F. and below.

4. By adding a new § 54.05-30 as follows:

§ 54.05–30 Allowable stress values at low temperatures.

(a) The Coast Guard will give consideration to the enhanced yield and tensile strength properties of ferrous and nonferrous materials at low temperature for the purpose of establishing allowable stress values for service temperature below 0° F.

(b) The use of such allowable stress values must be specially approved by the Coast Guard for each application. Further information may be obtained by writing to the Coast Guard (G-MMT).

(c) Submittals must include information and calculations specified by the Coast Guard (G-MMT) to demonstrate that the allowable stress for the material cannot be exceeded under any possible combination of vessel loads and metal temperature.

(40 USC 375, 392, 406, 407, 416; 49 USC 1655(b); 49 CFR 1.4(b) and 1.46(b).)

Correction to Rules of the Road Article

A typographical error appeared in the final installment (printed in our February 1974 issue) of the article entitled, "Modernization of the International Rules of the Road." Our apologies to the authors and to our readers who may have been misled by the error.

The entire article placed a great deal of emphasis on the new rule 17, which the authors believe to be most significant. On page 45, in the last sentence of paragraph 4 of the "Summary of Important Changes," the word not was mistakenly inserted, in effect reversing the in-

tended meaning. The correct reading of the paragraph is reprinted below.

4. Perhaps the single most significant rule change (rule 17) is that of allowing the stand-on vessel to break off early. It is very difficult to predict the impact of this rule change. However, it is fair to say that a great many more stand-on vessels will break off early under this rule than under the existing rules. That alone could significantly reduce collisions; it also might cause a few. Under this new rule we believe the courts will hold the stand-on vessel responsible for breaking off early, only when it can be shown that the burdened vessel was in fact taking action to avert collision.

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.¹ 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

- Specimen Examination for Merchant Marine Deck Officers (7-1-63). 101
- 101-1 Specimen Examinations for Merchant Marine Deck Officers (2d and 3d mate) (10-1-73).
- Rules and Regulations for Military Explosives and Hazardous Munitions (4-1-72). F.R. 7-21-72, 12-1-72. 108
- Marine Engineering Regulations (6-1-73) F.R. 6-29-73, 3-8-74. 115
- 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. 123
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The following have been modified by Federal Registers:

CG-123, 256, 257 & 323, Federal Register of March 18, 1974.

CG-190, Federal Register of March 25, 1974.

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CG-239, Federal Register of March 6, 1974.

CG-258, Federal Register of March 7, 1974.

CG-115, Federal Register of March 8, 1974.

¹Due 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.





SECOND BI-ANNUAL

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