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Commandant of the Coast Guard

CONTENTS

The Cover: **Coast Guard inspectors holding lifeboat drill on foreign liner as transport.**

Activities of the Merchant Marine Council

THE Merchant Marine Council has approved the issuance of a revised edition of Subchapter J, General Rules and Regulations for Vessel Inspection, Rivers. This revised edition embodies all amendments to Subchapter J published in the Federal Register through April 30, 1944. The provisions of Part 115 dealing with licensing of officers is omitted in accordance with the Council policy to delete all merchant marine personnel matters from general rules and regulations for incorporation in a revised edition of Subchapter K, Seamen, presently being prepared. Part 115 has been reheaded "Special Operating Requirements." Otherwise, no substantive changes in the regulations are made in this revision. Notice will be given when copies of this publication may be obtained.

The effective date of the amendment of Section 312.16, Pilot Rules for Inland Waters, specifying the lights to be carried by barges, scows, and canal boats in tow has been postponed until January 1, 1945. The Columbia River operators at a hearing held in Portland, Oregon, and the Gulf Towboat Association, New Orleans, requested the postponement in order to obtain the necessary equipment required by this amendment and to indoctrinate personnel.

Upon the basis of a report of the Naval Medical Research Institute the Council approved an amendment to Section 153.14a, Subchapter O, permitting the use of light mineral oil (liquid petrolatum U. S. P.) as an oil cleansing solution required to be carried in the abandon-ship kit. Detergents previously approved as oil cleansing solutions remain in effect. Any other detergents desired to be used as an oil cleansing solution may be used only after receiving specific approval by the Commandant, U. S. Coast Guard.

Consideration was given by the Council of the comments of panel members upon the proposed amendment to Subchapter O pertaining to Emergency Escape Panels. The chairman submitted the proposed regulations to a technical committee for revision embodying those recommended changes approved by the Council.

The Council approved the issuance of a Marine Inspection Memorandum rescinding approximately 3,000 circular letters, memoranda, and other directives concerning merchant marine inspection matters which were found to be obsolete. This is the first result of the program initiated by the Council in August 1943, to simplify the directives and circulars issued to the field by Headquarters.

The issuance of four general waivers was approved by the Council, and the issuance of Marine Inspection Memorandums 69 and 70 was approved. These memorandums waive compliance with Section 153.4, Subchapter O, Regulations During Emergency, on

design EC2–S–C1, cargo vessels, and design VC2–S–AP2–AP3, Victory ships, respectively, to the extent that whenever the number of persons employed on one of the subject vessels by the operator, plus the armed guard, exceeds 80 persons, which is the total capacity of four life rafts carried on skids, additional persons may be employed by the operator and additional members may be carried in the armed guard, provided an extra, fully equipped improved raft is carried. This additional raft need not be installed on a skid, but must be carried so that it will be readily accessible and have the best chance of floating off in case the vessel sinks. In every case the number of persons employed on board by the operator, plus the armed guard, shall not exceed the total capacity of the life rafts. A waiver of compliance with the requirements of any navigation and vessel inspection law or regulation issued thereunder applicable to Ocean and Coastwise vessels and administered by the U. S. Coast Guard requiring the posting of forms, notices, and other documents under glass was also approved.

Vessels on the Great Lakes engaged in business connected with the conduct of the war were issued a waiver of compliance with navigation and vessel inspection laws and regulations requiring the carrying as members of the crew of such vessels certificated seamen rated as qualified members of the engine department, or forbidding service in the engine department of such vessels without a certificate of service as a qualified member of the engine department. Council approval of this waiver was granted upon the advice of the Acting Director of the Office of Defense Transportation that the critical manpower situation existing in Great Lakes transportation through reclassification by the Selective Service System of men of the ages of 22 to 26 necessitated a relaxation of the requirements of law and regulation with respect to qualified members of the engine department on Great Lakes vessels. The Great Lake Carriers Association requested the age limit requirement for issuance of A. B. certificates to seamen on the Great Lakes be lowered from 18 to 17 years of age. The Council tabled action upon this request until additional facts were presented showing the necessity for this action.

The chairman appointed various Council committees to investigate and report to the Council upon recommendations submitted to the Council for consideration. Captain J. A. Hirshfield, Captain R. T. Merrill and Commander R. A. Smyth were appointed to examine the efficiency of magnetic compasses presently required to be carried on lifeboats, and upon the basis of their findings to recommend action to be taken. Captain J. A. Hirshfield was designated by the chairman to study the problem of the use by look-outs on merchant vessels of electrically heated suits. The chairman appointed a committee from the Council to observe comparative lifeboat tests of the R. S. Chapin, experimental lifeboat, conducted at New London, Connecticut.

Routine action was taken with respect to items of equipment submitted for approval by the Commandant which had satisfactorily met the requisite inspections and tests. Specifications covering firing attachments for Lyle-type line-throwing guns and signalling mirrors were given Council approval. Copies of these specifications may be obtained from the Commandant, U. S. Coast Guard, Washington 25, D. C. The council rejected a recommendation that the regulations be amended to require the carrying of desalting kits on lifeboats and life rafts, as the quantity of fresh water now carried has proven to be adequate. However, the Council found a desalting kit suitable for merchant marine use.

The Chairman announced the appointment of the Hon. Harold H. Burton, Senator from Ohio, to take the place of the late Senator McNary as a representative of the Senate Committee on Commerce to participate in the activities of the Council in which the Committee on Commerce has an interest.

SWINGING BOMBS ABOARD

Loading 1,000-pound bombs under Coast Guard supervision. In the foreground is a Coast Guard fireboat.

Commandant Attends Safety Council Meeting

ON MARCH 29th, Vice Admiral R. R. Waesche, Commandant of the Coast Guard, attended the Fifteenth Annual Meeting of the Greater New York Safety Council, in New York. He presided at the Maritime Safety Session and spoke briefly to it on the safety work of the Coast Guard. Other speakers at the session were Mr. Cornelius H. Callaghan, Manager of the Maritime Association of the Port of New York, Mr. Frank J. Taylor, President, American Merchant Marine Institute, and Captain H. C. Shepheard, USCGR, Chief, Merchant Marine Inspection Division, U. S. Coast Guard.

LOADING AERIAL BOMBS IN A MERCHANT SHIP—A Coast Guard Port Security Detail stands on the alert with fire extinguishers as the hold is loaded with 1,000-pound bombs.

Vision at Night

THE lookout system aboard ship functions 24 hours a day. Its efficiency is greatly impaired at night by the fact that the human eye has certain inherent limitations. However, a little knowledge of the eye and its functions will serve to improve the ability of observers immensely.

The eye is somewhat complex but may be considered essentially an apparatus very similar to a camera. The pupil is the entrance for light and the retina the sensitive lining on which the picture forms. The retina is composed of two kinds of cells that function under different conditions and in different ways. This difference of conditions is in the matter of illumination. One cell for reception in bright illuminations is the "cone cell." The other kind is operative in darkness and is the "rod cell." Both kinds are scattered about the retina but there is one small area called the center of vision where myriads of cones are collected into a compact group. This is where an image falls when one looks directly at an object in the daytime. Here the image is most distinct when illuminated sufficiently to affect the cone cells. Images falling elsewhere on the retina than on the center of vision are perceived by the more scattered cones and are indistinctly seen. This is what is referred to as seeing out of the corner of the eye. This then is vision in daylight or equivalent bright light.

In the dark or when the illumination is less than that of a starry moonless night only the rod cells are capable of seeing. They are many times as sensitive as the cones and are seemingly paralyzed by strong light. As the illumination decreases this paralysis decreases and finally when the light becomes too little to affect the cones the rods are back to normal and able to take over.

As we have seen, there are no rods at the center of vision, so looking directly at an object and thus having the image fall on this center means that it does not influence any rod cells. Accordingly, when the illumination is low no image will be seen. But, if the eye is turned slightly away from the object the image strikes away from this center and stimulates the scattered rods. It then becomes visible.

A second important point about vision at night is the fact that eyes are most sensitive just after they stop moving. Therefore, lookouts should scan the horizon or sky in systematic short jumps. In looking at an object repeatedly moving the eyes to positions just slightly aside it and in this way circumscribing a circle about it will give the clearest image.

A third fact to remember is the absence of color perception by the rod cells. At night, therefore, things appear dark and will be visible only by the contrast of shading between the object and its background.

It is thus seen only in silhouette and matters of distance, size, etc., are indistinct. In fact night vision is about as clear as seeing out of the corner of the eye in the daylight. It is natural to try to improve this indistinctness by looking directly at the object as one would if it were well illuminated. As we have seen, however, this does not work at night. Instead of becoming more distinct the object may not be seen at all.

The change in the rod cells from complete paralysis in strong light to the ability to "see" in poor illumina-

tion is called "dark adaptation." It takes about 30 minutes in complete darkness to acquire this adaptation. Consequently for the protection of the ship, lookouts should be dark adapted *before* going on watch. Otherwise their value is nil for most of this adaptation period.

Rarely the ability of the rod cells to adapt may be lost and the person will be blind at night. Such night blindness is due chiefly to a lack of vitamin "A." This vitamin is normally derived from yellow and green leafy vegetables, liver, cheese, and butter. It may also be obtained, in the absence of a well-rounded diet, from artificial sources such as cod liver oil or vitamin capsules.

Once dark adaptation is obtained it must be protected by avoiding exposure to bright light. Failure of lookouts to do this results in temporary night blindness, and during the period of readaptation the ship will be without protection just as when they go on watch unadapted to darkness.

In some situations, especially in the case of officers on watch, it is necessary to read instruments, charts, etc. Dark adaptation may be maintained if the illumination used is weak and preferably red in color. Red light affects the vision cells least while blue effects them most. Hence, red light cannot be detected from as far off as blue and it is to be preferred for these reasons of security as well as for the greater dark adaptation protection. Closing one eye even in a fairly strong light will also protect its adaptation.

In summary then, this advice for improving vision at night may be given from the data outlined:

1. Maintain an adequate intake of vitamin "A" in the diet.
2. Become used to seeing in the dark (dark adapted) before going on watch at night.
3. Learn to avoid looking directly at objects. Look only close to them at night and expect to see only a dark silhouette. At best this will appear indistinct.
4. Since the eyes "see" more at night just after having been moved, lookouts should sweep their gaze over overlapping segments of the horizon in short jumps. In looking at a specific object these jumps should describe a circle around it. Each short segment (or jump) should be just to one side of the object to cast the image away from the center of vision.
5. Maintain dark adaptation by illuminating charts, etc., as necessary with a weak red light. Keeping one eye closed will maintain its adaptation even in a fairly strong light.

International Maritime Safety Standards

THE principle of free interchange of commodities by water between nations without regard to flag of carrier makes it imperative that such shipping shall comply with minimum safety standards internationally adopted. From time to time, usually at rather long intervals, representatives of various maritime countries have met and adopted or revised such standards. It is now 15 years since the latest shipping convention was drafted. Many radical developments for safety measures have come about in that time. In addition, the emergence of transoceanic aviation and the importance it will assume in post-war travel introduces a special factor not previously existing.

The widespread destruction of shipping during this war will probably result in extensive new construction after the war, particularly by foreign countries. A large amount of the American war-built standardized fleet is unsuitable to many specialized trades, and even if some of it were disposed of abroad such acquisitions would probably be considered only as a stop gap pending the design and construction of specialized ships. The adoption or revision of any new maritime safety standards should, therefore, be given consideration as early as possible in spite of the disturbed conditions surrounding shipping during the war. Groundwork may be laid and some definitive action can be taken prior to extensive postwar construction.

In addition to international standards for structural strength of hulls, fire protection, compartmentation and pumping equipment, and loadlines, the wartime development of radionic devices will open a very wide field for their use on commercial ships after the war. Many of these are still military secrets and others are not in sufficient production for use outside the military forces, but it is obvious that, when they become available, they will tremendously improve safety of navigation.

The use of these special devices, either on board ship or as shore aids, will require uniformity of equipment and procedures in order that their benefits shall be available to ships of all nations. Their utilization will require additional qualifications for vessel personnel which should also be, so far as practicable, a matter for international agreement.

With the post-war establishment of commercial transoceanic aviation, it seems probable that minimum standards and requirements for such aircraft will be imposed by governments whose nations may embark upon overseas plans. Naturally such standards should be agreed to universally, so that the certificate of any plane would be acceptable to any other foreign country. Further large scale oversea aviation will probably involve the provision of special vessels stationed at intervals along the principal routes for the purpose of giving weather information, acting as navigational station ships, and in emergency supplementing the rescue facilities for distressed aircraft—a feature which will presumably be brought into being just as lifeboat stations were established for surface vessels. If such is the case, not only must the signals and reports of such vessels be internationally uniform in order to serve all traffic, but it seems probable that any such facilities should be supported internationally on a basis prorated among the nations making use of the facilities as in the case of the international ice patrol.

A most desirable and long overdue international move would be the standardization of admeasurement of vessels. While it is true that most national measurement regulations are approximate, it seems there are differences and loopholes in those regulations. The measurement regulations of the two interoceanic canals differ radically from each other and from the various national regulations.

The preparation of the necessary data and the cooperation of the various governmental departments concerned with some of the foregoing suggestions are of themselves matters which will require considerable time. Their discussion and adoption by an international body would require a further period after which the final measures would have to be passed upon by the respective governments. The initiation of these steps cannot be undertaken too early. It would be further hoped that, as a part of our postwar adjustment, international collaboration on these technical maritime safety measures could be provided for on a continuing basis, rather than left to intermittent and uncertain action at long intervals. The provision of a central maritime safety office with a permanent secretariat and with delegations from maritime nations meeting annually or bi-annually would assure a continuity of policy and safety improvement without radical changes. The matter is vital to the United States which seeks maximum safety without undue burdens in world competition.

LESSONS FROM CASUALTIES

Collisions Due to Misunderstood Signals

As a general rule, the immediate cause of most marine collisions is disregard or direct violation of the nautical rules of the road. In convoy, traveling blacked-out, conditions are such that in a fog or in poor visibility, a collision may be quite unavoidable. However, in the case of vessels plying the inland or coastal waters of the United States, the majority of collisions are both unnecessary and highly detrimental to the prosecution of the war. In the investigation of such cases, it usually appears that the accident could have been avoided had the masters or pilots of the respective vessels acted with strict conformity with the rules of the road.

As an illustration of this point, there was a case of two steamers which collided on an inland waterway recently. There were complicating factors in this particular instance, for four vessels were concerned; the X bound down the river and followed by the Y, one on each side of the channel, and the A bound upriver, to starboard and ahead of the B. When the leading vessels were in sight, the Y blew a two-blast signal to ontake and pass the X, which was properly answered and the Y proceeded to pass until the two steamers were approximately abreast and approaching the two upbound ships.

At the same time, the A was continuing up river, keeping to the starboard, and was being overtaken by the steamer B which gave and received the two-blast passing signal, and was about abreast of the A when the confusion arose. As the vessels approached, the Y blew a two-blast signal for a starboard-to-starboard passing, repeating it twice, and was answered once in kind by the A, signifying her agreement to the Y's proposal. At this juncture, there appears to have been an exchange of one and two-blast signals between the four steamers which created confusion as to which vessel originated them and for which vessel they were intended, until the situation became crucial and the alarm signal was sounded.

Then, when the A and the Y had drawn dangerously close, the A suddenly gave a cross signal of one blast and changed course to the right, going full speed ahead on the port engine and backing on the starboard, as it became apparent to the pilot that he would not be able to cross the bow of the Y. The rudder was kept hard right, and according to testimony, the A had made almost a 180° turn and was headed almost downstream when the two vessels collided—the starboard bow of the Y striking the port bow of the A and their quarters scraping as the latter continued to swing.

The collision occurred in the early morning while it was still dark, and when the two downbound and the two upbound vessels were both abreast, a doubly hazardous situation. When it first became apparent that confusion existed in regard to the signals given and there was misunderstanding for whom they were intended, it was the duty of *both* masters to reduce the speed of their vessels to bare steerageway, stop, and back if necessary, until the difficulty had been ironed out.

The nautical rules of the road have been carefully worked out for the better safety of navigation, and one of the cardinal points is the rule requiring that, when a misunderstanding with regard to signals arises, both vessels must decrease speed or stop. Neither of the vessels concerned followed this proper course of action; had either one done so, there would probably have been no collision.

Loss of Ship Due to Poor Judgment

An American merchant ship loaded with an important war cargo recently arrived off a foreign port after sunset and in bad weather conditions. The wind was blowing a gale directly on shore with heavy rain squalls in which the wind reached force 8. The anchorage was congested due to the presence of a number of other vessels, many of which were experiencing difficulty in holding, even with two anchors down.

The master of the vessel in question came to anchor and almost immediately began to drag. He hove up and proceeded farther off shore and again anchored with 90 fathoms of chain out. He again began to drag despite the use of his engines to ease the strain on his ground tackle. After about an hour he again hove up and steamed off shore at slow speed.

At about 0400, the night dark and the wind still of gale force and a heavy swell setting in, he ran back for the anchorage. His lookout was stationed on the bridge because of the seas that had been coming over the bow while heading into the wind. After about half an hour, when he concluded he was close enough to the beach to anchor—no soundings had been taken at any time—he discovered that he was well into the congested anchorage and was dangerously close to the beach. Full use of engines and rudder were insufficient to extricate the ship from this position due in part probably to the shallowness of the water in which she then was. Both anchors were let go but the vessel lay in the trough of the sea and drifted broadside onto the beach.

A tug was dispatched to her assistance but could not get close enough to pass a line in the shallow water and the heavy seas. The ship was pounding heavily and after about an hour and a half broke in two. Lifeboats and life rafts were launched and a part of the crew reached the beach although one man was swept off his life raft and drowned and the first lifeboat was capsized in the surf. The remainder of the crew stayed by the wreck and were taken off the following day.

The master was charged with inattention to duty and unskillfulness and after a full hearing was found guilty and his license suspended for a period of 6 months. The conclusion was inescapable that after anchoring in a dangerously congested area under conditions which showed that the vessel's ground tackle would not hold, the master had properly gotten under way and had gained sea room where he could lie to or hold his position with the use of his engines. A short time thereafter he re-entered this congested anchorage under conditions which placed him in greater peril than at the time when he first anchored. Inadequate precautions as to lookouts and soundings were taken with the result that he overran his estimated position and caused the total loss of a valuable cargo vessel and the death of one of his seamen.

Personnel Casualties on Western Rivers

A review of the injuries and losses of life investigated by the St. Louis office during the calendar year 1943 showed that 25 crew members died and 10 were injured, while 17 passengers lost their lives and 5 were injured. Of the 42 total deaths, 39 were by drown-

ing—22 crew members and all 17 of the passengers. The majority of the so-called passengers were in rowboats or small motorboats which capsized or sank. In two instances rowboats were run down in broad daylight by powerboats.

Three drownings occurred from ferryboats. In one an automobile with faulty brakes drove through the safety gate and overboard. The other two took place when a cable ferry, operated from one bank of the river, was sent across to take on some cars waiting on the other side. The operator assumed that he had allowed sufficient time for them all to board the ferry when he started the winch to pull the craft across. Actually one car was only part way on and dropped into the river with its two passengers. Headquarters ruled that this craft was "propelled by machinery"—regardless of where the machinery was located—and therefore should have had a licensed operator on board.

Seventeen crew member drownings were due to falling overboard from a barge or towboat. All but one occurred during darkness. Probably none of these would have been a fatality had the men made it a practice to wear life preservers when moving about on deck, particularly at night. There is also some question as to how far the falls were due to darkness and whether flashlights would have been helpful.

Three men suffered severe leg injuries—two involving loss of leg—through stepping into a turn of wire rope as it was rendering on a bitt. Each of these men was reasonably experienced and familiar with his job, but a moment of carelessness offset all of their experience.

How To Get Along on Lifeboat Rations

DURING the first year of the war there were spread by word-of-mouth and in the press tales of seamen adrift in boats or rafts for long periods of time, with vivid descriptions of the attendant tortures of thirst, hunger, heat or cold, immersion foot, or similar afflictions. Lately such stories have not been so prevalent or widespread, for few ships now sail alone. Moreover, rescue facilities have been organized to such a degree that it seldom happens that men are forced to spend more than a few days in a lifeboat or raft awaiting rescue. In addition, and even more important as a factor of survival in such cases, the action taken by the Coast Guard in promulgating its wartime safety measures and equipping boats and rafts with additional food and water, signaling and propulsion devices, and other lifesaving equipment, has made extended sojourns in boats not only unlikely to occur, but such that, in those rare instances where they do occur, they are no longer apt to be the torturous ordeal they once were.

Although the likelihood of death from hunger or thirst in a lifeboat has been reduced to a minimum, we must not lose sight of that possibility; and proper measures should be taken to guard against such a contingency. Recent research on the quantity and type of food and liquid required to maintain life has been conducted by the Medical Corps of the Navy; and the Committee on Air-Sea Rescue, under the Joint Chiefs of Staff, has brought out several salient points on how survivors may best preserve health and strength when put on forced short rations of food and water.

First of all, if you abandon ship in a lifeboat or raft in which the food and water containers are undamaged, you have little to worry about. By law, all lifeboats and rafts are now equipped with 10 quarts of water per man capacity, which is sufficient for 20 days (at the rate of 1 pint a day) plus a supply of food, 14 ounces each of chocolate, pemmican, malted milk tablets, and type C ration biscuits per man, to last for a similar length of time. With fewer people in the boat, provisions would, of course, last correspondingly longer. Even if some of the water or food containers should be smashed, there will still be an adequate supply for 12 to 15 days, and rescue can confidently be expected well before that time. Regardless of your expectations of immediate rescue, however, neither food nor water should be wasted, but should always be rationed out equitably to all men by the person in charge.

If you should be forced to abandon ship on a float or piece of buoyant apparatus which has no supply of water and provisions, your plight will be more serious. In all probability you will be picked up by one of the boats or rafts; but even if you should not, don't get panicky, and on no account, no matter how thirsty you become, attempt to drink sea water, either "straight" or diluted with fresh water. Here are a few reasons why: experience in actual cases and experiments conducted on human volunteers have shown that although small amounts taken occasionally will not invariably cause insanity or hallucinations, they will always cause severe vomiting and diarrhea, both of which result in a net loss of valuable water from the body. In addition, the salt in sea water (3 to 3½ percent) is absorbed by the tissues and has to be washed out by the kidneys, which must use a still greater volume of the reserve water in the body to do so, thereby again causing a net loss. Worst of all, it has been found that the drinking of sea water will not alleviate, but will actually increase thirst. No benefit is obtained by diluting fresh water with sea water to increase its volume.

A few useful things to remember should you find yourself with only a limited supply of water on hand are listed below:

(1) If you had a good drink of water shortly before the casualty, it is not necessary to take a drink for the first 24 hours.

(2) From the beginning, ration out your water at the rate of 16 ounces (1 pint) per man per day.

(3) Water is all-important; food is only a secondary consideration. One can live for at least 20 days without any food whatsoever, but without water, in a hot climate, one would be lucky to survive for 5 days.

(4) Eating meat, fish, or fruit which has been dried makes you more thirsty. If you have plenty of water, that is, from 24 to 32 ounces per day, it is all right to eat the flesh of birds, fish, turtles, etc., which you may catch. If you are on the minimum pint a day ration, it is better to avoid eating such foods, as the kidneys would have to draw water from the body to dispose of the minerals and waste products formed from them. Biscuits, too, are thirst-producing unless water is plentiful.

(5) If you have any anti-seasickness pills, take one every 6 hours for the first day or two, as water is of course wasted in vomiting.

(6) If you are in a warm or hot climate, take extra pains to see that as little water is lost through perspiration as possible. To effect this, rig an awning overhead to protect you from the sun's rays, but leave the sides open to enable the breeze to cool your body. To this end, most of the clothes should be removed during the hot hours of the day. If you have no way of improvising shade, sit upright so that the least possible body area is exposed to the heat of the sun. Keep your clothes constantly soaked with sea water in the daytime, for this will cool your body by evaporation and conserve your body water. Clothes should be dried out before evening, however, for you may get a chill even in the Tropics once the sun has set.

Activities of Merchant Marine Hearing Units

Coast Guard Merchant Marine hearing units, during March, handled cases involving 238 licensed officers and 2,180 unlicensed men. In the case of officers, 6 licenses were revoked, 23 were suspended, 54 were suspended on probation, 5 were suspended plus suspension on probation, 2 were voluntarily surrendered, 92 admonitions were given and 56 cases were dismissed. Of the unlicensed men, 32 certificates were revoked, 157 were suspended, 433 were suspended on probation, 21 were suspended—plus suspension on probation, 15 were voluntarily surrendered, 854 admonitions were given and 668 cases were dismissed.

Buoy Purchases

DURING the calendar year 1943, a total of 9,127 buoys of all types were purchased by the Coast Guard from private contractors. Almost all of these buoys were used for replacements and original installations offshore and at advanced bases in connection with the war program.

Of the total number of buoys purchased, 343 were lighted buoys ranging in diameter from 3 to 9 feet, and 8,784 were unlighted buoys, of which 25 were sound buoys.

During the past year, work has been continued on a study of buoyage throughout the United States with a view to modernizing and standardizing the numerous types of buoys now in service. This work consisted mainly of improving and modernizing designs, applying welding in place of riveting, and substituting fabricated plate units for castings. As a result, the number of buoy types has been reduced from about 170 before the standardizing program to about 34 modern standard buoys approved and adopted by the Coast Guard. Nearly all of the buoys purchased during 1943 were of the standard modernized types.

Experiments were also conducted in the construction of various types of buoys using three varieties of basic plastic materials in place of steel. Two hundred of these plastic buoys were purchased by the Coast Guard and are now established in nearly all districts, where they are kept under careful observation.

Private Aids To Navigation

THE act of June 20, 1906 (34 Stat. 324), as amended, gave non-Government interests, with the permission of the Commandant of the Coast Guard, the right to establish and maintain aids to navigation for their own private purposes in waterways where the general public use did not warrant the placing of aids by the Government. Due to changes in conditions, occasions have arisen where it was desirable, as a wartime measure, to have the Coast Guard take over and maintain such aids and make alterations to them.

The Chief Counsel advised that there was no legal objection to such procedure and that the cited act did not limit the authority of the Coast Guard in respect to aids to navigation. He added, however, that "where it is contemplated that certain changes in the equipment of the existing private aids will be made and that the aids will be maintained by the Coast Guard only during the war and for six months thereafter, it is essential that these intentions are fully understood by the present operators of the aids and that written permission be obtained for the Coast Guard to so take over, maintain, and make changes in the existing equipment, such fixtures or additions so placed to remain the property of the Government."

BEACH PATROL SURF BOAT HAULED BY TRACTOR—Caterpillar tractor hauling life-saving equipment along the beach.

APPENDIX

Amendment to Regulations

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter III—Coast Guard: Inspection and Navigation

PILOT RULES

PART 312—PILOT RULES FOR INLAND WATERS

The document dated February 5, 1944, published in 9 F. R. 1535, as amended by document dated March 31, 1944, published in 9 F. R. 3515, is further amended by changing the effective date to read January 1, 1945, instead of May 1, 1944 (9 F. R. 4542, April 29, 1944).

TITLE 46—SHIPPING

Chapter I—Coast Guard: Inspection and Navigation

SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS AND SHIPPING DURING EMERGENCY

PART 153—BOATS, RAFTS, AND LIFESAVING APPLIANCES: REGULATIONS DURING EMERGENCY

ABANDON-SHIP KIT

Section 153.14a is amended by changing the fourth item in the articles required in the abandon-ship kit in the first undesignated paragraph to read as follows:

§ 153.14a. *Abandon-ship kit.* * * *

Four ounces of light mineral oil (liquid petrolatum U. S. P.) or 4 ounces of an approved cleansing solution in bottle having a screw cap (9 F. R. 3771, April 8, 1944).

Waivers of Navigation and Vessel Inspection Laws

POSTINGS UNDER GLASS ON OCEAN AND COASTWISE VESSELS

The Acting Secretary of the Navy having by order dated 1 October 1942 (7 F. R. 7979), waived compliance with the Navigation and Vessel Inspection laws administered by the United States Coast Guard, in the case of any vessel engaged in business connected with the conduct of the war to the extent and in the manner that the Commandant, United States Coast Guard, shall find to be necessary in the conduct of the war; and

It appearing upon investigation that the efficient prosecution of the war would be impeded by the application to ocean and coastwise vessels of certain navigation and vessel inspection laws and regulations issued thereunder which require the posting of forms, notices, and other documents under glass in said vessels;

Now therefore, I hereby find it to be necessary in the conduct of the war that there be waived compliance with the Navigation and Vessel Inspection laws and the regulations issued thereunder administered by the United States Coast Guard, in the case of any vessel engaged in business connected with the conduct of the war, to the following extent and in the following manner:

To the extent necessary to dispense with the requirements of any navigation and vessel inspection law or regulation issued thereunder applicable to ocean and coastwise vessels and administered by the United States Coast Guard requiring the posting of forms, notices, or other documents under glass.

Nothing contained herein shall be construed to effectuate waiver of compliance with any law or regulation requiring the posting of forms, notices, and other documents on ocean and coastwise vessels, except to the extent of waiving compliance with the requirement of posting under glass. Nothing herein contained shall be construed to impair or limit the waiver order of the Secretary of the Navy of 21 March 1942 (7 F. R. 2477), with respect to compliance with R. S. 4446 (46 U. S. C. 232).

Dated: April 6, 1944

R. R. WAESCHE,
Vice Admiral, U. S. Coast Guard, Commandant.

(9 F. R. 3771, April 8, 1944.)

TITLE 46—SHIPPING

Chapter I—Coast Guard: Inspection and Navigation

QUALIFIED MEMBERS OF THE ENGINE DEPARTMENT ON GREAT LAKES VESSELS

The Acting Secretary of the Navy having by order dated 1 October 1942 (7 F. R. 7979), waived compliance with the Navigation and Vessel Inspection laws administered by the United States Coast Guard, in the case of any vessel engaged in business connected with the conduct of the war, to the extent and in the manner that the Commandant, United States Coast Guard, shall find to be necessary in the conduct of the war, and,

The Acting Director of the Office of Defense Transportation having advised that a critical manpower situation has developed in Great Lakes transportation through reclassification by the Selective Service System of men of the ages of 22 to 26 and that, accordingly, it is necessary to relax the requirements of laws and regulations with respect to qualified members of the engine department on Great Lakes vessels.

Now therefore, I hereby find it to be necessary in the conduct of the war that there be waived compliance with the Navigation and Vessel Inspection laws administered by the United States Coast Guard, including regulations issued thereunder, in the case of any vessel on the Great Lakes engaged in business connected with the conduct of the war, to the following extent and in the following manner:

To the extent necessary to waive compliance with any such law or regulation imposing requirements for carrying as members of the crews of such vessels certificated seamen rated as qualified members of the engine department, or forbidding service in the engine department of such vessels without a certificate of service as a qualified member of the engine department.

Dated: April 22, 1944

R. R. WAESCHE,
Vice Admiral, U. S. Coast Guard, Commandant.

(9 F. R. 4402, April 25, 1944.)

Marine Inspection Memorandums

No. 69

Life Rafts on Design EC2–S–C1, Cargo Vessels

UNITED STATES COAST GUARD,
Washington, D. C.
14 April 1944

1. The War Shipping Administration has advised Coast Guard Headquarters that in some cases, the number of persons employed on the subject vessels by the operator, plus the armed guard, will exceed 80, i. e., the total capacity of the four 20 person life rafts, which are to be carried on skids as required by Section 153.4 of Subchapter "O."

2. The carrying of a fifth raft on a skid aboard the subject vessels would, the War Shipping Administration states, be impracticable because the skid structure would seriously interfere with cargo handling, as well as the stowage of deck cargo, and request is therefore made for permission to carry an additional life raft without installing it on a skid for launching purposes.

3. Based upon the foregoing, I therefore, hereby find that a waiver of Section 153.4 of Subchapter "O" is essential to the extent that whenever the number of persons employed on one of the subject vessels by the operator, plus the armed guard, exceeds 80, i. e., the total capacity of four life rafts carried on skids, additional persons may be employed by the operator and additional members may be carried in the armed guard, provided an extra, fully equipped improved raft is carried. This additional raft need not be installed on a skid, but must be carried so that it will be readily accessible, and will have the best chance of floating off in case the vessel sinks.

4. In all cases, the number of persons employed on board by the operator plus the armed guard shall not exceed the total capacity of the life rafts.

5. This finding is made pursuant to the Order of the Secretary of the Navy, dated 1 October 1942, and is applicable to all of the subject vessels. It will not, therefore, be necessary to issue individual waivers to the subject vessels on the matter covered herein.

(S) R. R. WAESCHE,
Commandant.

No. 70

Life Rafts on Design VC2–S–AP2–AP3, Victory Ships

UNITED STATES COAST GUARD
Washington, D. C.
14 April 1944

1. The Maritime Commission has advised Coast Guard Headquarters that in some cases, the number of persons employed on the subject vessels by the operator, plus the armed guard, will exceed 80, i. e., the total capacity of the four 20-person life rafts, which are to be carried on skids as required by Section 153.4 of Subchapter "O."

2. The carrying of a fifth raft on a skid aboard the subject vessels would, the Maritime Commission states, be impracticable because the skid structure would seriously interfere with cargo handling, as well as the stowage of deck cargo, and request is therefore made for permission to carry an additional life raft without installing it on a skid for launching purposes.

3. Based upon the foregoing, I, therefore, hereby find that a waiver of Section 153.4 of Subchapter "O" is essential to the extent that whenever the number of persons employed on one of the subject vessels by the operator, plus the armed guard, exceeds 80, i. e., the total capacity of four life rafts carried on skids, additional persons may be employed by the operator and additional members may be carried in the armed guard, provided an extra, fully equipped improved raft is carried. This additional raft need not be installed on a skid, but must be carried so that it will be readily accessible, and will have the best chance of floating off in case the vessel sinks.

4. In all cases, the number of persons employed on board by the operator plus the armed guard shall not exceed the total capacity of the life rafts.

5. This finding is made pursuant to the Order of the Secretary of the Navy, dated 1 October 1942, and is applicable to all of the subject vessels. It will not, therefore, be necessary to issue individual waivers to the subject vessels on the matter covered herein.

(S) R. R. WAESCHE.
Commandant.

Equipment Approved by the Commandant

BUOYANT APPARATUS

Twenty-person buoyant apparatus utilizing styrofoam as the buoyant material (Dwg. No. B. A. 2, dated 28 March 1944), submitted by Leyde & Leyde, Falls Church, Va. (9 F. R. 3771, April 8, 1944).

DAVITS

Schat davit, type M. D. 45–10.5 (Arrangement of P. H. A. davits, B. U. type for 22′ lifeboats Dwg. No. B. A. 342, dated 20 January 1944) (Maximum working load of 10,000 pounds per set), submitted by the Lane Lifeboat & Davit Corp., Foot of Fortieth Road, Flushing, N. Y. (9 F. R. 3771, April 8, 1944).

Schat davit, type R. D. 5–10 (Arrangement Dwg. No. C. A. 395, dated 10 January 1944) (Maximum working load of 5,800 pounds per set), submitted by the Lane Lifeboat & Davit Corp., foot of Fortieth Road, Flushing, N. Y. (9 F. R. 3771, April 8, 1944).

EMBARKATION-DEBARKATION LADDERS

"Viking" chain suspension, Type A, embarkation - debarkation ladder (Dwg. No. 561–S1604–2, dated 11 March 1944), submitted by Ballard Rigging & Sailloft Co., 314 Colman Bldg., 311 Spring St., Seattle, Wash. (9 F. R. 3771, April 8, 1944).

"Viking" wire rope suspension, Type B, embarkation-debarkation ladder (Dwg. No. 561–S–1604–3, dated 11 March 1944), submitted by Ballard Rigging & Sailloft Co., 314 Colman Bldg., 311 Spring Street, Seattle, Wash. (9 F. R. 3771, April 8, 1944).

Embarkation - debarkation ladder with aluminum disks, for use on tank vessels (Dwg. No. 241–B aluminum, dated 30 March 1944), submitted by the American Chain Ladder Co., Inc., 151 East Fiftieth Street, New York, N. Y. (9 F. R. 4417, April 25, 1944).

FIRE RETARDANT MATERIALS FOR VESSEL CONSTRUCTION—INSULANT FOR CLASS A–1 CONSTRUCTION

Mineral wool insulation, for use as an insulant for Class A–1 construction (in conjunction with an approved class B panel), minimum thickness 1½″—8 lb. per cu. ft. density, minimum thickness 2″—6 lb. per cu. ft. density, batts or blankets, submitted by Forty-Eight Insulations, Inc. Aurora, Ill. (9 F. R. 4417, April 25, 1944).

FIRING ATTACHMENTS FOR LINE-THROWING GUNS

Firing attachment for line-throwing gun, Type A (Dwg. No. C–32 revised 28 March 1944), submitted by the Coston Supply Co., 31 Water Street, New York, N. Y. (9 F. R. 4126, April 18, 1944).

Firing attachment for line-throwing gun, Model VK–L3 (Dwg. No. F 325, dated 2 April 1944), submitted by the Van Karner Arms Corporation, 202 East Forty-fourth Street, New York, N. Y. (9 F. R. 4126, April 18, 1944).

FLASHLIGHT

Watertight flashlight, model No. 3450 (Assembly Dwg. No. 3450, dated 11 November 1943, and Material List No. 3450, dated 29 November, 1943), submitted by the Fulton Manufacturing Company, Wauseon, Ohio (9 F. R. 3771, April 8, 1944).

LIFEBOAT

26′ x 8.5′ x 3.825′ metallic lifeboat with Allen hand-operated propelling gear, type "HMS" (583 cu. ft. S. R. capacity) (construction detail Dwg. No. 469 B, dated February 1944), submitted by Tregoning Boat Co., 6505 Seaview Avenue, Seattle, Wash. (For use on the U. S. A. H. S. *Marigold* only) (9 F. R. 4417, April 25, 1944).

LIFE FLOAT

40-person, rectangular balsa wood life float (Dwg. No. M751, dated 25 October 1943), manufactured by Roof Structures, Inc., 45 West Forty-fifth Street, New York, N. Y. (9 F. R. 4417, April 25, 1944).

LIFE PRESERVER

Style No. LP–1 adult kapok life preserver, removable pads (Dwg. No. LP–1, dated 17 February 1944). (For general use and for use in conjunction with rubber lifesaving suits), Approval No. B–215, manufactured by H. D. Gihon, Inc., 21 Muirhead Avenue, Trenton, N. J. (9 F. R. 3771, April 8, 1944).

U. S. Army Transportation Corps adult kapok life preserver (Dwg. No. XA–252–A), Approval No. B–217, for general use, and not for use with a rubber lifesaving suit, submitted by U. S. Army Transportation Corps, Water Division, Marine Safety Inspection Section, 201 Sixty-fourth Street, Brooklyn, N. Y. (9 F. R. 4417, April 25, 1944).

LIFE PRESERVER LIGHT

Life preserver light, type "Dutch Admiral Junior" (revision of changes drawing dated 18 March 1944), submitted by Henry A. S. Van Daalen, 17 East Forty-second Street, New York, N. Y. (9 F. R. 4126, April 18, 1944).

LIFE RAFTS

Twenty-person, improved type, well deck life raft (Dwg. No. M765, dated 23 March 1944), submitted by Roof Structures, Inc., 45 West Forty-fifth Street, New York, N. Y. (9 F. R. 3771, April 8, 1944.)

Twenty-person, improved type, life raft (general arrangement Dwg. No. 8040–D–1, dated 24 March 1944), submitted by Colvin-Slocum Boats, Inc., Amesbury, Mass. (9 F. R. 3771, April 8, 1944.)

Twenty-person, improved type, metallic reversible life raft (general arrangement Dwg. No. 5GR–896, dated 13 March 1944), constructed by the Globe American Corporation, Kokomo, Ind. (9 F. R. 4126, April 18, 1944).

LINE-THROWING GUN

Two and one-half inch line-throwing gun, Model "B" short barrel (Dwg. No. 100, dated 1 April 1944), submitted by the Hawley Smith Machinery Company, Croton Falls, N. Y. (9 F. R. 4417, April 25, 1944).

PORTABLE ELECTRIC MEGAPHONE

Portable electric megaphone (Assembly Dwg. dated 17 March 1944), submitted by the National Scientific Products Company, Inc., 5013–25 N. Kedzie Avenue, Chicago, Ill. (9 F. R. 3771, April 8, 1944).

Portable electric megaphone, type AM–5, (Dwgs. Nos. 31044 and 31144, dated 14 March 1944, and 11044, dated 12 January 1944), submitted by Herbach & Rademan Co., 517 Ludlow St., Philadelphia, Pa. (9 F. R. 4417, April 25, 1944).

WATER INDICATOR

Secondary boiler level indicator, prismatic periscope reading water level indicator (Dwg. No. B–5231, Bulletin No. 434), submitted by The Reliance Gauge Column Company, 5902 Carnegie Avenue, Cleveland, Ohio.

ELECTRICAL APPLIANCES

For the use of Coast Guard personnel in their work of inspecting merchant vessels, the following items of electrical equipment have been examined. This list is not intended to be an all-inclusive list of miscellaneous electrical equipment; accordingly, items not included may also be satisfactory for marine use.

Manufacturer and description of equipment	Location apparatus may be used				Date of action
	Passenger and crew quarters and public spaces	Machinery-cargo and work spaces	Open decks	Pump rooms of tank vessels	
Benjamin Electric Manufacturing Co., Des Plaines, Ill.:					*1944*
Lighting fixture, explosion proof, 100-watt maximum, drawing No. 221990, issue No. 7	x	x	x	x	Mar. 24
Control Instrument Co., Brooklyn, N. Y.: Salinity indicator panel, types 14, 14A and 14B, single cell, drawing No. 21125, alt. K	x	x			Apr. 11
The Dayton Manufacturing Co., Dayton, Ohio:					
Ceiling fixture No. C–10725, nonwatertight, 60-watt maximum, drawing No. 1616, rev. 3	x				Apr. 24
Ceiling fixture No. C–10726, nonwatertight, 60-watt maximum, drawing No. 1617, rev. 3	x				Do.
Wall bracket fixture No. B–5512, nonwatertight, 60-watt maximum, drawing No. 1602, rev. 4	x				Do.
Ceiling fixtures Nos. C–10778 and C–10778–1, nonwatertight, 2 60-watt lamps maximum	x				Do.
Ceiling fixture, watertight, 100-watt maximum, type No. C–10779, drawing No. 1921, rev. 3	x	x	x		Mar. 16
Gangway light, portable, watertight, 100-watt maximum, type No. C–10779–1, drawing No. 1921, rev. 3	x	x	x		Do.
Durkee Marine Products Corporation, Staten Island, N. Y.:					
Mechanical telegraph transmitter, drawing No. 300, revised per U. S. Coast Guard letter Feb. 29, 1944	x	x			Apr. 15
Mechanical telegraph transmitter, drawing No. 331, revised per U. S. Coast Guard letter Feb. 29, 1944	x	x	x		Do
Mechanical telegraph transmitter, drawing No. 510, revised per U. S. Coast Guard letter Feb. 29, 1944	x	x			Do
Edwards & Co., Inc., Norwalk, Conn.:					
Contact maker, hand operated, lever type, double pole, single throw, watertight, 10 amperes, 120 volts, 5 amperes, 240 volts, A. C. or D. C., catalog No. 1705, drawing No. 6753B, alt. 2	x	x	x		Mar. 24
Horn, marine type, watertight, 20 volts D. C., 115 volts D. C., or 115 volts A. C., catalog No. 1773, drawing No. 6565GM, alt. 1	x	x	x		Do.
Push buttons, watertight, interior communication, 250 volts or less:					*1943*
1-gang, type T, catalog No. 1708, drawing No. 6863–1, alt. 0	x	x	x		Aug. 27
1-gang, type S, catalog No. 1709, drawing No. 6863–1, alt. 0	x	x	x		Do
1-gang, type R, catalog No. 1710, drawing No. 6863–1, alt. 0	x	x	x		Do
1-gang, type P, catalog No. 1711, drawing No. 6863–1, alt. 0	x	x	x		Do
2-gang, type A–S, catalog, No. 1712, drawing No. 6863–2, alt. 0	x	x	x		Do
3-gang, type A–S, catalog No. 1713–3, drawing No. 6863–3, alt. 0	x	x	x		Do
4-gang, type A–S, catalog No. 1714–4, drawing No. 6863–4, alt. 0	x	x	x		Do
5-gang, type A–S, catalog No. 1713–5, drawing No. 6863–5, alt. 0	x	x	x		Do
NOTE.—The above listed push buttons supersede the call bell push buttons listed in Coast Guard Bulletin dated October 1943.					

Equipment Approved—Continued.

Manufacturer and description of equipment	Location apparatus may be used				Date of action
	Passenger and crew quarters and public spaces	Machinery-cargo and work spaces	Open decks	Pump rooms of tank vessels	
General Electric Co., Schenectady, N. Y.:					
Searchlight, 18", incandescent, with high pedestal pilothouse mounting, drawing No. T-8455256, rev. 3	x	x	x		*1944* Mar. 21
Porthole ventilation fan, ⅓₀ hp., 115 volts D. C., totally enclosed, waterproof, drawing No. WW-2265813, rev. 0	x	x	x		Apr. 14
Bracket fan, electric, 12", oscillating, 115 volts, A. C., drawing No. WW-2265810, rev. 1	x				Apr. 3
A. Ward Hendrickson & Co., Inc., Brooklyn, N. Y.:					
Anchor light, electric, No. 2 lens, drawing No. 21915, rev. 2/28/44			x		Mar. 30
Stern light, electric, No. 2 lens, drawing No. 21917, rev. 2/28/44			x		Do.
Masthead, range and towing light, electric, No. 2 lens, drawing No. 21918, rev. 2/28/44			x		Do.
Henschel Corporation, Amesbury, Mass.: Running light panel, nonautomatic, watertight, pedestal mounting, 115 volts, D. C., drawing No. 40-010-20, alt. 3	x	x	x		Mar. 20
Markel Electric Products, Inc., Buffalo, N. Y.:					
Ceiling lighting fixture, nonwatertight, 50-watt maximum, drawing No. E-13-A	x				Mar. 28
Ceiling lighting fixture, nonwatertight, 2 50-watt maximum, drawing No. E-13-B	x				Do.
Berth or desk light fixture, nonwatertight, 25-watt maximum, drawing No. E-14	x				Do.
Nemco Electric Co., Seattle, Wash.:					
Junction boxes, watertight, drawing No. N-2117, rev. 4, catalog Nos. J-250, J-251, J-252, J-253, J-651, J-652, J-653, J-280 and J-680	x	x	x		Apr. 12
Pendant fixtures, watertight, drawing No. N-2121, rev. 1:					
Catalog No. P-201, 60-watt maximum	x				Do.
Catalog No. P-201-G, 60-watt maximum	x	x	x		Do.
Catalog No. P 202, 100-watt maximum	x				Do.
Catalog No. P-202-G, 100-watt maximum	x	x	x		Do.
Catalog No. P-601, 60-watt maximum	x				Do.
Catalog No. P-601-G, 60-watt maximum	x	x	x		Do.
Catalog No. P-602, 100-watt maximum	x				Do.
Catalog No. P-602-G, 100-watt maximum	x	x	x		Do.
Bracket fixtures, watertight, drawing No. N-2122, rev. 1:					
Catalog No. B-211, 60-watt maximum	x				Do.
Catalog No. B-211-G, 60-watt maximum	x	x	x		Do.
Catalog No. B-212, 100-watt maximum	x				Do.
Catalog No. B-212-G, 100-watt maximum	x	x	x		Do.
Catalog No. B-611, 60-watt maximum	x				Do.
Catalog No. B-611-G, 60-watt maximum	x	x	x		Do.
Catalog No. B-612, 100-watt maximum	x				Do.
Catalog No. B-612-G, 100-watt maximum	x	x	x		Do.
Ceiling fixtures, watertight, drawing No. N-2125, rev. 1:					
Catalog No. C-203, 60-watt maximum	x				Do.
Catalog No. C-203-G, 60-watt maximum	x	x	x		Do.
Catalog No. C-204, 100-watt maximum	x				Do.
Catalog No. C-204-G, 100-watt maximum	x	x	x		Do.
Catalog No. C-603, 60-watt maximum	x				Do.
Catalog No. C-603-G, 60-watt maximum	x	x	x		Do.
Catalog No. C-604, 100-watt maximum	x				Do.
Catalog No. C-604-G, 100-watt maximum	x	x	x		Do.
Junction box and bracket type fixtures, watertight, drawing No. N-2128, rev. 1:					
Catalog No. J-205, 60-watt maximum	x				Do.
Catalog No. J-205-G, 60-watt maximum	x	x	x		Do.
Catalog No. J-206, 100-watt maximum	x				Do.
Catalog No. J-206-G, 100-watt maximum	x	x	x		Do.
Catalog No. B-256, 60-watt maximum	x				Do.
Catalog No. B-256-G, 60-watt maximum	x	x	x		Do.
Catalog No. B-257, 100-watt maximum	x				Do.

SEA ANCHOR

Sea anchor, type GA–1 (U. S. Coast Guard Dwg. No. MMI–562, and specification dated 1 November 1943), submitted by the Globe American Corp., Kokomo, Ind. (9 F. R. 3771, April 8, 1944).

Sea anchor, type 3 x 6 (U. S. Coast Guard specification and Dwg. No. MMI–562, dated 1 November 1943), submitted by the Weber Showcase & Fixture Corporation, 5700 Avalon Boulevard, Los Angeles, Calif. (9 F. R. 4417, April 25, 1944).

Sea anchor, type A–1 (U. S. Coast Guard specification and Dwg. No. MMI–562, dated 1 November 1943), submitted by Eveready Canvas Corp., 20 Fulton Street, New York, N. Y. (9 F. R. 4126, April 18, 1944).

APPROVAL NUMBERS FOR STANDARD LIFE-SAVING DEVICES

LIFE PRESERVERS

The following life preservers constructed in accordance with Coast Guard specification have been approved and issued the following approved numbers.

Standard adult kapok life preserver, approval No. A–270, submitted by William W. Stanley Co., Inc., 401 Broadway, New York, N. Y.

Standard adult kapok life preserver, approval No. A–271, submitted by Athens Boat Supply Co., Athens, N. Y.

Standard adult kapok life preserver, approval No. A–272, submitted by Elvin Salow Co., 379–381 Atlantic Avenue, Boston, Mass.

Standard adult kapok life preserver, approval No. A–273, submitted by Foster Manufacturing Co., 430 Notre Dame Street, New Orleans, La.

Standard adult cork life preserver, approval No. A–274, submitted by Central Sterilizing Plant, 270 Seventh Street, San Francisco, Calif.

Standard child cork life preserver, approval No. A–275, submitted by Central Sterilizing Plant, 270 Seventh Street, San Francisco, Calif.

Standard adult balsa wood life preserver, approval No. A–276, submitted by Central Sterilizing Plant, 270 Seventh Street, San Francisco, Calif.

Standard child balsa wood life preserver, approval No. A–277, submitted by Central Sterilizing Plant, 270 Seventh Street, San Francisco, Calif.

Standard adult kapok life preserver, approval No. A–278, submitted by H. D. Gihon Co., Inc., Trenton, N. J.

Standard adult balsa wood life preserver, approval No. A–279, submitted by H. D. Gihon, Inc., 21 Muirhead Avenue, Trenton, N. J.

Standard adult cork life preserver, approval No. A–280, submitted by H. D. Gihon, Inc., 21 Muirhead Avenue, Trenton, N. J.

Standard adult kapok life preserver, approval No. A–281, submitted by Star Toy & Novelty Co., 461 Broome Street, New York, N. Y.

AFFIDAVITS

It is required by the Marine Engineering Regulations that manufacturers submit affidavits before they manufacture items of equipment in accordance with these regulations for use on vessels subject to inspection by the Coast Guard. These affidavits are kept on file at Coast Guard Headquarters and a list of approved manufacturers is published for the information of all parties concerned. The affidavits received and accepted during the period from March 16 to April 15, 1944, are as follows:

Automatic Switch Co., 41 East Eleventh Street, New York 3, N. Y., valves.

East Bay Machine Works, 1833 Peralta Street, Oakland, Calif., valves and fittings.

Flange & Forge Co., Los Angeles, Calif., fabricated steel fittings.

Industrial Equipment Co., 1301 Fifty-Ninth Street, Emeryville 8, Calif., fabricated valves and fittings.

Josam Manufacturing Co., 1783 East Eleventh Street, Cleveland, Ohio, valves and fittings.

Klingerit, Inc., 16–22 Hudson Street, New York 13, N. Y., valves for temperatures not exceeding 750° F.

Lewis Bolt & Nut Co., Minneapolis 14, Minn., bolts, studs and nuts.

Los Angeles Boiler Works, Los Angeles, Calif., welding fittings.

Miners Foundry & Supply Co., Nevada City, Calif., valves.

Refinery Piping & Equipment Co., Los Angeles, Calif., fabricated steel valves and fittings.

Texas Flange Co., 1400 Paige Street, Houston 3, Tex., flanges.

Wedgeplug Valve Co., Inc., Carondelet Building, New Orleans 12, La., steel valves and fittings.

WELDING ELECTRODES

Planett Welding Electrode Co., 200 South Dolan Street, Downey, Calif., Planett electrode No. 5 for all-position welding.

Manufacturer and description of equipment	Location apparatus may be used				Date of action
	Passenger and crew quarters and public spaces	Machinery-cargo and work spaces	Open decks	Pump rooms of tank vessels	
Nemco Electric Co., Seattle, Wash.—Continued.					—
Junction box and bracket type fixtures, watertight, drawing No. N–2128, rev. 1—Continued.					*1944*
Catalog No. B–257–G, 100-watt maximum	x	x	x		Apr. 12
Catalog No. J–605, 60-watt maximum	x				Do.
Catalog No. J–605–G, 60-watt maximum	x	x	x		Do.
Catalog No. J–606, 100-watt maximum	x				Do.
Catalog No. J–606–G, 100-watt maximum	x	x	x		Do.
Catalog No. B–656, 60-watt maximum	x				Do.
Catalog No. B–656–G, 60-watt maximum	x	x	x		Do.
Catalog No. B–657–G, 100-watt maximum	x	x	x		Do.
Catalog No. B–657, 100-watt maximum	x				Do.
Junction box type bulkhead fixtures, watertight, drawing No. N–2126, rev. 1:					
Catalog No. J–207, 60-watt maximum	x				Do.
Catalog No. J–207–G, 60-watt maximum	x	x	x		Do.
Catalog No. J–208, 100-watt maximum	x				Do.
Catalog No. J–208–G, 100-watt maximum	x	x	x		Do.
Catalog No. J–607, 60-watt maximum	x				Do.
Catalog No. J–607–G, 60-watt maximum	x	x	x		Do.
Catalog No. J–608, 100-watt maximum	x				Do.
Catalog No. J–608–G, 100-watt maximum	x	x	x		Do.
Wire guard for lighting fixtures, drawing No. N–2130, rev. 1					Do.
Bulkhead type fixtures, watertight, drawing No. N–2133, rev. 2:					
Catalog No. B–209, 60-watt maximum	x				Do.
Catalog No. B–209–B, 60-watt maximum	x	x	x		Do.
Catalog No. B–210, 100-watt maximum	x				Do.
Catalog No. B–210–G, 100-watt maximum	x	x	x		Do.
Catalog No. B–609, 60-watt maximum	x				Do.
Catalog No. B–609–G, 60-watt maximum	x	x	x		Do.
Catalog No. B–610, 100-watt maximum	x				Do.
Catalog No. B–610–G, 100-watt maximum	x	x	x		Do.
Work light, hand portable, watertight, catalog No. U–257, 100-watt maximum, drawing No. N–2138, rev. 1	x	x	x		Do.
Paragon Electric Co., Chicago, Ill.:					
Running light telltale and dimmer panel dripproof, 115 volts D. C., drawing No. A–255 revised	x	x			Mar. 17
Running light telltale and dimmer panel watertight, 115 volts D. C., drawing No. A–256, revised	x	x	x		Do.
Running light transfer switch panel, dripproof, drawing No. A–257, rev. 0	x	x			Do.
Semi-automatic running light telltale panel, drawing No. A–196, rev. 3	x	x			Apr. 6
Navigation light lockout and dimmer panel, 5 lockout and dimmer circuits and 1 lockout circuit, drawing No. A–243, rev. 2	x	x			Do.
Service Electric Mfg. Co., Boston, Mass.:					
Blackout switch, watertight, 125 volts, 15 amperes, drawing No. 104, rev. Feb. 12, 1944:					
Catalog No. 1013, single pole	x	x	x		Mar. 25
Catalog No. 1014, double pole	x	x	x		Do.
Catalog No. 1015, two circuit	x	x	x		Do.
Blackout switch, watertight, 125 volts, 15 amperes, catalog No. 1016, four circuit, drawing No. 107, rev. Feb. 12, 1944	x	x	x		Do.
Blackout switch, watertight, 125 volts, 15 amperes, drawing No. 108, rev. Feb. 12, 1944:					
Catalog No. 1033, single pole	x	x	x		Do.
Catalog No. 1034, two circuit	x	x	x		Do.
Blackout switch, watertight, 125 volts, 15 amperes, drawing No. 109, rev. Feb. 12, 1944:					
Catalog No. 1023, single pole	x	x	x		Do.
Catalog No. 1024, double pole	x	x	x		Do.
Catalog No. 1025, 2-circuit	x	x	x		Do.

MERCHANT MARINE LICENSES ISSUED DURING MARCH 1944

DECK OFFICERS

REGION	Master										Chief mate										Second mate									
	Ocean		Coast-wise		Great Lakes		B. S. & L.		Rivers		Ocean		Coast-wise		Great Lakes		B. S. & L.		Rivers		Ocean		Coast-wise		Great Lakes		B. S. & L.		Rivers	
	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R
Atlantic coast	58	41	....	24	....	4	10	30	....	4	90	13	1	6	....	....	3	4	....	....	181	8	1	5	....	....	....	....	....	....
Gulf coast	6	10	....	3	....	1	2	2	....	5	23	2	....	1	....	....	....	7	....	1	24	3	....	2	....	....	....	....	....	....
Great Lakes and rivers	1	....	....	2	13	41	1	....	5	21	....	1	....	1	....	2	....	4	3	7	....	1	....	....	....	....	....	....	....	....
Pacific coast	29	44	3	....	....	....	5	12	1	1	66	9	....	....	....	....	4	7	....	....	....	....	....	....	....	....	....	....	....	....
Total	94	95	3	29	13	46	18	44	6	31	179	25	1	8	....	2	7	22	3	8	272	18	1	7	....	....	....	....	....	....

REGION	Third mate										Pilots						Master mate				Total		
	Ocean		Coast-wise		Great Lakes		B. S. & L.		Rivers		Great Lakes		B. S. & L.		Rivers		Uninspected vessels high seas				Original	Renewal	Grand total
	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R			
Atlantic coast	433	19	....	1	....	....	....	1	....	....	....	5	46	97	4	7	....	....	....	....	827	269	1,096
Gulf coast	29	2	....	....	....	....	....	....	....	....	....	....	7	9	3	7	....	....	....	....	94	55	149
Great Lakes and rivers	....	....	....	....	....	....	....	....	....	....	72	61	7	9	53	30	....	....	....	....	155	180	335
Pacific Coast	104	5	1	....	....	....	....	....	....	....	....	1	20	51	4	4	....	....	....	....	304	140	444
Total	566	26	1	1	....	....	....	1	....	....	72	67	80	166	64	48	....	....	....	....	1,380	644	2,024

ENGINEER OFFICERS

Region	Chief engineer, steam				First assistant engineer, steam				Second assistant engineer, steam				Third assistant engineer, steam				Motor vessels								Uninspected vessels				Total		
	Ocean		Inland		Ocean		Inland		Ocean		Inland		Ocean		Inland		Chief engineer		First assistant engineer		Second assistant engineer		Third assistant engineer		Chief engineer		Assistant engineer		Original	Renewal	Grand total
	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R	O	R			
Atlantic coast	45	108	10	40	90	35	4	14	142	34	2	5	456	29	1	2	17	68	10	21	17	9	398	5	....	....	....	....	1,192	370	1,562
Gulf coast	12	19	....	7	23	8	....	2	17	5	....	....	12	3	....	....	13	14	4	4	3	....	14	1	....	....	....	....	98	62	160
Great Lakes and rivers	....	9	29	71	2	7	55	32	1	4	69	16	1	2	32	1	5	14	6	4	1	....	1	....	....	....	....	....	202	160	362
Pacific coast	19	39	....	8	61	14	1	1	78	10	....	....	105	5	....	....	3	22	4	6	5	5	94	3	....	....	....	....	370	113	483
Total	76	175	39	126	176	64	60	49	238	53	71	21	574	39	33	3	38	118	24	35	26	14	507	8	....	....	....	....	1,862	705	2,567

ORIGINAL SEAMEN'S DOCUMENTS ISSUED, MONTH OF MARCH 1944

Region	Continuous discharge book	Certificate of identity	A. B., green 3 years [1]	A. B., green 9 months emergency [1]	A. B., blue 18 months 12 months [1]	A. B., blue 6 months emergency [2]	A. B., blue 6 months emergency [3]	Lifeboat 12–24 months [4]	Lifeboat 6–12 months emergency [5]	Q. M. E. D. 6 months	Q. M. E. D. emergency	Radio operators	Certificate of service	Tankerman	Staff officer	Total
Atlantic coast	26	4,769	381	256	77	21	0	3,251	164	1,552	428	275	3,548	12	291	15,051
Gulf coast	59	817	90	28	11	1	0	628	13	159	88	17	648	38	24	2,621
Pacific coast	20	2,325	176	138	41	1	0	855	153	307	447	24	1,542	0	70	6,099
Great Lakes and rivers	2,749	201	33	23	22	33	0	31	34	68	72	1	2 956	13	3	6,239
Total	2,854	8,112	680	445	151	56	0	4,765	364	2,086	1,035	317	8,694	63	388	30,010

[1] Unlimited.
[2] Great Lakes, lakes, bays, and sounds.
[3] Tugs and towboats and freight vessels under 500 tons (miscellaneous).
[4] 12 months deck or 24 months other departments.
[5] 6 months deck or 12 months other departments.

WAIVERS OF MANNING REQUIREMENTS FROM 1 MARCH TO 31 MARCH 1944

Authority for these waivers contained in Navigation and Vessel Inspection Circular No. 31, dated 13 March 1943

Region	Number of vessels	Deck officers substituted for higher ratings	Engineer officers substituted for higher ratings	Able seamen substituted for deck officers	Ordinary seamen substituted for able seamen	Qualified members engine department substituted for engineer officers	Wipers or coalpassers substituted for qualified members of engine department	Wipers, coalpassers, or cadets substituted for engineer officers	Ordinary seamen or cadets substituted for deck officers	Tankermen substituted for engineer officers	Total
Atlantic coast	490	263	303	55	697	112	55	26	64	1	1,576
Gulf coast	49	20	19	4	85	10	7				145
Pacific coast	220	106	77	15	405	39	27	2	8		680
Great Lakes	8				2		6				8
Total	767	389	399	74	1,189	162	95	28	72	1	2,409

CREW SHORTAGE REPORTS FROM 1 MARCH TO 31 MARCH 1944

These reports submitted in accordance with Navigation and Vessel Inspection Circular No. 34, dated 1 May 1943

Region	Number of vessels	Ratings in which shortages occurred										Total
		Chief mate	Second mate	Junior third mate	Able seamen	Ordinary seamen	First engineer	Second engineer	Junior third assistant	Qualified member engine department	Wiper or coalpasser	
Atlantic coast	11			1	10	1		1	1			14
Gulf coast	5		1				2	2				5
Pacific coast	11	2				1		3		4	2	12
Great Lakes	1					1				1		2
Total	28	2	1	1	10	3	2	6	1	5	2	33

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