

PROCEEDINGS OF THE MERCHANT MARINE COUNCIL UNITED STATES COAST GUARD



The Printing of This Publication Has Been Approved by the Director of the Bureau of the Budget March 17, 1949

Vol. 6

May 1949

No. 5



MERCHANT MARINE COUNCIL

Published monthly at Coast Guard Headquarters, Washington 25, D. C., under the auspices of the Merchant Marine Council, in the interest of safety at sea. There are no restrictions on the republication of material appearing in this issue except for the cover picture.

Mention of source will be appreciated.

The Merchant Marine Council of the United States Coast Guard

Admiral JOSEPH F. FARLEY, U. S. C. G.
Commandant of the Coast Guard

Rear Admiral HALERT C. SHEPHEARD,
U. S. C. G., *Chairman*
Chief, Office of Merchant Marine
Safety, U. S. C. G.

Captain ALFRED C. RICHMOND,
U. S. C. G., *Member*
Chief, Planning and Control Staff,
U. S. C. G.

Captain ROY L. RANEY,
U. S. C. G., *Member*
Vice Chairman, Assistant Chief
Office of Merchant Marine Safety.

Captain KENNETH K. COWART,
U. S. C. G., *Member*
Assistant Engineer in Chief

Captain HENRY T. JEWELL,
U. S. C. G., *Member*
Chief, Merchant Vessel Personnel
Division, U. S. C. G.

Captain ROBERT A. SMYTH,
U. S. C. G., *Member*
Chief, Merchant Marine Technical
Division, U. S. C. G.

Captain EDWARD C. CLEAVE,
U. S. C. G., *Member*
Chief, Merchant Vessel Inspection
Division, U. S. C. G.

Mr. KENNETH S. HARRISON,
Chief Counsel, U. S. C. G.

Captain JOSEPH A. KERRINS,
U. S. C. G., *Secretary*

For each meeting two District Commanders and three Marine Inspection Officers are designated as members by the Commandant.

CONTENTS

	Page
Council Activities.....	94
Changing Weights in a Stranded Ship.....	95
Radar Phenomena.....	96
Licensed Operators for Shipboard Radar Stations.....	96
British Load Lines.....	97
Numbered and Undocumented Vessels.....	97
Lessons From Casualties:	
Another Lifeboat Dropped.....	98
Boat Fall.....	98
Appendix:	
Amendments to Regulations.....	99
Navigation and Vessel Inspection Circular 5-49.....	103
Equipment Approved by the Commandant.....	103
Merchant Marine Personnel Statistics.....	106
Investigating Units.....	108
Cover picture: The S. S. <i>Argentina</i> , courtesy the Moore-McCormick Lines.	
Distribution (SDL 37):	
A: a, b, c, d (2 ea.); remainder (1 ea.).	
B: c (14 ea.); g, l (5 ea.); f (4 ea.); e, h (3 ea.); d (2 ea.); remainder (1 ea.).	
C: All (1 ea.).	
D: All (1 ea.).	
E: m (1 ea.).	
List 141M.	

COUNCIL ACTIVITIES

The Commandant has directed that, on June 14, 1949, at 9:30 a. m. in room 4120, Coast Guard Headquarters, Washington, the Merchant Marine Council hold a public hearing on the proposed International Regulations for the Prevention of Collisions at Sea, 1948. These proposed Regulations may be found in the Department of State's Publication 3282, on the "International Conference on Safety of Life at Sea, April 23-June 10, 1948," which is obtainable from the Superintendent of Documents, Washington 25, D. C., for 55 cents a copy.

The new Regulations are intended to revise and modernize the International Regulations which, in this country, were enacted on August 19, 1890, and with some minor modifications, are still in effect. Proposals to accomplish this were formulated in the United States by a subcommittee of the U. S. Safety at Sea Committee, headed by Capt. R. F. Farwell, U. S. N. R. On this subcommittee sat representatives of government agencies, the maritime industry and the admiralty bar. The committee was guided in its work by the responses to a questionnaire on the present rules sent out by Captain Far-

well to a large list of seagoing personnel and others specifically interested.

At the London Safety Conference, held April 23 to June 10, 1948, representatives of other maritime countries discussed with our own delegation desirable changes in the International Regulations. The final result represents an agreement of all of the 30 countries represented at the conference. It does not follow, in all respects, the original United States proposals but the latter were substantially adopted in the main.

The recent ratification of the new Safety Convention does not affect these Regulations as they were not made part of the convention itself. The reason for this separation is that it is desirable to have the Safety Convention come into force as early as possible and affirmative action by 15 nations (of which 7 must be large ship-owning countries) will accomplish this. But a change in the basic Rules of the Nautical Road must be accepted by practically every maritime state and must come into effect at a specified moment for all the world's shipping, to avoid dangerous confusion. Accordingly, the Safety Conference recommended that the proposed Regulations should only

come into effect upon some date set after there was "substantial unanimity" as to their acceptance by other nations.

Acceptance by the United States must be determined by congressional action in approving the substitution of the new Regulations for those presently on the statute books. This action might take the form of writing the entire set of Regulations into law, or it might merely be an enabling act, authorizing the President to bring the rules into effect by

proclamation, in which case the rules themselves would appear as Statutes at Large.

The purpose of the hearing, therefore, is twofold: First, to determine whether the new Regulations are generally acceptable to the maritime industry and hence should be recommended to Congress for approval; and, second, in what form the necessary legislation should be drafted for submission to the appropriate committees of both Houses. The Commandant feels it necessary to point

out that amendments or alterations to the new Regulations cannot be considered at the hearing, since they would constitute unilateral action in modifying an agreement reached at an international conference and could only be considered at another such conference. The issue is the acceptance, or the rejection, *in toto*, of the proposed Regulations. It may also be pointed out that nothing in the new proposals will in any way affect the Inland, Great Lakes, or Western Rivers Rules.

Changing Weights in a Stranded Ship

"Marine Salvage and Its Many Branches" was the subject of a paper presented at the annual meeting of the Society of Naval Architects and Marine Engineers on November 11 and 12, 1948, by Rear Adm. William A. Sullivan, USN (Retired). The various classes of salvage work were ably presented by Admiral Sullivan who had extensive experience during World War II in the conduct of salvage operations in both the Atlantic and Pacific theaters. He discusses at some length the matters to be considered in changing of weights on a ship which has stranded. There has been excerpted from Admiral Sullivan's paper the following material which he has devoted to weight changing:

"It is obvious that the removal of cargo will aid the condition of a stranded ship materially. It appears hardly necessary to discuss this part of salvage. However, there is perhaps no other aspect of salvage that has been more mismanaged. Salvage records report many cases of ships which should have been refloated but which, because of ill-considered weight removal, became constructive total losses. Other cases are recorded where the salvage work required was made more difficult and more expensive because cargo was removed or jettisoned that should have been kept on board. Examples of this waste of time and labor and of the unnecessary destruction of valuable property may even be found, if a critical analysis is made, in some reports of operations that have been published as examples of efficiently conducted operations.

"It is not difficult to appreciate the causes of this misdirected effort. When a ship strands, there is apt to be some confusion and there is a natural urge for action. Invariably, there are present some who desire to exhibit their ability in a crisis, and the easiest way to show what they can do is to start getting rid of cargo and to discharge fuel and water over the side. This often is done before any intelli-

gent survey has been made of the situation, before there is any appreciation of the amount of buoyancy lost, or of whether the ship is aground along the entire length of the keel or on only one end. Little record is made of the weight removed, and the need of considering the effect of weight removal on conditions of trim, list, and stability is entirely overlooked. As the work may be undertaken at low tide, adverse effects upon trim or list will not be readily apparent until the tide rises or the ship recovers enough buoyancy to become lively.

"The removal of weight can be of the greatest value in helping to refloat a stranding. There is no intention to belittle this fact, but weights should not be discharged until the situation of the ship is understood.

"The amount of buoyancy lost in a stranding can be determined quickly by the loss suffered in mean drafts. The change in trim will be indicated by the changes in drafts forward and aft. This together with soundings taken at intervals along the rail will give some indication of the contact between the keel and the bottom. These data, together with an estimate of the amount of rise and fall of tide which may be expected, will show approximately how much cargo should be removed to refloat the ship and from what holds it should be taken.

"However, no actual work should be commenced until the position of the ship is secure. Some positive means must be provided to keep the vessel from creeping further ashore or from swinging around and broaching. If it appears possible to refloat the vessel upon the next high tide, and if the swell about the ship is not appreciable, a tug might be used to pull on the ship while this unloading is being done. Otherwise, it will be better to postpone unloading operations until the stern can be secured properly by cables under strain to heavy anchors placed to seaward. The standard sets of beach gear are excellent for this purpose and, if any great amount of un-

loading is considered necessary, it should be deterred until beach gear is available.

"Whenever the removal of weight is under consideration, the effect of weight removal upon conditions of trim, list, and stability must be remembered. Some sort of a plan should be developed showing the weight that is to be removed and its location in the ship, and some attention should be given to the sequence with which the work is to be done.

"Consideration of trim should receive particular attention when plans for lightening the ship are developed, for it is quite possible to remove weights that would cause the ship to bear more heavily upon the ground, rather than less so. Some salvors follow an old-time maxim in doing this work, which says 'to lighten the heavy end of the ship.'

"There are cases where the situation will be improved by the addition of more weight. When this is found necessary, water can be taken on board as ballast. Such a case may be found when a ship runs its bow on a rock but is afloat elsewhere. It will be most desirable to lighten and trim the ship so as to lessen the forward draft sufficiently to permit the ship to float free. It may not be possible to do this by weight removal alone, even if all possible weight which was not removed is shifted aft. Perhaps it can be done by flooding void spaces aft. Perhaps it will be found necessary to flood a hold compartment aft also. This will cause undesirable free surface conditions, and the risk incurred in flooding a hold space should be thoroughly evaluated before it is done. However, where shaft alley structures pass through hold spaces it is often possible to flood them to a level below the level of the top of the shaft alley without incurring any serious loss in stability by so doing.

"When ships are aground on rock, serious difficulties will be encountered in dragging or jacking them off. It will be much easier, if they can be lightened sufficiently to float free, even

if the work of lightening them involves considerable labor and expense. In such a situation, parts of the ship's structure and some of its machinery installation might be removed, as well as all of its cargo, stores, and portable equipment.

"If a ship bears throughout its length on rock, it will be preferable if its weight on the rock is more or less equally distributed when an attempt is to be made to free it by dragging.

"This same rule of an equal distribution of weight is followed generally when ships are aground their entire length on sand or gravel. However, if the ship is to be dragged astern, it is considered advisable to lighten the stern sufficiently to break contact between the ground and the bottom of the sternpost by at least a few inches, so that the stern will not be apt to act as a plow on the bottom as the ship is dragged aft.

"Some salvors believe it advisable, when ships are aground over their entire length on a sand or gravel bottom, particularly if the sand and gravel is loosely packed, to lighten the ship aft as much as practicable, even though they may have succeeded already in bringing the stern afloat. They believe that, if they can trim the ship by the bow, they can throw the center of the ship's pressure on the ground far forward so that only a small portion of the bottom of the ship remains in contact with the ground. They do this to increase the unit intensity of pressure on the bottom, even though in doing it they somewhat increase the total pressure on the bottom. They believe, however, and there is reason to believe that they are right, especially if the bottom has any 'quick' properties, that it will take a smaller pull to drag the ship away when in this condition than otherwise.

"Stability considerations are not apt to cause many difficulties in the salvage of the ordinary seagoing ship when it is stranded. It is only when it comes afloat that difficulties in this direction may arise, and such difficulties are more apt to happen in ships that have suffered partial flooding which has not been corrected, or in connection with large passenger ships with a high position of the center of gravity. When large passenger ships are aground, care should be taken if they are to be lightened by the removal of weight, to see that some weight high up is removed to compensate for the water, fuel, and stores which may be discharged.

"Small ships with very fine lines and a good rise of floor may develop a tendency to fall over at low tide, if they were stranded at high water. In these circumstances ships should be

ballasted, and, if possible, shored upright.

"In most cases undertaken by organized salvage facilities the work of lightening the ship proceeds apace with the work of rigging beach gear. Often, before any considerable portion of the cargo has been removed, a sufficient amount of beach gear has been rigged to develop the pull needed to drag the ship and its remaining cargo from the strand.

"Water ballast is often used to pin down stranded ships to keep them from being shifted or slewed by a swell or in heavy weather. It is often used to weigh down ends of stranded vessels that have remained afloat to prevent damage by pounding.

"This ballast can be pumped out when an attempt is made to float the ship; if the attempt is not successful, the ballast can be pumped back in. Generally, this ballast is placed in double bottoms and in void spaces, but if the stranding is subject to bad conditions of swell, or if heavy weather threatens, hold spaces should be flooded as well.

"Salvage pumps, if they are available, can be used to handle this ballast. If they are not available, the ship's own pumps can be used; if these cannot be operated, holes can be cut in the ship's side so that the hold spaces can flood freely at high water. If burning gear is not available for this work, small charges of explosives can be used.

"When salvage pumps are used for purposes of ballasting, they sometimes are placed on stages hung over the rail and well above the waterline. Suctions are led directly to the sea and the discharge pipes are led into the ship through airports or through holes cut for this purpose. When it is necessary to pump the ballast water out of the ship, the suction and discharge pipes can be reversed by shifting them on the pump connections."

LICENSED OPERATORS FOR SHIPBOARD RADAR STATIONS

The Federal Communications Commission on April 6, 1949, issued an order that in effect extended the waiver of the provision of section 318 of the Communications Act of 1934, as amended, which requires licensed radio operators for ship radar stations licensed in the Ship Service. A previous FCC order provided for the waiver of the requirement of section 318 for the period December 15, 1947, to April 15, 1949. The order of November 10, 1948, waives the requirement for the period from November 15, 1948, to the effective date of permanent rules adopted by the Commission governing operator license requirements for ship radar stations li-

censed in the Ship Service, or to April 15, 1949, whichever is earlier. The Federal Communications Commission is now preparing the permanent rules mentioned above.

Part of the text of the FCC order of April 8, 1949, is as follows:

IT IS ORDERED, That, effective April 15, 1949, the provisions of section 318, aforementioned, are hereby waived insofar as such provisions require any person to hold a radio operator license issued by this Commission in order to operate ship radar stations licensed by this Commission in the Ship Service, provided that this waiver shall extend only to the normal operation of such radar stations on board ship and shall not be construed to permit unlicensed personnel to make any adjustments or to do any servicing or maintenance that may affect the proper operation of the station; *Provided further*, That this waiver shall not be construed to affect in any way the responsibility of the station licensee for the proper operation of the station; *And provided further*, That the waiver herein ordered may, in the discretion of the Commission and without hearing, be changed or canceled by order of the Commission, and shall in no event extend beyond the effective date of permanent rules adopted by the Commission governing operator license requirements for ship radar stations licensed in the Ship Service, or beyond November 15, 1949, whichever is earlier.

RADAR PHENOMENA

The Master of a merchant vessel recently reported a phenomenon observed on his ship's radar which should be of interest to other mariners using radar.

The ship was running at night up the coast to New York. When 33 miles off Long Branch, N. J., the weather was misty with light rain, visibility 4 to 5 miles, wind south-southwest, force 5 to 6, barometer 29.74, air temperature 50°, and water temperature 48°. At the time, the radar was operating on a range of 15 miles.

A formation, which resembled in shape a strip of land around Long Branch, appeared on the radar scope, at a range of 15 miles and in the direction of Long Branch. However, the range of the formation decreased at a much greater rate than the speed of the vessel. The formation passed across the scope in a southeasterly direction and eventually disappeared. The Master displayed his prudence by altering his course. During all this time, the formation was carefully observed in the scope until it disappeared.

Apparently the radar picked up a local weather disturbance. This happens quite frequently and many persons having considerable experience with radar have observed similar phenomena from time to time. That this particular weather disturbance, or cold front, appeared on the approx-

imate bearing of the nearest land and closely approximated it in configuration can be ascribed only to coincidence. Of course, weather phenomena of sufficient density to be observed by radar can appear on any bearing and range, can have any physical shape, and may travel at widely different and generally unpredictable speeds

and directions. Had the Master in this case switched his radar to the 50-mile range, he might have picked up the true coast line as well as the weather formation and should have had no difficulty in distinguishing between them.

The whole subject of radar, as a means of observing weather effects, is

complex at best. Radar wave length, size of water droplets, air and sea temperatures, humidity and several other factors all combine to make this study in itself. For the modern mariner, however, it is important only to know that most present day commercial shipboard radars operate on frequencies which detect local weather phenomena under certain conditions. When such formations are detected, they can then be identified by observation of relative movement and appearance together with the ever necessary knowledge of your ship's position and will in almost all cases furnish ample information on which to base an accurate decision. An experienced deck officer should be able to differentiate between the radar picture of weather formations and solid objects.

When it has been determined that a given formation is a squall, cold front, or other phase of climatic condition, it should be kept under close scrutiny because of the possibility that the weather disturbance may obscure another vessel in the same way that excessive sea return from choppy water may obscure a small boat or buoy.

BRITISH LOAD LINES

The Lloyd's Register of Shipping and the British Corporation Register of Shipping and Aircraft have been merged under the title "Lloyd's Register of Shipping" with the subtitle "United with the British Corporation Register." Load line certificates issued by the British Corporation up to and including March 25, 1949, will remain valid until their normal expiration date and the marks will remain unaltered on the ships' sides. Load line certificates issued after March 25, 1949, will be in the name of Lloyd's Register of Shipping and the marks on the ships' sides will be altered as soon as practicable to "LR" where they were previously marked "BC." A letter was received by the Commandant, United States Coast Guard, from the Secretary of the British Corporation Register of Shipping and Aircraft, 14 Blythswood Square, Glasgow, C. 2, dated March 25, 1949, reference 3, which describes this merger and reads as follows:

"I have to inform you that Lloyd's Register of Shipping and the British Corporation Register of Shipping and Aircraft have now made an agreement by which the two societies will be merged under the title of 'Lloyd's Register of Shipping' with the subtitle 'United with the British Corporation Register.'"

"In accordance with this agreement, the following arrangements have been made:

NUMBERED AND UNDOCUMENTED VESSELS

The table below gives the cumulative total of numbered but undocumented vessels in each Coast Guard district by customs ports for the quarter ending March 31, 1949. Generally speaking, undocumented vessels are those machinery-propelled vessels of less than 5 net tons engaged in trade which by reason of tonnage are exempt from documentation, and those

motorboats or motor vessels of less than 16 gross tons which are not subject to documentation as yachts, together with motorboats and motor vessels used exclusively for pleasure purposes which are 16 gross tons or over and not so documented. These vessels are required to be numbered under the provisions of the act of June 7, 1918, as amended (46 U. S. C. 288).

Coast Guard district	Customs port	Port Total	Total
1. (Boston)	(4) Boston	14,830	32,430
	(1) Portland, Maine	10,674	
	(2) St. Albans	2,788	
	(5) Providence	4,118	
	(45) St. Louis	17,218	
2. (St. Louis)	(12) Pittsburgh	2,663	43,460
	(34) Pembina	77	
	(35) Minneapolis	6,950	
	(40) Indianapolis	4,105	
	(42) Louisville	3,911	
	(43) Memphis (part)	7,966	
	(44) Vacant (Des Moines)	87	
	(46) Omaha (part)	483	
3. (New York)	(10) New York	46,403	75,652
	(6) Bridgeport	8,505	
	(11) Philadelphia	20,744	
5. (Norfolk)	(14) Norfolk	15,497	45,524
	(13) Baltimore	21,821	
	(15) Wilmington, N. C.	8,206	
7. (Miami)	(18) Tampa (part)	21,989	27,501
	(16) Charleston	1,813	
	(17) Savannah	3,239	
	(49) San Juan	390	
	(51) St. Thomas	70	
8. (New Orleans)	(20) New Orleans	19,116	43,639
	(18) Tampa (part)	824	
	(19) Mobile	7,679	
	(21) Port Arthur	3,885	
	(22) Galveston	10,123	
	(23) Laredo	1,930	
	(24) El Paso	6	
	(43) Memphis (part)	76	
9. (Cleveland)	(41) Cleveland	13,932	89,905
	(7) Ogdensburg	6,565	
	(8) Rochester	8,584	
	(9) Buffalo	8,117	
	(36) Duluth	4,084	
	(37) Milwaukee	12,375	
	(38) Detroit	28,236	
	(39) Chicago	8,012	
11. (Long Beach)	(27) Los Angeles	8,329	10,058
	(25) San Diego	1,647	
	(26) Nogales	82	
12. (San Francisco)	(28) San Francisco	19,980	19,980
	(47) Denver		
13. (Seattle)	(30) Seattle	31,801	48,851
	(29) Portland, Oreg.	9,485	
	(31) Juneau	6,539	
	(33) Great Falls	1,026	
	(46) Omaha (part)		
14. (Honolulu)	(32) Honolulu	4,137	4,137
Grand total			441,137

"1. Ships which are already classed with either society will retain that class so long as the owners desire and the ships comply with the requirements of the society concerned or with unified rules when issued.

"2. Ships being built to the rules and classification of Lloyd's Register of Shipping or the British Corporation will be completed in accordance

with the rules and practices of the society specified.

"3. Ships may be specified to be built for classification according to either set of rules until unified rules are published.

"4. Load Line Certificates issued by the British Corporation up to and including 25 March 1949, will remain valid until their normal date of expiry,

and the marks will remain unaltered on the ships' sides.

"5. Load Line Certificates issued after 25 March 1949, will be in the name of Lloyd's Register of Shipping and the marks on the ships' sides will, as soon as opportunity serves, be altered to LR where they were previously BC."

LESSONS FROM CASUALTIES

ANOTHER LIFEBOAT DROPPED

The purpose of a lifeboat is to save life. But a lifeboat may become an instrument of death or injury through the negligence of one of the boat crew. This is well illustrated by a recent casualty that occurred during boat drill on a passenger vessel. A lifeboat was lowered to the promenade deck. The lifeboatman in charge, an unlicensed member of the deck department, ordered the assigned seamen of the boat crew to man the boat. The lifeboatman followed the men into the boat and shipped the tiller with the assistance of another seaman. The seamen in the boat busied themselves with arranging the equipment preparatory to getting underway when the boat should become waterborne. After the tiller was shipped, the boat releasing lever was inadvertently tripped and the boat dropped approximately 30 feet, striking the water with great force. All except one of the occupants of the boat were so severely injured that they were unable to move from positions into which they had fallen between the thwarts in the bottom of

the boat. More than half of those in the boat sustained fractured vertebrae.

The releasing gear was of the conventional type that releases both ends of the lifeboat simultaneously. An inspection of the releasing gear after the casualty revealed that it was in good mechanical working order. There was no failure of material—this was a failure of personnel.

If the lifeboatman tripped the releasing gear lever before the boat was waterborne, such act is incomprehensible. He held a Lifeboatman's Certificate. He was believed to be familiar with his assignment as he had participated in many lifeboat drills. He was thought to be cognizant of the importance of tripping the releasing gear lever at the proper time.

It is impossible entirely to eliminate human errors. Nevertheless, efforts should be made to reduce such errors to the absolute minimum. The following measures are recommended to reduce lifeboat casualties of this type:

1. Great care should be exercised in selecting personnel to be placed in charge of lifeboats. They should be competent men who remain cool in an emergency. Where possible they should be licensed deck or engineering officers.
2. After a person is assigned to take charge of a lifeboat, it is his obligation to thoroughly familiarize himself with his duties. He must learn what to do, when to do it, and what not to do. Before the lifeboat is swung out the lifeboatman should check the releasing gear to see that the releasing handle is in the locked safety position and that the lifeboat "goose-neck" hooks are securely attached to the fall block links supporting the lifeboat on the forward and aft boat falls. Above all, the releasing gear lever should never be tripped until the boat is waterborne or nearly so.
3. Drills should be carried out precisely as though an emergency existed. Boats should be swung out, lowered into the water, and all hands should be instructed in the proper method of launching and handling the boats by

actually operating the boats in the water.

4. The releasing gear lever should be painted red with white stripes. A warning sign giving notice of the danger of tripping the lever prematurely should be posted near the releasing gear assembly. It is suggested that the sign read as follows: **WARNING—DO NOT TRIP THIS LEVER UNTIL BOAT IS WATERBORNE.**

BOAT FALL

A recent personnel casualty brings to mind the story about the artistic window washer who finished a window on a high building and then stepped back to admire his work. The story has an element of humor. But a seaman on a vessel falling backward from the boat deck to the deck below and seriously injuring himself is not funny.

The vessel was making a sea passage in clear, calm weather. The seaman was ordered to remove two cans of water from No. 2 lifeboat which was stowed on the forward boat deck. The boat deck ended just abaft No. 2 lifeboat with a fall of 23 feet to the main deck. A two-course railing at the after end of the boat deck extended athwartships from the house to a point on the keel line of No. 2 lifeboat extended aft. The water cans in the boat were covered with a rust-preventing grease. In removing the cans the seaman's hands became greasy. To secure the lifeboat cover he stood on the boat deck abaft the lifeboat and outboard of the railing and heaved aft on a boat cover lashing. His greasy hands slipped and he fell backward from the boat deck to the main deck below, sustaining serious injuries.

This accident may have been prevented if the railing had been extended to the ship's side. However, the absence of a railing at the place of the fall cannot be said to be the cause of the accident.

The cause was the failure of the seaman to foresee what might happen under the circumstances. It has been said that to govern is to foresee. This maxim is applicable to governing one's



self as much as to governing a nation. To govern one's self safely one must think and foresee the probable and possible effects of one's acts.

In the situation described above the seaman should have realized that he did not have the protection of the railing, that if the boat cover lashing parted when he was heaving on it he would fall backward, and, most importantly as it turned out, that his greasy hands might slip on the lashing causing him to fall backward.

"It is not hard to be safe. There is no mystery about either accident causes or accident prevention. While physical conditions are sometimes hazardous, no accident actually occurs until some person fails to REC-

OGNIZE unsafe conditions and to act accordingly.

"Sometimes this failure is due to insufficient knowledge of the job, but more often it is due to foolish chance-taking or inattention.

"Whatever your job, SAFETY requires constant attention because conditions are always changing. Nothing can be taken for granted, everything must be checked and rechecked.

"ALERTNESS and AWARENESS, together with a genuine desire to do your job correctly, are the things which will assure you of freedom from injury under any and all conditions."

—Safety Review—U. S. Navy.



APPENDIX

Amendments to Regulations

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

[CGFR 49-10]

PILOT RULES AND NAVIGATION REQUIREMENTS FOR GREAT LAKES, ST. MARYS RIVER, MICH., AND WESTERN RIVERS

Notices regarding proposed changes in the lights for barges, canal boats, scows, and other vessels of nondescript type not otherwise provided for, when being towed by being pushed ahead of a steam vessel while navigating on Great Lakes waters, were published in the Federal Register dated February 26 and March 12, 1949, 14 F. R. 898, 1128. A notice regarding proposed changes for visual signals at lookout stations, visual signals on vessel aground in channel, and sound signal for a vessel aground in a channel during good visibility, on the St. Marys River, as well as a proposed change in § 95.33, regarding lights for barges temporarily operating within or without Western Rivers to limit its application, was published in the Federal Register dated March 12, 1949, 14 F. R. 1128. In accordance with these notices a public hearing was held by the Merchant Marine Council on March 29, 1949, at Washington, D. C.

The purpose of the amendment for pusher tows on Great Lakes waters (§ 90.19a) is to specifically prescribe such lights which are not presently covered by regulations. The purpose of the amendments in the navigation regulations for the St. Marys River,

Mich., regarding visual signals at lookout stations, visual signals on a vessel aground in a channel and sound signal for a vessel aground in a channel (§§ 92.07 (b), 92.10, and 92.11) is to make the masters of vessels responsible for determining the passability of the channel when another vessel is aground in the channel and to reduce the distance between the light signals for a vessel aground from six feet to three feet so that the provisions in § 92.10 are the same as the provisions of Rule 30, subparagraph (c), in Public Law 448, 80th Congress.

These amendments are to be effective on and after the date of publication in the Federal Register. The effective date requirement in section 4 (c) of the Administrative Procedure Act (5 U. S. C. 1003) in connection with the amendments in this document is hereby found to be contrary to the public interest because the 1949 navigation season on the Great Lakes is starting and incorporation of the equipment changes necessary as well as instructions for personnel operating the vessels can be more easily carried out at this time rather than awaiting the statutory period and then requiring that signals be changed.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405, as amended, and section 101 of Reorganization Plan No. 3 of 1946, 46 U. S. C. 1, 375, as well as the statutes cited with the regulations below, the following amendments to the regulations are prescribed:

Subchapter E—Navigation Requirements for the Great Lakes and St. Marys River

PART 90—PILOT RULES FOR THE GREAT LAKES

Part 90 is amended by adding a new § 90.19a, to follow § 90.19, reading as follows:

§ 90.19a *Lights for canal boats towed by being pushed ahead.* When a tow of one or more canal boats is towed by being pushed ahead of a steam vessel such tow shall carry a green light on the starboard side and a red light on the port side so placed that they mark the tow at its maximum projection to starboard and port, respectively, and may carry an amber light at the extreme forward end of the tow as near the centerline as it is practicable to carry such light. The term "canal boats" as used in this section shall be construed to include barges, scows, and other craft of nondescript type not otherwise provided for by statute or regulations in this part. The amber light described shall show an unbroken light over an arc of the horizon of twenty points of the compass, so fixed as to throw the light ten points on each side, namely, from right ahead to two points abaft the beam on either side, and be of such a character as to be visible at a distance of at least three miles. The colored side lights shall be fitted with inboard screens, so as to prevent them from being seen across the bow, and of such a character as to be visible on a dark night, with a clear atmosphere, at a distance of at least 2 miles, and so constructed as to show a uniform and unbroken light over an arc of the horizon of 10 points of the compass.

and so fixed as to throw the light from right ahead to 2 points abaft the beam on either side (secs. 1, 3, 28 Stat. 646, as amended, 649, as amended, Pub. Law 448, 80th Cong.; 33 U. S. C. 243, 256).

PART 92—ANCHORAGE AND NAVIGATION REGULATIONS; ST. MARYS RIVER, MICH.

1. Section 92.07 (b) is amended to read as follows:

§ 92.07 Visual signals at lookout stations. * * *

(b) *Channel partially obstructed.* Indicated by a red ball over a white ball by day, a red light over a white light by night, hoisted vertically about 6 feet apart (Sec. 1, 29 Stat. 54, as amended; 33 U. S. C. 474).

2. Section 92.10 is amended to read as follows:

§ 92.10 Visual signals on vessel aground in channel. A vessel aground in a dredged channel shall carry from sunset to sunrise in addition to the white light or lights prescribed for a vessel at anchor, two red lights hoisted vertically not less than 3 feet apart, in such position and height as to be readily visible to vessels bound up and down the channel (Sec. 1, 29 Stat. 54, as amended; 33 U. S. C. 474).

3. Section 92.11 is amended to read as follows:

§ 92.11 Sound signal for a vessel aground in a channel. A vessel aground in a channel shall sound several short and rapid blasts of her whistle, not less than five, upon the approach of another vessel bound up or down the channel. If the approaching vessel cannot pass with safety, she shall stop and make proper dispositions to avoid fouling the grounded vessel, and shall upon the approach of another vessel coming up astern sound the same signal. Should additional vessels approach from that same direction, it shall be the duty of the last vessel in line to sound this signal. In times of low visibility, the signal described herein shall be in addition to the prescribed fog signal (Sec. 1, 29 Stat. 54, as amended; 33 U. S. C. 474).

Subchapter F—Navigation Requirements for Western Rivers

PART 95—PILOT RULES FOR WESTERN RIVERS

Section 95.33 is amended to read as follows:

§ 95.33 Lights for barges temporarily operating within or without Western Rivers. Nothing in §§ 95.29 and 95.31 shall be construed as compelling barges being towed, when passing through any waters coming

within the scope of any regulation where lights for barges are different from those of the waters whereon such barges are usually employed, to change their lights from those required on the waters from which their trip begins or terminates; but should such barges engage in local employment on waters requiring different lights from those where they are customarily employed, they shall comply with the local rules where employed: *Provided*, That such barges (including canal boats) being towed on the Great Lakes and their connecting waters and the St. Marys River shall comply with the rules prescribing lights for craft being towed on such waters (Sec. 1, 3, 28 Stat. 646, as amended, 649 as amended, sec. 2, 30 Stat. 102, as amended, sec. 4233A, Pub. Law 544, 80th Cong.; 33 U. S. C. 157, 243, 256).

Dated: April 12, 1949.

J. F. FARLEY,
Admiral, U. S. Coast Guard,
Commandant.

[F. R. Doc. 49-2953; Filed, Apr. 15, 1949;
8:51 a. m. Apr. 16, 1949, 14 F. R. 1846]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 49-9]

**PART 10—LICENSING OF OFFICERS AND
MOTORBOAT OPERATORS AND REGIS-
TRATION OF STAFF OFFICERS**

**REGISTRATION OF STAFF OFFICERS; HOSPI-
TAL CORPSMAN, FIRST CLASS**

A change in the rating structure of the Navy, Coast Guard, and Maritime Service has changed the rating "pharmacist's mate, first class" to "hospital corpsman, first class." In order that persons will not be discriminated against, the rating "hospital corpsman, first class" is inserted in § 10.25-9 (a) (6), covering the experience requirements for a "junior assistant purser and pharmacist's mate." In accordance with the Administrative Procedure Act (60 Stat. 237, 5 U. S. C. 1001 et seq.), notice of proposed rule making, public procedure thereon, and publication thirty days prior to its effective date are found to be contrary to the public interest in that this regulation imposes no new experience requirement for "junior assistant purser and pharmacist's mate."

By virtue of the authority vested in me as Commandant, United States Coast Guard, by section 7, act of August 1, 1939 (53 Stat. 1147, 46 U. S. C. 247), and section 101 of Reorganization Plan No. 3 of 1946 (60 Stat. 1097, 46 U. S. C. 1), the following amend-

ment to the regulations is prescribed, which shall become effective on the date of publication of this document in the Federal Register:

§ 10.25-9 Experience requirements.

(a) * * *

(6) *Junior assistant purser and pharmacist's mate.* A rating of at least Pharmacist's Mate, First Class, or Hospital Corpsman, First Class, in the U. S. Navy, U. S. Coast Guard, U. S. Maritime Service, or an equivalent rating in the U. S. Army (not less than Technical Sergeant, Medical Department, U. S. A.), and a period of service of at least 1 month in a U. S. Naval, U. S. Marine, or U. S. Army Hospital (Sec. 7, 53 Stat. 1147; 46 U. S. C. 247).

Dated: April 4, 1949.

J. F. FARLEY,
Admiral, U. S. Coast Guard,
Commandant.

[F. R. Doc. 49-2743; Filed, Apr. 8, 1949;
8:57 a. m.; Apr. 9, 1949, 14 F. R. 1708]

**MOTORBOAT OPERATORS' EXAMINATIONS;
EXAMINATIONS FOR CERTIFICATES OF
EFFICIENCY OR SERVICE; ELECTRICAL
CONTROL OF VENTILATION SYSTEMS
ON MERCHANT VESSELS**

[CGFR 49-21]

A notice regarding proposed changes in the requirements for professional examinations to obtain licenses as motorboat operators, proposed changes in requirements for applicants for certificates of service or efficiency, other than for entry ratings, and proposed changes in the electrical control of ventilation systems on passenger vessels was published in the Federal Register, dated February 26, 1949 (14 F. R. 898), and a public hearing was held by the Merchant Marine Council on March 29, 1949, at Washington, D. C.

The purpose for canceling the exemption for an applicant for a motorboat operator's license who is not able to read or write, if he is qualified in all other respects and possesses extensive experience in the operation of small vessels, is to promote safety. Many written regulations, recommended practices, constructions, safety hints, etc., are being distributed to motorboat operators for their guidance. An operator's inability to read may result in his ignorance of practices essential to safety.

The purpose of the amendments regarding English language requirements for applicants for certificates of service or efficiency, other than for entry ratings, is to improve safety of life at sea, and will require future applicants for ratings as able seaman, lifeboatman, qualified member of engine department, and tankerman to be able to speak and understand the

English language, and that any examination conducted in connection therewith will be given only in the English language.

The purpose of the amendment regarding the electrical control of ventilation systems on passenger vessels is that present requirements have specific reference to the control of machinery space ventilation from the fire control room or wheelhouse, which may prove to be hazardous, and further that such location of said control is unnecessary.

These amendments shall become effective ninety days after date of publication of this document in the Federal Register, except for the amendment to 46 CFR 144.25 (j), which shall become effective upon date of publication in the Federal Register because it is a relaxation from present requirements.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405, as amended, and section 101 of Reorganization Plan No. 3 of 1946, 46 U. S. C. 1, 375, as well as the statutes cited with the regulations below, the following amendments to the regulations are prescribed:

Subchapter B—Merchant Marine Officers and Seamen

PART 10—LICENSING OF OFFICERS AND MOTORBOAT OPERATORS AND REGISTRATION OF STAFF OFFICERS

SUBPART 10.20—MOTORBOAT OPERATORS' LICENSES

Section 10.20-5 (c) is amended to read as follows:

§ 10.20-5 Professional examinations.

(c) If the applicant has operated motorboats under the license issued under the act of June 9, 1910, he shall be held to possess the required experience but must qualify in all other respects (sec. 17, 54 Stat. 166, as amended; 46 U. S. C. 526p).

PART 12—CERTIFICATION OF SEAMEN

SUBPART 12.05—ABLE SEAMEN

1. Section 12.05-3 (a) is amended by deleting the word "and" from the end of subparagraph (3), by changing the period at the end of subparagraph (4) to a semicolon, and by adding the word "and" immediately thereafter, and by adding the following new subparagraph (5):

§ 12.05-3 General requirements.

(a) * * *
(5) Be able to speak and understand the English language as would be required in the rating of able seaman and in an emergency aboard ship (R. S. 4417a, 4451, as amended,

sec. 13, 38 Stat. 1169, 49 Stat. 1544, 1936, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 643, 672, 689, and 50 U. S. C. 1275).

2. Section 12.05-9 (b) is amended by changing the first sentence to read as follows:

§ 12.05-9 Examination and demonstration of ability.

(b) The oral or written examination shall be conducted only in the English language and shall consist of questions regarding: * * * (R. S. 4417a, 4451, as amended, sec. 13, 38 Stat. 1169, 49 Stat. 1544, 1936, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 643, 672, 689, and 50 U. S. C. 1275).

SUBPART 12.10—LIFEBOATMAN

3. Section 12.10-3 is amended by adding a new paragraph (b), reading as follows:

§ 12.10-3 Service or training requirements.

(b) An applicant, to be eligible for certification as lifeboatman, shall be able to speak and understand the English language as would be required in the rating of lifeboatman and in an emergency aboard ship (R. S. 4417a, 4488, as amended, 49 Stat. 1544, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 481, and 50 U. S. C. 1275).

4. Section 12.10-5 (b) is amended by changing the first sentence thereof to read as follows:

§ 12.10-5 Examination and demonstration of ability.

(b) The oral examination shall be conducted only in the English language and shall consist of questions regarding: * * * (R. S. 4417a, 4488, as amended, 49 Stat. 1544, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 481, and 50 U. S. C. 1275).

SUBPART 12.15—QUALIFIED MEMBER OF ENGINE DEPARTMENT

5. Section 12.15-3 is amended by adding a new paragraph (c), reading as follows:

§ 12.15-3 General requirements.

(c) An applicant, to be eligible for certification as qualified member of the engine department, shall be able to speak and understand the English language as would be required in the rating of qualified member of the engine department and in an emergency aboard ship (R. S. 4417a, 49 Stat. 1544, 1936, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 672, and 689, 50 U. S. C. 1275).

6. Section 12.15-9 (a) is amended to read as follows:

§ 12.15-9 Examination requirements. (a) Applicants for certification as qualified members of the engine department in the ratings of oiler, watertender, fireman, deck engineer, refrigerator engineer, junior engineer, electrician, and machinist shall be examined orally or in writing and only in the English language on the subjects listed in paragraph (b) of this section. The applicant's general knowledge of the subjects must be sufficient to satisfy the examiner that he is qualified to perform the duties of the rating for which he makes application. * * * (R. S. 4417a, 49 Stat. 1544, 1936, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 672, and 689, 50 U. S. C. 1275).

SUBPART 12.20—TANKERMAN

7. Section 12.20-1 is amended by adding a new paragraph (d), reading as follows:

§ 12.20-1 General requirements.

(d) An applicant, to be eligible for certification as tankerman, shall be able to speak and understand the English language as would be required in the rating of tankerman and in an emergency aboard ship (R. S. 4417a, 49 Stat. 1544, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, and 50 U. S. C. 1275).

8. Section 12.20-5 is amended to read as follows:

§ 12.20-5 Examination requirements.

Any applicant for certification as tankerman must prove to the satisfaction of the Coast Guard by an oral or written examination conducted only in the English language that he is familiar with the general arrangement of cargo tanks, suction and discharge pipe lines and valves, cargo pumps and cargo hose, and has been properly trained in the actual operation of cargo pumps, all other operations connected with the loading and discharging of cargo, and the use of fire extinguishing equipment. (R. S. 4417a, 49 Stat. 1544, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, and 50 U. S. C. 1275).

Subchapter M—Construction or Material Alteration of Passenger Vessels of the United States of 100 Gross Tons and Over Propelled by Machinery

PART 144—CONSTRUCTION OR MATERIAL ALTERATION OF PASSENGER VESSELS OF THE UNITED STATES OF 100 GROSS TONS AND OVER PROPELLED BY MACHINERY

Section 144.25 (j) is amended to read as follows:

§ 144.25 Ventilation.

(j) All electrical ventilation systems shall be provided with remote

control means for stopping the motors in case of fire or other emergency. For the machinery space ventilation there shall be provided a control located in the passageway leading to, but outside of, the space, for all other ventilation systems, two stations shall be provided, one located in the fire control room or wheelhouse, and the second located as distant as practicable, except that the main bus feeding power to the equipment for these systems may be considered as the second station. These emergency control push button stations shall be protected by installing glass doors on which there will be marked "In case of fire break glass and push button to stop ventilation." Each push button shall be provided with a name plate identifying the system with which it is associated. This remote control system shall be of the under-voltage protection type and so arranged that damage to the master switch or cable will automatically stop the fans. Steam powered ventilation systems shall have a remote control for the steam valve located in an accessible location outside the space affected by the ventilation system (Sec. 5, 49 Stat. 1384, sec. 2, 54 Stat. 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 369, 463a, and 50 U. S. C. 1275).

Dated: April 18, 1949.

MERLIN O'NEILL,
Rear Admiral, U. S. Coast Guard,
Acting Commandant.

[F. R. Doc. 49-3124; Filed, Apr. 21, 1949;
8:49 a. m.; Apr. 22, 1949, 14 F. R. 1958]

Subchapter Q—Specifications

[CGFR 49-13]

PART 160—LIFESAVING EQUIPMENT

DISTRESS SIGNALS

The purpose of the following amendments to the specification requirements for hand red flare distress signals, floating orange smoke distress signals, and hand orange smoke distress signals is to relax the present requirements to permit easier manufacture, obtain testing conditions comparable to those encountered in service use, and provide an alternate method for the chemical stability test required.

These amendments to the specifications are published without prior general notice of their proposed issuance for the reason that notice, public rule making procedure, and effective date requirements in connection therewith are hereby found to be unnecessary because the amendments are relaxations of present requirements.

By virtue of the authority vested in me as Commandant, United States

Coast Guard, by R. S. 4405, as amended, and section 101 of Reorganization Plan No. 3 of 1946, 46 U. S. C. 1, 375, the following amendments to the regulations are prescribed which shall become effective on and after the date this document is published in the Federal Register:

SUBPART 160.021—SIGNALS, DISTRESS, FLARE, RED, HAND, FOR MERCHANT VESSELS

1. Section 160.021-3 (i) is amended to read as follows:

§ 160.021-3 *Materials, workmanship, construction and performance requirements.* * * *

(i) *Burning time.* Test specimens shall burn in air not less than 2 minutes nor more than 2 minutes and 40 seconds when the time is measured as described in § 160.021-4 (k). Test specimens shall burn under water not less than 5 seconds when tested as described by § 160.021-4 (f).

2. Section 160.021-4 is amended by changing paragraphs (e) and (f) to read as follows:

§ 160.021-4 *Sampling, inspections, conditioning, and tests.* * * *

(e) *Conditioning; elevated temperature, humidity and storage.* Place specimen in a thermostatically controlled even-temperature oven held at 90° C. with not less than 90 percent relative humidity for 72 hours. Remove specimens and store at room temperature (20° to 25° C.) with approximately 65 percent relative humidity for ten days. If for any reason it is not possible to operate the oven continuously for the 72-hour period, it may be operated at the required temperature and humidity for 8 hours out of each 24 during the 72-hour conditioning period. (Total of 24 hours on and 48 hours off.)

(f) *Test method; underwater burning.* Ignite the flare and let it burn 5 seconds in air. Submerge burning flare in water in a vertical position with head down. Obtain underwater burning time by stop watch measurements from time of submersion until positive flame emission ceases (R. S. 4417a, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 481, 50 U. S. C. 1275).

SUBPART 160.022—SIGNALS, DISTRESS, SMOKE, ORANGE, FLOATING, FOR MERCHANT VESSELS

3. Section 160.022-3 (g) is amended to read as follows:

§ 160.022-3 *Materials, workmanship, construction and performance requirements.* * * *

(g) *Temperature of ignition of signal materials.* When tested as de-

scribed by § 160.022-4 (g), the temperature of ignition of the signal materials shall be not less than 320° F. (160° C.).

4. Section 160.022-4 is amended by changing paragraphs (e) and (g) to read as follows:

§ 160.022-4 *Sampling, inspections, conditioning, and tests.* * * *

(e) *Conditioning; elevated temperature, humidity, and storage.* Place specimen in a thermostatically controlled even-temperature oven held at 90° C. with not less than 90 percent relative humidity for 72 hours. Remove specimens and store at room temperature (20° C. to 25° C.) with approximately 65 percent relative humidity for ten days. If for any reason it is not possible to operate the oven continuously for the 72-hour period, it may be operated at the required temperature and humidity for 8 hours out of each 24 during the 72-hour conditioning period. (Total of 24 hours on and 48 hours off.)

(g) *Test method; temperature of ignition of signal materials.* The test shall be conducted in a uniformly heated gas or electric oven with a chamber of at least 6 inches by 6 inches by 9 inches inside measurement. If gas heated, the oven should be of jacketed type with the products of combustion of the heating gas excluded from the inner chamber. The oven should be provided with an opening or openings at the top of at least 3/4 square inch in area to give air circulation within. A suitable 600° F. 3-inch immersion thermometer or thermocouple shall be inserted through a sleeve in the top of the oven. A shelf of perforated sheet metal shall be provided at the mid-height of the oven. A wire screen cup 1/2 inch diameter by 3/4 inch high shall be provided. The materials to be tested shall be placed to a depth of 1/2 inch in the wire screen cup. (Ordinarily, materials adjacent to each other in the assembled signal will be blended together for the test; materials nonadjacent ordinarily will not be blended together for the test.) The cup then shall be placed on the shelf so as to be within 1/2 inch to 3/4 inch from the bulb of the thermometer or the junction of the thermocouple. The temperature of the oven is to be raised to about 266° F. (130° C.) at a convenient rate, after which the temperature is to be raised at a rate not to exceed 2° F. per minute until ignition occurs or 320° F. (160° C.) has been reached. Time and temperature readings at 30 second intervals and also time at which ignition, if such occurs, are to be recorded. If ignition occurs, the approximate ignition temperature,

to be reported, can be obtained by extrapolation from the time-temperature data. Alternate test methods will be given special consideration by the Coast Guard. (R. S. 4417a, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 481, 50 U. S. C. 1275).

SUBPART 160.037—SIGNALS, DISTRESS, SMOKE, ORANGE, HAND, FOR MERCHANT VESSELS

5. Section 160.037-3 (h) is amended to read as follows:

§ 160.037-3 *Materials, workmanship construction and performance requirements.*

(h) *Temperature of ignition of signal materials.* When tested as described by § 160.037-4 (j), the temperature of ignition of the signal materials shall be not less than 320° F. (160° C.).

6. Section 160.037-4 is amended by changing paragraphs (e) and (j) to read as follows:

§ 160.037-4 *Sampling, inspections, conditioning and tests.*

(e) *Conditioning; elevated temperature, humidity, and storage.* Place specimen in a thermostatically controlled even-temperature oven held at 90° C. with not less than 90 percent relative humidity for 72 hours. Remove specimen and store at room temperature (20° to 25° C.) with approximately 65 percent relative humidity for ten days. If for any reason it is not possible to operate the oven continuously for the 72-hour period, it may be operated at the required temperature and humidity for 8 hours out of each 24 during the 72-hour conditioning period. (Total of 24 hours on and 48 hours off.)

(j) *Test method; temperature of ignition of signal materials.* The test shall be conducted in a uniformly heated gas or electric oven with a chamber of at least 6 inches by 6 inches by 9 inches inside measurement. If gas heated, the oven should be of jacketed type with the products of combustion of the heating gas excluded from the inner chamber. The oven should be provided with an opening or openings at the top of at least 3/4 square inch in area to give air circulation within. A suitable 600° F. 3-inch immersion thermometer or thermocouple shall be inserted through a sleeve in the top of the oven. A shelf of perforated sheet metal shall be provided at the mid-height of the oven. A wire screen cup 1/2 inch in diameter by 3/4 inch high shall be provided. The materials to be tested shall be placed to a depth of 1/2 inch in the wire screen cup. (Ordinarily, mate-

rials adjacent to each other in the assembled signal will be blended together for the test, materials non-adjacent ordinarily will not be blended together for the test.) The cup then shall be placed on the shelf so as to be within 1/2 inch to 3/4 inch from the bulb of the thermometer or the junction of the thermocouple. The temperature of the oven is to be raised to about 266° F. (130° C.) at a convenient rate, after which the temperature is to be raised at a rate not to exceed 2° F. per minute until ignition occurs or 320° F. (160° C.) has been reached. Time and temperature readings at 30 second intervals and also time at which ignition, if such occurs, are to be recorded. If ignition occurs, the approximate ignition temperature, to be reported, can be obtained by extrapolation from the time-temperature data. Alternate test methods will be given special consideration by the Coast Guard. (R. S. 4417a, 4426, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 481, 489, 50 U. S. C. 1275).

Dated: April 22, 1949.

MERLIN O'NEILL,
Read Admiral, U. S. Coast Guard,
Acting Commandant.

[F. R. Doc. 49-3246; Filed, Apr. 26, 1949;
8:54 a. m.; Apr. 27, 1949, 14 F. R. 2064]

Navigation and Vessel Inspection Circular No. 5-49

UNITED STATES COAST GUARD,
Washington 25, D. C., April 11, 1949.

CANCELLATION OF NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 4-48

1. The Navigation and Vessel Inspection Circular No. 4-48, dated 18 May 1948, regarding defective Pyrene carbon tetrachloride type fire extinguishers manufactured by Pyrene Manufacturing Co., Newark 8, N. J., is hereby canceled.

2. The Pyrene Manufacturing Co. has informed the Coast Guard that stocks of Pyrene fire extinguishers which were maintained for replacement purposes at various locations listed in Navigation and Vessel Inspection Circular No. 4-48 have been withdrawn since their records indicate there is no further need for continuing this service.

/S/ J. F. FARLEY,
Admiral, U. S. Coast Guard,
Commandant.

Equipment Approved by the Commandant

[CGFR 49-8]

APPROVAL OF EQUIPMENT

By virtue of the authority vested in me as Commandant United States Coast Guard, by R. S. 4405 and 4491, as amended; 46 U. S. C. 375, 489; and section 101 of Reorganization Plan No. 3 of 1946 (11 F. R. 7875, 60 Stat. 1097, 46 U. S. C. 1), as well as the additional authorities cited with specific items below, the following approvals of equipment are prescribed and shall be effective for a period of five years from date of publication in the Federal Register unless sooner canceled or suspended by proper authority:

LIFE PRESERVERS, KAPOK, ADULT AND CHILD (JACKET TYPE)

Approval No. 160.002/36/0, Model 2, adult kapok life preserver, U. S. C. G. Specification 160.002, manufactured by General Textile Mills, Inc., Carbon-dale, Pa. (R. S. 4417a, 4426, 4488, 4492, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 164, 166, 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 396, 404, 481, 490, 526e, 526p, 1333, 50 U. S. C. 1275; 46 CFR 160.002).

BUOYANT CUSHIONS, KAPOK, STANDARD

NOTE: Cushions are for use on motorboats of classes A, 1, or 2 not carrying passengers for hire.

Approval No. 160.007/78/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by Hinshaw Mattress Co., 1913-19 Milam, Texarkana, Texas.

Approval No. 160.007/79/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by Greenwood Cowan & Platt, 949 Asbury Ave., Ocean City, N. J. (54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4-1, 160.007).

BUOYANT CUSHIONS, NON-STANDARD

Approval No. 160.008/405/0, 15" x 15" x 2" rectangular buoyant cushion, 20 oz. kapok, flexible plastic film cover and straps, stitched seams, specifications dated March 12, 1949, manufactured by Hinshaw Mattress Company, 1913-19 Milam, Texarkana, Texas (54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4-1, 160.008).

BUOYANT APPARATUS

Approval No. 160.010/3/1, Buoyant apparatus, pine decking with copper tanks, 20-person capacity, Dwg. No. G-305-S, dated January 2, 1947, revised January 30, 1949, manufactured by C. C. Galbraith and Son, Inc., 99 Park Place, New York, N. Y. (Su-

persedes Approval No. 160.010/3/0 published in the Federal Register of July 31, 1947.)

Approval No. 160.010/7/1, Buoyant apparatus, pine decking with copper tanks, 5-person capacity, Dwg. No. G-129, dated January 20, 1937, revised January 31, 1949, manufactured by C. C. Galbraith and Son, Inc., 99 Park Place, New York, N. Y. (Supersedes Approval No. 160.010/7/0 published in the Federal Register of July 31, 1947.)

Approval No. 160.010/8/1, Buoyant apparatus, pine decking with copper tanks, 11-person capacity, Dwg. No. G-129, dated January 20, 1937, revised January 31, 1949, manufactured by C. C. Galbraith and Son, Inc., 99 Park Place, New York, N. Y. (Supersedes Approval No. 160.010/8/0, published in the Federal Register of July 31, 1947.) (R. S. 4417a, 4426, 4488, 49 Stat. 1544; 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 1333, 50 U. S. C. 1275; 46 CFR 37.1-1, 59.54a, 60.47a, 76.51a.)

MECHANICAL DISENGAGING APPARATUS, LIFEBOAT

Approval No. 160.033/37/0, Rottmer Type R-50 releasing gear, approved for maximum working load of 10,000 pounds per set (5,000 pounds per hook), identified by General Arrangement Dwg. No. 3245-3, dated February 17, 1949, manufactured by the Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J. (R. S. 4417a, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 481, 1333, 50 U. S. C. 1275; 46 C. F. R. 37.1-7, 59.68, 76.62, 94.59.)

VALVES, SAFETY

Approval No. 162.001/9/1, Style HN-MS-26, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 750° F. maximum temperature; Dwg. No. HV-8-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/9/0, published in Federal Register of July 31, 1947.)

Approval No. 162.001/10/1, Style HNA-MS-27, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 900° F. maximum temperature; Dwg. No. HV-10-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and

Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/10/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/11/1, Style HNA-MS-37, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 900 pounds per square inch primary service pressure rating, 900° F. maximum temperature; Dwg. No. HV-11-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/11/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/12/1, Style HNA-MS-28, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 1,000° F. maximum temperature; Dwg. No. HV-10-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/12/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/13/1, Style HNA-MS-38, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 900 pounds per square inch primary service pressure rating, 1,000° F. maximum temperature; Dwg. No. HV-11-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/13/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/14/1, Style HS-MS-15, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 300 pounds per square inch primary service pressure rating, 650° F. maximum temperature; Dwg. No. HV-6-MS, issued 2/18/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/14/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/15/1, Style HS-MS-25, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 450 pounds per square inch maximum allowable pressure, 650° F. maximum temperature, Dwg. No. HV-7-MS, issued 2/16/49, and Dwg. No. D-28167,

issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/15/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/16/1, Style HSA-MS-16, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 300 pounds per square inch primary service pressure rating, 750° F. maximum temperature; Dwg. No. HV-12-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/16/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/17/1, Style HN-MS-36, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 900 pounds per square inch primary service pressure rating, 750° F. maximum temperature; Dwg. No. HV-9-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/17/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/18/1, Style HSA-MS-17, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 300 pounds per square inch primary service pressure rating, 900° F. maximum temperature; Dwg. No. HV-12-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/18/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/19/1, Style HSA-MS-27, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 450 pounds per square inch maximum allowable pressure, 900° F. maximum temperature; Dwg. No. HV-13-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/19/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/46/1, Style HSA-MS-26, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 450 pounds per square inch maximum

allowable pressure, 750° F. maximum temperature; Dwg. No. HV-13-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (Supersedes Approval No. 162.001/46/0, published in Federal Register July 31, 1947.)

Approval No. 162.001/101/0, Style HS-MS-35, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 650° F. maximum temperature; Dwg. No. HV-7-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass.

Approval No. 162.001/102/0, Style HSA-MS-36, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 750° F. maximum temperature; Dwg. No. HV-13-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass.

Approval No. 162.001/103/0, Style HSA-MS-37, alloy steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 900° F. maximum temperature; Dwg. No. HV-13-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass.

Approval No. 162.001/104/0, Style HN-MS-25, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 600 pounds per square inch primary service pressure rating, 650° F. maximum temperature; Dwg. No. HV-8-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3" and 4"; manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass.

Approval No. 162.001/105/0, Style HN-MS-35, carbon steel body pop safety valve, flanged nozzle type, exposed spring fitted with spring cover, 900 pounds per square inch primary service pressure rating, 650° F. maximum temperature; Dwg. No. HV-9-MS, issued 2/16/49, and Dwg. No. D-28167, issued 3/11/47; approved for sizes 1½", 2", 2½", 3", and 4";

manufactured by Crosby Steam Gage and Valve Co., 10 Roland St., Boston 29, Mass. (R. S. 4417a, 4418, 4426, 4433, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 392, 404, 411, 1333, 50 U. S. C. 1275, 46 CFR 52.65).

VALVES, PRESSURE VACUUM RELIEF

Approval No. 162.017/59/0, "VAC-REL" Series No. 1-N pressure-vacuum relief valve, atmospheric pattern, weight loaded, bronze body, fitted with flame screen; for use with inflammable or combustible liquids of Grade "B" or lower in direct atmospheric vent system; Dwg. No. 1N3-1A; approved for 2½", 3" and 4" sizes; manufactured by Mechanical Marine Co., Inc., 17 Battery Place, New York 4, N. Y.

Approval No. 162.017/60/0, "VAC-REL" Series No. 3-F-AT pressure-vacuum relief valve, angle type, enclosed pattern, weight loaded, bronze body, fitted with flame screen; for use with inflammable and combustible liquids of Grade "A" or lower in closed vent header system; Dwg. No. 3F-AT-1A; approved for 4" and 6" sizes; manufactured by Mechanical Marine Co., Inc., 17 Battery Place, New York 4, N. Y. (R. S. 4417a, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 391a, 50 U. S. C. 1275; 46 CFR 32.7-4).

Dated: April 6, 1949.

J. F. FARLEY,

Admiral, U. S. Coast Guard,
Commandant.

[F. R. Doc. 49-2818; Filed, Apr. 12, 1949;
8:50 a. m.; Apr. 13, 1949, 14 F. R. 1770.]

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of Ships' Stores and Supplies Certificated or Canceled from March 25, 1949, to April 25, 1949, inclusive, for use on board vessels in accordance with the provisions of Part 147 of the Regulations governing, "Explosives or Other Dangerous Articles on Board Vessels," are as follows:

Chemical Compounding Corp., 262 Huron Street, Brooklyn 22, N. Y. Certificate No. 275, dated March 29, 1949, "Chemical Compounding Corporation Disinfectant."

West Disinfecting Co., 42-16 West Street, Long Island City, N. Y., Certificate No. 276, dated March 29, 1949, "Linacrol."

Leadership Products Corp., 135-21, Northern Boulevard, Flushing, Long Island, N. Y., Certificate No. 277, dated April 8, 1949, "Scramsoot Green"; Certificate No. 278, dated April 8, 1949, "Scramsoot Blue"; Certificate No. 279, dated April 8, 1949, "Scramsludge (Diesel)"; Certificate No. 280, dated April 8, 1949, "Scramsludge" (Regular); Certificate No. 281, dated April 8, 1949, "Scramsludge" (Premium);

Certificate No. 282, dated April 11, 1949, "Scramsoot."

Innis, Speiden & Co., 117 Liberty Street, New York 6, N. Y.; Certificate No. 283, dated April 11, 1949, "Isco Spray."

The Perolin Co., Inc., 10 East Fortieth Street, New York 16, N. Y., Certificate No. 284, dated April 15, 1949, "Pero-nite Soot and Fire Scale Remover No. 1001."

Leadership Products Corp., 135-21 Northern Boulevard, Flushing, Long Island, N. Y., Certificate No. 169, dated April 8, 1949, "Scramsoot Green" and "Scramsoot Blue." This item is canceled.

AFFIDAVITS

The following affidavits were accepted from March 15, 1949, to April 15, 1949:

Nordstrom Valve Division, Rockwell Manufacturing Co., 400 North Lexington Avenue, Pittsburgh 8, Pa., Valves.

Pacific Tube Co., 5710 Smithway Street, Los Angeles 22, Calif., Pipe and Tubing.

Pennsylvania Forge Corp., Milnor and Bleigh Streets, Philadelphia 35, Pa., Flanges and Fittings.

Russell, Burdall & Ward Bolt and Nut Co., Port Chester, N. Y., Bolting.

FUSIBLE PLUGS

The Marine Engineering Regulations and Material Specifications require that manufacturers submit samples from each heat of fusible plugs to the Commandant for test prior to plugs being used on vessels subject to inspection by the Coast Guard. A list of approved heats which have been tested and found acceptable during the period from March 15, to April 15, 1949, is as follows:

Waltworth Co., Greensburg Works, Greensburg, Pa., Heat No. 125.

WELDING ELECTRODES

The following type of electrode has been tested in accordance with the requirements of ASTM designation A233-48T for mild steel arc-welding electrodes in the presence of an American Bureau of Shipping Surveyor and the test report indicates that the requirements were met.

Metal and Thermit Corp., 120 Broadway, New York 5, N. Y. Metal & Thermit Corp., manufacturer.) MUREX HTS, type E-6015.

Operating Positions and Electrode Sizes

The 3/32", 1/8", and 5/16" diameter electrodes will be allowed for all position welding. The 3/16", 3/32", and 1/4" diameter electrodes will be allowed for horizontal fillet and flat positions. The 5/16" diameter electrodes will be allowed for flat positions. Special limitations require direct current and reverse polarity.

Merchant Marine Personnel Statistics

MERCHANT MARINE LICENSES ISSUED DURING FEBRUARY 1949

DECK OFFICERS

		Region								Total	
		Atlantic coast		Gulf coast		Great Lakes and rivers		Pacific coast			
		O	R	O	R	O	R	O	R	O	R
Master	Ocean	17	99	8	33		4	13	70	38	206
	Coastwise	5	16	8	2		4	1	1	14	23
	Great Lakes		4		1	32	86	1	4	33	95
	B. S. & L.	8	42		1	1	2	3	2	12	47
	Rivers		3		4	5	19			5	26
Chief mate	Ocean	24	20	13	10	2	3	10	21	49	54
	Coastwise		4				1			1	5
Second mate	Ocean	23	22	10	9		3	13	20	52	54
	Coastwise		2							2	
Third mate	Ocean	11	37	6	8	3	5	15	12	35	62
	Coastwise						1	1		1	1
Mate	Great Lakes										
	B. S. & L.	2	5	1				2	4	5	9
	Rivers					6	7			6	8
Pilots	B. S. L. & R.	71	127	18	27	110	212	16	52	215	418
Master	Uninspected vessels							6	1	6	1
Mate	Uninspected vessels							1		1	
Total		162	381	70	96	159	347	82	187	473	1,011
Grand total		543		166		506		269		1,484	

ENGINEER OFFICERS

Steam	Chief engineer:										
	Unlimited	14	67	3	34	8	18	3	48	28	167
	Limited	1	43		9	17	105		5	18	162
	First assistant engineer:										
	Unlimited	13	26	9	11	7	7	6	11	35	55
	Limited		4			11	46	1		12	50
	Second assistant engineer:										
	Unlimited	26	37	7	11	12	12	15	29	90	89
	Limited					9	37			9	37
	Third assistant engineer:										
Motor	Unlimited	15	38	6	13	20	17	2	17	43	85
	Limited					10	8	1		11	8
	Chief engineer:										
	Unlimited	3	6		7		3	3	10	6	26
	Limited	11	21	2	3	1	10	5	6	19	40
	First assistant engineer:										
	Unlimited	3	3		4	1	1		7	4	15
	Limited	5		1	5	1	2		3	7	10
	Second assistant engineer:										
	Unlimited	2	11	1	1		1	1	3	4	16
Uninspected vessels	Limited	6				1				7	
	Third assistant engineer:										
	Unlimited	22	50	6	20	13	24	4	27	45	121
	Limited					1				1	
	Chief engineer							6		6	
	Assistant engineer							1		1	
Total		121	306	35	118	112	291	48	166	316	881
Grand total		427		153		403		214		1,197	

You can get a PERMANENT INJURY with a temporary repair job

MERCHANT MARINE LICENSES ISSUED DURING MARCH 1949

DECK OFFICERS

		Region								Total	
		Atlantic coast		Gulf coast		Great Lakes and rivers		Pacific coast			
		O	R	O	R	O	R	O	R	O	R
Master	Ocean	16	87	10	25	1		3	25	30	137
	Coastwise	2	15	3	3		1		2	5	21
	Great Lakes		2		1	5	39			5	42
	B. S. & L.	7	56		1		2	3	9	10	68
Chief mate	Rivers	1	6		6	7	16			8	28
	Ocean	19	23	3	4		2	4	10	26	39
	Coastwise		6						1		7
	Ocean	9	15	12	5		2	1	5	22	27
Second mate	Coastwise				1						1
	Ocean	9	27	2	8		7	4	3	15	45
	Coastwise										
	Great Lakes										
Third mate	B. S. & L.	2	3					1	2	3	5
	Rivers		1		1	7	10			7	12
	B. S. L. & R.	66	121	18	26	65	84	18	22	167	253
	Uninspected vessels										
Pilots	Uninspected vessels										
Mate	Uninspected bessels										
Total		131	362	48	81	85	163	34	79	208	685
Grand total		493		129		248		113		983	

ENGINEER OFFICERS

Steam	Chief engineer:										
	Unlimited	18	119	8	33	6	12	6	47	38	211
	Limited	2	64		7	11	88		3	13	162
	First assistant engineer:										
	Unlimited	15	40	6	14	3	5	8	23	32	82
	Limited	1				9	39			10	39
	Second assistant engineer:										
	Unlimited	36	43	11	13	5	13	9	26	61	95
	Limited		1			6	27			6	28
	Third assistant engineer:										
	Unlimited	8	64	5	20	2	26	4	22	19	132
	Limited					5	2			5	2
Motor	Chief engineer:										
	Unlimited	5	26	1	11	1	5	3	13	10	55
	Limited	11	30	7	11	5	12	1	12	24	65
	First assistant engineer:										
	Unlimited	1	1		2	1			2	2	5
	Limited	8	4			1	1	2		11	5
	Second assistant engineer:										
	Unlimited	3	2		1	1		2		6	3
	Limited							1		1	
	Third assistant engineer:										
	Unlimited	2	68		18		30	2	36	4	152
	Limited					1	1			2	1
Uninspected vessels	Chief engineer							2		2	
	Assistant engineer							3		3	
Total		110	462	38	130	57	261	43	184	248	1,037
Grand total		572		168		318		227		1,285	

STAY WITH THE BOAT
If You Capsize
The Boat Will Stay Afloat Longer Than You

ORIGINAL SEAMEN'S DOCUMENTS ISSUED MONTH OF MARCH 1949

Region	(1) Staff officer	(2) Contin- uous dis- charge book *	(3) United States merchant mariners' docu- ments	(4) AB any waters, un- limited	(5) AB any waters, 12 months	(6) AB Great Lakes, 18 months	(7) AB tugs and tow- boats, any waters	(8) AB bays and sounds†	(9) AB sea- going barges	(10) Life- boat- man	(11) Q. M. E. D.	(12) Radio opera- tors	(13) Certifi- cate of service	(14) Tanker- man
Atlantic coast.....	34		636	232	121	5				282	150	11	471	6
Gulf coast.....	2	3	280	63	31	1				38	75	4	197	30
Pacific coast.....	19	1	375	90	51	6				262	104	2	300	4
Great Lakes and rivers.....	2		1,239	19	79	54				54	114		1,178	22
Total.....	57	4	2,530	404	282	66	0	0	0	636	443	17	2,146	62

† 12 months, vessels 500 gross tons or under not carrying passengers.

NOTE.—Columns 4 through 14 indicate endorsements made on United States merchant mariners' documents.

WAIVERS OF MANNING REQUIREMENTS FROM MARCH 1 TO MARCH 31, 1949

Region	Number of vessels	Deck offi- cers sub- stituted for higher ratings	Engineer officers substituted for higher ratings	Able sea- men sub- stituted for deck officers	Ordinary seamen substituted for able seamen	Qualified members of engine de- partment substituted for engineer officers	Wipers or coal passers substituted for qualified members of engine de- partment	Wipers, coal passers or cadets sub- stituted for engineer officers	Ordinary seamen or cadets sub- stituted for deck officers	Total
Atlantic coast.....	2				2					2
Gulf coast.....	1						1			1
Pacific coast.....	2	3								3
Great Lakes.....	1	1	1							2
Total.....	6	4	1		2		1			8

NOTE.—In addition, individual waivers were granted to permit the employment of 11 able seamen holding certificates for "any water—12 months" in excess of the 50 percent authorized by general waiver.

CREW SHORTAGE REPORTS FROM MARCH 1 TO MARCH 31, 1949

Region	Number of vessels	Ratings in which shortages occurred												Total
		Chief mate	Second mate	Third mate	Radio	Able seamen	Ordinary seamen	Chief engi- neer	First engi- neer	Second engi- neer	Third engi- neer	Qualified member engine de- partment	Wiper or coal passer	
Atlantic coast.....	1												1	1
Gulf coast.....														
Pacific coast.....	11	2	1	2		2		2	2		4	8		23
Great Lakes.....														
Total.....	12	2	1	2		2		2	2		4	8	1	24

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 537 cases during the month of February 1949. From this number, hear-

ings resulted involving 37 officers and 100 unlicensed men. In the case of officers, 14 licenses were suspended, 11 were suspended with probation granted, 1 was voluntarily surrendered, 8 were closed with admonition, and 8 cases were dismissed. Of the

unlicensed personnel, 10 certificates were revoked, 22 were suspended, 50 were suspended with probation granted, 6 were voluntarily surrendered, 5 were closed with admonition, and 13 were dismissed after hearing.