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# PROCEEDINGS OF THE

# MERCHANT MARINE COUNCIL

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# MERCHANT MARINE COUNCIL

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# The Merchant Marine Council of the United States Coast Guard

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The Cover: The Sternwheel Steamboat OMAR of the Ohio River Company, pushing 28 barges carrying 22,792 tons of coal. The over-all length of this tow is 1,100 feet, including the OMAR, (Photograph courtesy The Waterways Journal.)

### COUNCIL ACTIVITIES

The rescinding of the wartime regulations for licensed officers, as set forth in part 155 of subchapter O, scheduled for 2 May 1946, was postponed and these regulations will remain in effect indefinitely or until rescinded by proper authority. The wartime regulations for able seamen and qualified members of the engine department, which were also to be rescinded on 2 May 1946, have been retained and will remain in effect indefinitely or until rescinded by proper authority. This action was taken at the request of the War Shipping Administration because the shortages of licensed officers and qualified seamen are still causing delays in the sailings of many vessels.

The regulations for licensing of merchant marine personnel were amended to permit the use of the new license form, NAVCG 2849—License to U. S. Merchant Marine Officers.

The amendment to the regulations for lifeboatmen provides that a merchant mariner's document indorsed as "able seaman" shall be considered as the equivalent of a certificate as lifeboatman or an indorsement as lifeboatman.

The miscellaneous amendments to the "Load Line Regulations" proposed in connection with the forthcoming revision of the pamphlet, "Load Lines" were approved. For the most part these changes were editorial. A clarification was made regarding the loading of a vessel in one zone for a voyage on which the vessel will enter a less favorable zone which provided that an allowance must be made so that the vessel when crossing into the less favorable zone will conform to the regulations and free-board for the less favorable zone.

The winter north Atlantic freeboard for cargo and tank vessels was also redefined. The requirements for sea chests were transferred to the Marine Engineering Regulations and deleted from the Load Line Regulations as well as the other General Rules and Regulations for Vessel Inspection for the various classes of waters. The cast iron sea chests installed on ocean and coastwise vessels constructed prior to 15 June 1941 are still required to be reinforced with concrete or other suitable material in conjunction with structural braces.

The regulations for shipboard inspections of life preservers were amended and the specific requirement for testing a specified number of kapok life preservers at each annual inspection was rescinded. However, the life preservers will still be examined by an inspector at each annual inspection or oftener if deemed necessary. When life preservers are inspected and found to be in accordance with the requirements of law and regulations, the inspector will stamp them with the word "passed," his initials, port, and date. Any life preservers found not to be in a serviceable condition shall be removed from the vessel's equipment, and if beyond repair shall be destroyed in the presence of the inspector. The inspector may test life preservers for buoyancy whenever he believes it is necessary.

The changes in regulations governing allotments of seamen in subchapter K were approved. These changes will permit consular officers of the United States to approve allotments of seamen who are signed on at foreign ports.

# Shipping on the Mississippi River System

The first boom in commercial shipping in the western rivers reached its zenith in 1896, when the colorful packet boats on the Mississippi and its tributaries carried approximately 38 million tons of freight. After that peak year, commercial shipping began a decline that ended in almost a complete cessation of commercial river traffic. The railroads had moved west and were competing, with faster service and cheaper rates, for the bulk of the commercial transportation market. The railroads also entered the river commerce, and the ensuing rate war put most of the opposition out of business. The advent of the railroads themselves had been a blow to the packet boat owners and operators; the railroads' entrance into the packet boat field was the proverbial straw that broke the camel's back.

Rivermen believed the railroads had signed the death warrant for all private enterprise on the inland waterways. "The rivers are dead," they said.

It was a sharp and prolonged decline, and it found less than 17 million tons being hauled in 1903. At the turn of the century everything else was booming, but the annual river tonnages dropped lower and lower, the colorful packet boats began to disappear from the American scene. An era was over-a colorful, gaudy, rugged, exciting, pioneering era that had begun with the flatboats of the fur traders and ended with the packet boats. The men who had followed the rivers looked for other fields to enter; they knew that except for a miracle the rivers were commercially

That miracle didn't come along until World War I exposed the sad condition of American transportation. America at peace had found the railroads sufficient to transport her needs; America at war found her transportation facilities sadly lacking, and her war effort hampered at a time when immediate and increased hauling power was the desperate order of the day. Realization was the beginning of the miracle, steel barges were a great part of the miracle, and improved pusher-type towboats completed the miracle that once more sent river traffic tonnages booming skyward.

In 1917 Congress set up the Inland Waterways Corporation to operate the Federal Barge Line, and soon the rivers were introduced to the steel towing barges. Ugly craft, with none of the color of the packet boats, but with astonishing carrying capacity, the barges proved themselves at once, and

were seen in ever-increasing numbers on the "dead" rivers. And in 1918 an estimated 24 million tons of freight were shipped on the Mississippi River system—still far below the peak of 38 million tons hauled in 1896, but incredibly more than had been hauled for any year since the beginning of the slump.

Each steel barge could carry more than four times as much as a single packet boat of the rivers' freight-hauling heyday, and the tonnage of a tow was limited only by the river conditions and the number of barges a towboat could safely handle in regard to her own power and those natural conditions. Today there are more than 1,000 pusher-type towboats on the rivers, and five times as many steel barges.

Let's examine this phenomenal innovation that transfused new lifeblood into river commerce, the pushertype towboat. Something new in 1917? Not at all. The principle of the pusher towboat was originated some time in the mid-1800's. The story of the pusher-type towboat and the long tows of barges is tied up inevitably and incontrovertibly with Pennsylvania coal. The first pushers were used on the Monongahela and Ohio Rivers in the coal traffic, and were the offspring of necessity. All the navigable rivers below the rich coal fields in the Pittsburgh area were heavy with downstream traffic to the Southern markets.

Towing heavily-laden barges astern on downstream trips-and all of the coal traffic was downstream-presented unsurmountable difficulties. The barges were like an awkward and cumbersome and considerably uncontrollable tail which could crush the towing vessel's stern if it had to stop suddenly in the swift current. It was a case of the powerful reflex tail wagging the small dog. Their own momentum plus the current's speed made the trailed tows well-nigh unmanageable on the sharp bends and shoaling curves of the rivers. Therefore the principle of the pusher towboat came into being.

This principle is quite simple. By locking the towboat's bow to the locked barges, the whole tow becomes one long vessel for handling and for maneuvering, with the power and rudders at the stern where they should be. The earliest towboats employing the pusher theory were stern-wheelers, and stern-wheelers still predominate in the coal industry. For downriver towing, veteran rivermen declare, the stern-wheelers are superior to the more modern screw-propelled tow-

boats. A stern-wheeler can stop a downbound tow quickly; with four huge rudders mounted in front of the stern-wheel, the towboat can throw her stern around rapidly, handling a long tow downbound much faster and easier. These same veteran rivermen are agreed, however, that for upstream traffic, where the major problem is one of pushing power, the screw-driven boats are superior. Everywhere except in the coaling traffic nowadays. the modern screw-propelled towboats predominate, because they can handle upstream loads as well as downstream loads. Most of the Pennsylviania and West Virginia coal is still pushed downstream to southern markets, and still use the stern-wheelers. Another very good reason for this is that the stern-wheelers are steamboats, and have access to plenty of cheap fuel in the coal trade.

In the old days the three rivers in the Pittsburgh area were choked with acres and acres of coal barges when the water was high. In fact, the sight of gigantic and almost endless fleets of coal tows was still commonplace until just before the last war, when the downstream traffic dwindled for several reasons. One chief reason was that most of the coal from the Pittsburgh area was needed for the waraccelerated Pittsburgh steel industry. Another reason was that the coal fields in Illinois and other states began to cut in on the Southern market, and a third reason was that the Southern markets for coal in many instances converted to oil and became markets for oil from Texas and Louisiana.

Despite the fact that few of the prewar coal-traffic congestions were seen below Pittsburgh in the past 4 or 5 years, the rivers that run through the mighty powerhouse of Pennsylvania were crowded with coal tows. During the war, for example, one plant of the Carnegie Steel Corporation burned 40,000 tons of coal each day, all of which arrived by water. It would have taken approximately 800 railroad cars to deliver 1 day's tonnage of coal consumed by that one plant alone.

Rivermen credit the largest coal tow ever handled to the steamer Sprague, which moved a tow of some 75 pieces of equipment, loaded with approximately 75,000 tons of coal. They also tell of one very successful stern-wheeler still operating in the coal trade which, when open river prevails on the Ohio, can and does tow 27,000 tons from Huntington, W. Va., to Cincinnati, Ohio, twice a week. A total of 54,000 tons per week on a downstream run—the equivalent of

about 1,080 railroad carloads. This steamer has handled up to 30 huge barges per tow, and at times has constituted a tow of approximately 1,300 feet in length, counting the boat itself.

A riverman's rule of the thumb, pilots say, is that economical operation upstream is 3 miles an hour. If a towboat is making 5 miles an hour upstream, she doesn't have enough cargo to come out ahead, financially, while anything less than 3 miles an hour means she has too much cargo and is losing money in the long run.

As previously stated, the coal trade still employs stern-wheel steamboats predominantly, but in 1945 it was estimated that the total Diesel horsepower (screw-propellers) on the western rivers surpassed steam horsepower. So it might be said that Diesel power not only is the coming thing on the inland waterways, but is already the current thing. Diesel screw-driven boats have flat bottoms, straight up-and-down sides, and the largest have an average draft of from 6 to 7 feet. The screw-driven boats all have a steering rudder behind each screw, and two flanking rudders ahead of each screw. Thus a twin-screw Diesel towboat has six large rudders. A boat of this type with a length of 150 feet, has a rudder area in excess of that of the battleship Missouri.

The combined use of engines and two sets of rudders makes the modern towboat extremely maneuverable. A twin-screw towboat with no tow can turn around in her own length, or literally operate sideways. Due to the short bends on the rivers, the steering gear is built for quicker action than on seagoing vessels. From "hard over to hard over" in 10 seconds is considered only good by rivermen, and not at all remarkable.

Estimating average tonnage of tows for river boats is at best a matter of guesswork. When open water prevails, the towboats have a maximum tonnage efficiency, but most of the year they are subject to water conditions-narrowing of navigable channels, shallower water, current conditions, etc.-and handle tows according to what they believe is most safe. However, it is safe to say that an average tow for a stern-wheeler in the coal traffic is a 15 barge tow of approximately 15,000 tons, downstream. Going upstream on the Mississippi, the largest boats can handle 12,000 to 13,000 tons, and the average tow is about 10,000. On the Upper Mississippi, the maximum tonnage of the tows operating in that region is about 6.000 tons, while on the Illinois River the average is approximately 8,000 tons, maximum. Quite often the length of a towboat and tow combined runs from 1,000 to 1,200 feet, and the entire length handles as one craft.

River commerce was naturally stimulated far above normal annual tonnages during the years of World War II by the pressing need for supplies, by the advent of shipbuilding along the inland waterways, and by the fact that a considerable amount of prewar coastal shipping, under the threat of U-boats, became upriver shipping instead.

The estimated tonnage handled by the western rivers in 1942 was more than 125 million tons, an increase of 29 percent over 1940, the last peacetime year. But 1942 was the peak wartime shipping year, for the figures for 1945 show the annual tonnage had dropped to something over 100 million tons, plus 2 million tons of war shipping (inland built warcraft). But while total tonnage dropped in the past 2 years, the upriver tonnage has increased, and that is believed to be a good sign for future river commerce. A tentative peacetime potential average annual tonnage for all the inland waterways might be set at somewhere between 80 and 90 million tons.

Between 1942 and the end of the war, more than 3,000 ships built at inland shipyards went down the inland waterways to tidewater. This giant armada included LST's, Russian tugboats, cargo vessels, patrol craft, subchasers, patrol gunboats, yard tugs, several types and sizes of amphibious warcraft and landing craft, tankers, floating derricks, submarines, and some commercial vessels, the largest of which was a 365-foot oceangoing Standard Oil tanker.

Perhaps the most curious facet of the wartime river commerce boom was the upstream oil shipments. Prior to the war, the oil was shipped in coastal tankers from Texas and Louisiana oil fields around Florida and up to the large east coast cities. During the war the coastal tankers became prey to the German U-boats which came within hailing distance of our east coast to sink American shipping, and the oil was diverted up the Mississippi and Ohio Rivers via barges and towboats. In prewar days, Pittsburgh's oil supply was piped in from the east coast ports. During the war the pipelines were reversed, and Pittsburgh, receiving her oil supplies by river tows of tank barges, supplied oil to the eastern cities.

Chief competitor of the waterways is still the vast railway networks that crowfoot America, but while the railroads emphasize speedy transit, the barge line companies point at economy and large-scale movement of goods. On the Mississippi, for example, one long barge tow can haul

a tonnage that would require more than a dozen average freight train loads, based on the estimated average of tonnage carried by average railroad freight units. At the same time, such a tow would also be equivalent to 24 average packet boat loads.

As for liquid cargoes, it would require 42 railroad tank cars of maximum capacity to handle 10,000 barrels of gasoline, while this quantity can be handled in one river barge of 1,554 tons capacity. The modern steel barges, open and covered, in use on western rivers, range in cargo capacity from 100 to 3,000 tons.

Today, the commercial interests on the Mississippi and Ohio Rivers and tributaries are looking once more to the future. Unworried by the threat of the huge cargo-carrying airplanes (the box cars of tomorrow, so called), and of the giant trailer-trucks that pound swiftly along the highways, and their oldest competitor, the railroads, the river interests look ahead to the steady growth of American enterprise, and believe firmly that the heyday of the western rivers commerce has not yet arrived.

#### NEW LICENSE FOR MERCHANT MARINE OFFICERS

Printed license forms of the type issued to masters, mates, engineers, and pilots during the war no longer will be issued on and after 9 May 1946. They will be replaced by a newly designed engraved license form which will more fittingly reflect the importance of the position or positions in which its holder is qualified to serve on United States merchant vessels.

The new form, License to United States Merchant Marine Officer. NAVCG 2849, will be issued to all persons who qualify for original master's, mate's, engineer's, or pilot's license or for renewals of such licenses. Furthermore, it has been provided through amendments to the Code of Federal Regulations, that a duplicate license will be issued on the new form to any lawful holder of a license who loses his license and who previously would have been issued a certificate of Lost or Destroyed License. Any lawful holder of one of the wartime forms which are to be replaced will be permitted to exchange such a license for a duplicate license on the new form by applying to any Coast Guard Marine Inspection office. Wartime licenses which are voluntarily surrendered for a new license will be cancelled by the Coast Guard and filed unless the holder wishes to retain the cancelled form. A sample of the license and a sample duplicate license are shown on the back cover.

This form will be prepared by means of a typewriter instead of in longhand as were the replaced forms and, therefore, completed licenses will be neater in appearance. When the new license form is issued as a duplicate license it will show the date and port of the issuance of the original license as well as the date and port of issuance of the duplicate license and the following typewritten endorsement will appear

The License to U. S. Merchant Marine Officer has been adopted as a result of the Coast Guard program to simplify procedures and forms, which also brought about the adoption of the United States Merchant Mariner's Document on 1 November 1945.

### MOTORBOAT REQUIREMENTS

In the interest of safety, the United States Coast Guard desires to acquaint all owners and operators of motorboats operated solely for pleasure purposes, with the Federal law and regulations governing their equipment, operation and statutory requirements affecting their numbering and recording.

The latest laws affecting motorboats are contained in an act of Congress dated 25 April 1940, which superseded the Motorboat Act of 1910. Regulations required for the proper administration of this act have been prepared by the United States Coast Guard. Prior to issuing these regulations, the cooperation of yachtsmen, yacht and boat builders, and manufacturers of boating equipment was solicited. The regulations therefore have been formulated for your safety by practical men who represent both the Government and the industry, and the operation of your boats in compliance with these regulations should not be found burdensome. Those features of the old act which had been so considered, have been eliminated.

Given below is a brief digest of the more important features of the Motorboat Act of 25 April 1940, and the regulations issued thereunder.

- 1. Fines or penalties will not be incurred for failure to carry the following:
  - (a) Pilot Rules.
  - (b) Fire extinguishers on outboard motorboats.
  - (c) Fog bells on motorboats less than 26 feet.
  - (d) Whistles on motorboats less than 16 feet.
  - (e) Fog horns on all motorboats.
- 2. Navigation Lights.—If your present navigation lights are those which complied with the old motorboat law and have the range of visibility required by the new act, they may be continued in use as long as they are in serviceable condition. Lights installed or fitted 6 months after the termination of the National Emergency shall be of a type approved by the Commandant.

- 3. Whistles.—If your present whistle complies with the audibility requirements of the rules even though not the type of whistle required, it may be continued in service until 6 months after the termination of the National Emergency. After that date the specified type is required.
- 4. Lifesaving Equipment.—A life-saving device is required for every person on board. Box-type buoyant cushions will be permitted as life preservers on boats up to 40 feet in length. Life preservers or ring buoys are required for motorboats 40 feet and over. Purchasers of lifesaving equipment should look for the label or stamp indicating that the device is of a type approved by the Coast Guard.
- 5. Ventilation. All motorboats which are constructed or decked over after 25 April 1940, and which use gasoline or other liquid fuel having a flashpoint of less than 110° F. shall be provided with ventilation as follows:
  - (a) At least two ventilators fitted with cowls or their equivalent for the purpose of properly and efficiently ventilating the bilges of every engine and fuel tank compartment in order to remove any inflammable or explosive gases.
  - (b) The ventilation of the boat is not required where the greater portion of the bilges of the engine and fuel tank compartments is open to the natural atmosphere.
- 6. Fire Extinguishers.—The number of extinguishers listed in the table is required on board. The extinguishers on motorboats, if in good and serviceable condition, may be used until six months after the National Emergency. Purchasers of fire extinguishers should look for the label or stamp indicating that the extinguisher is of a type approved by the Coast Guard.
- 7. Reckless Operation.—Any person who shall operate any motorboat or any vessel in a reckless or negligent manner so as to endanger the life, limb, or property of any person shall

be deemed guilty of a misdemeanor and on conviction thereof by any court of competent jurisdiction shall be punished by a fine not exceeding \$2,000, or by imprisonment for a term of not exceeding 1 year, or by both such fine and imprisonment, at the discretion of the court.

From the following table one may readily determine the equipment required on the various classes of motorboats which are operated for pleasure purposes. The failure to have such equipment on board at all times when the vessel is operated, constitutes a menace to safety of life and subjects the owner and vessel to the penalties prescribed by law.

Equipment is required for the safety of the persons on board. To be effective it must be in good condition. For your own protection you should not only have the equipment on hand but you should also by frequent check see that the equipment is in working order and fully ready for the purpose for which it was designed.

#### THE NUMBERING REQUIREMENTS

- 1. Every undocumented vessel operated in whole or in part by machinery, owned in the United States and found on the navigable waters thereof, except public vessels and vessels not exceeding 16 feet in length measured from end to end over the deck excluding sheer, temporarily equipped with detachable motors, shall be numbered. The regulations issued by the Commandant under authority of this act clarify the language of the statute to require the following undocumented vessels to be numbered:
  - All boats equipped with permanently fixed engines.
  - All boats over 16 feet in length equipped with detachable engines.
  - All boats not more than 16 feet in length equipped with detachable engines as the ordinary means of propulsion.
- The following undocumented vessels are not required to be numbered:
  - All boats not exceeding 16 feet in length equipped with detachable engines and falling within the following classes:
    - (a) Rowboats and canoes designed and intended for the use of oars or paddles as the ordinary means of propulsion.
    - (b) Sailboats.
    - (c) Boats designed and used solely for the purpose of racing or operation incident to racing.
- Upon the purchase of an undocumented vessel which has been issued

a certificate of award of number under the provisions of the act of June 7, 1918, as amended, and after the completion of the bill of sale on the reverse side of the certificate by the vendor or the former owner, the purchaser should execute the application for number for undocumented motor vessel, which is incorporated on the reverse side of the certificate of award (Form NAVCG 1513), and surrender the certificate, bill of sale, and application for a new number to the commander of the Coast Guard district in which the vessel is owned, within the statutory period of 10 days. That officer upon receipt of the certificate properly filled in by the purchaser, will issue a new certificate of award of number. In the case of such vessels

#### Requirements For Motorboats Not In Commercial Service

Equipment	Class A 0 to 16 feet	Class 1 16 to 26 feet	Class 2 25 to 40 feet	Class 3 40 to 65 feet
Combination light	port and green	of boat showing red to to starboard from right oints abaft the beam. t I mile.	None	None
Port side light	None	None	One on port side, pro red from right aber beam, visible at les	perly screened to show ad to 2 points abaft the ast 1 mile.
Starboard side light	None	None	show green from r	le properly screened to ight ahead to 2 points Visible at leas; 1 mile.
Stern light	One bright whi	te light aft showing all a	round the horizon. V	isible at least 2 miles.
Bow light	None	None	showing from right	ht in fore part of boat ahead to 2 points abaft sides. Visible at least
Whistle	None	One hand, mouth, or power-operated, audible at least ½ mile.	One hand or power- operated, audible at least 1 mile.	One power-operated, audible at least 1 mile.
Bell	None	None		, when struck, a clear round characteristics.
Lifesaving devices	One life preserve	er or ring buoy or buoy person on board	eant cushion for each	One life preserver or ring buoy for each person on board.
Flame arrestors	One on each car	buretor of all gascline e	engines installed after rd motors	25 April 1940, except
Ventilation	in engine and f	tors with cowls or equiva uel tank compartments bline or other fuel of a fla	of boats constructed of	r decked after 25 April
Fire extinguishers	134-gallon foar extinguisher.	n tetrachloride or one n er one 4-lb. CO <sub>2</sub> outboard motorboats.	Two 1-qt. carbon tetrachloride or two 134 gallon foam cr two 4-lb. CO <sub>2</sub> extinguish- ers.	Three 1-qt. carbon tetrachloride or three 134-gallon foam or three 4-th, CO <sub>2</sub> extinguish- ers.

which are new or which have never been numbered under the provisions of the act of June 7, 1918, as amended. application should be made to the same Coast Guard officer by the execution of Form NAVCG 1512, the application for number for undocumented motor vessel, or if no such application cards are available, by applying direct to such officer for these application cards. Upon their receipt and upon completion of same in duplicate, they, together with evidence of ownership such as a bill of sale, should be returned to the commander of the Coast Guard district in which the vessel is owned, in order that a certificate of award of number may be issued. Upon receipt of the certificate of award of number, the number awarded shall be painted or attached to each bow of the vessel and shall be in block characters. of good proportion and not less than three inches in height, reading from left to right and parallel with the waterline, as near the forward end of the bow as legibility of the entire number for surface and aerial identification permits. The number shall also be of a color in contrast with the color of the hull so as to be distinctly visible and legible.

4. The certificate of award of number must be kept on board at all times (unless in the custody of the commander of the Coast Guard district), except in the case of vessels not exceeding 17 feet in length, or vessels whose design or fittings are such that the carrying of such certificate on board would render it imperfect, illegible, or would otherwise tend to destroy its usefulness as a means of ready identification.

For further information in respect to the laws and regulations applicable to your vessels and for the requirements for vessels engaged in commercial service, you should consult or communicate with any Officer in Charge, Marine Inspection, United States Coast Guard, stationed at the principal ports in the United States, or apply direct to Coast Guard Head-cuarters, Washington 25, D. C.

### LESSONS FROM CASUALTIES

#### Accentuate the Positive

During the war when a great many ships' officers of all ranks were not as experienced as in peacetime, masters and chief engineers were very emphatic in requiring that they be called in case the watch officer was in doubt about any procedure to be followed or whenever anything occurred which seemed to him to be out of the ordinary. By implication this has been interpreted by many junior officers to mean that could not perform any but the most routine duties without first calling the master or chief engineer. In general, this is a good thing, as no commanding officer of a vessel would wish, for instance, to have the course changed

without his knowing about it, and no chief engineer would want a boiler cut out or the speed of the engine changed without prior notification.

However, this rule can be, and in several recent incidents has been, interpreted too literally. It does not mean, for instance, that in the case of low water in a boiler, a third or second assistant engineer must call the chief engineer and wait for his permission before putting out the fires. He should act immediately in this sort of emergency, put out the fires first and then call the chief.

A very serious case of a too literal interpretation of the foregoing rule has recently come to the Coast Guard's attention. In the case in question, a ship had been proceeding by dead reckoning for some time. The master left the bridge at 12:10 a. m. after leaving orders that the mate on watch (the second officer) was to change course and slow down at 1:00 a. m. (Incidentally, as a landfall was expected at 1:00 a. m. and the ship had been proceeding under dead reckoning, it is doubtful if the master should have left the immediate vicinity of the bridge under these circumstances.) The second officer had taken over the watch at midnight, at which time the vessel was proceeding full ahead at approximately fourteen knots in a hazy atmosphere with light rain. At 12:20 a. m. land was reported dead ahead, although according to the dead reckoning position no land should be visible at that time nor on that bearing. The watch officer saw the land but thought it several miles away. At 12:28 a. m. the lookout again reported land ahead. Realizing by this time that the vessel was off her course, the second mate then put the engines on "stand-by" and left the bridge to call the master and apprise him of the situation. The master proceeded to the bridge immediately, saw breakers dead ahead at about 500 yards, rang full astern and gave the vessel a hard right rud-It was too late; the vessel grounded lightly but was able to back free under her own power. Damage was estimated to be approximately \$50,000.

In the Coast Guard's opinion. neither the master nor the second mate used good judgment in their handling of the situation. It is felt that the master should have been immediately available under the circumstances and, assuming that the captain was not on the bridge it is thought that the second officer failed in his duty by not taking prompt action when land was first sighted at a time and on a bearing which were not expected. A check on the position of grounding showed that the vessel was about 40 miles north and west of her dead reckoning position.

The sight of land ahead by the lookout should have indicated that the vessel was considerably distant from her dead reckoning position and that precautionary measures were needed. This was the time to have called the captain. At the second time land was reported the second offi-

cer showed that he was aware that a situation of potential danger existed by his acts in ringing "stand-by" and going for the master. He stated that the reason he left the bridge to go on this errand himself was that he could not trust the stand-by man to get the captain up in a minimum length of time. This statement makes it all the more reprehensible that he did not slow down or stop the vessel before leaving the bridge. No harm could have resulted from this and it is possible that the grounding could have been prevented. A capable mate or assistant engineer in charge of a watch is supposed to be able to deal with most emergencies himself although he is, of course, supposed to call the master or chief engineer as soon as possible. However, his first duty is to the ship and any watch officer cannot be considered to have done his full duty in a case such as that just described if he merely throws up his hands, sends for the master and allows the ship to run aground when a timely stop or full astern bell might have saved her.

#### Lookout—Special Circumstances

A pusher type towboat pushing two empty barges in tandem down a river at dusk hit a small pleasure craft and one of the occupants was killed. This accident illustrates how the vision of the pilot on a tug can be obscured so that the water for some distance ahead of the tow cannot be seen by the pilot. In this case each barge was approximately 165 feet in length with a 40-foot beam, and drawing a foot and a half of water forward. The pilothouse of the tug was approximately 11 feet above the water line. The bows of the empty barges were

approximately 12½ feet above the water line. Because of the obstructions by the bows of the barges the pilot of the tug could not see the water ahead of the barges for a distance of well over 1,000 feet. There was no lookout stationed on the empty barges to inform the pilot of any changes in conditions which the pilot could not observe.

This tow was proceeding down a river in which the channel was marked. Three men in a small rowboat propelled by an outboard motor were fishing on the edge of the channel. The fishermen noticed the tow bearing down on them and attempted to move the rowboat. One fisherman attempted to raise the anchor, another tried to start the outboard motor, while a third used a lantern flashlight as a signal to attract the attention of the pilot on the tugboat. The flashlight signal was not seen by the pilot. The outboard motor on the rowboat failed to start and the boat drifted with the current. The tow in taking the outside of a bend in the river hit the rowboat. The men either jumped overboard or were knocked into the water. One fisherman lost his life and the other two were badly shaken up and injured. The pilot never noticed the rowboat nor knew that he had hit any object until he heard cries of the fishermen in the water.

In cases such as this, good seamanship requires that a pilot whose arc of vision is obscured by reason of the make up of the tow should station a lookout who can report objects or dangers which might appear in the obscured sector. The accompanying picture indicates that this practice is being carried out by the pilot of the towboat.



Proper lookout stationed where vision of pilot is obscured.

# APPENDIX

## **Amendments to Regulations**

#### TITLE 46-SHIPPING

#### Chapter I — Coast Guard: Inspection and Navigation

All the changes in the regulations are now in effect. The exact effective date may be obtained from the Federal Register in which the amendment was published.

Subchapter C-Motorboats, and Certain Vessels Propelled by Machinery Other Than by Steam More Than 65 Feet in Length

PART 25—REQUIREMENTS FOR ALL MOTORBOATS EXCEPT THOSE OF OVER 15 GROSS TONS, CARRYING PASSENGERS FOR HIRE

Section 25.8-5 is amended to read as follows:

§ 25.8-5 Signing and thumbprinting licenses. Every person to whom a license is issued shall place his signature and left thumbprint thereon, and upon any sheets attached for additional endorsements.

Section 25.8-7 is amended by changing the heading and paragraph (a) to read as follows:

§ 25.8-7 Duplicate license. (a) Whenever a person who holds a license loses his license, he shall report such loss to an Officer in Charge, Marine Inspection, who shall issue a duplicate license after receiving from such person a properly executed affidavit on Form NAVCG 719-E. giving satisfactory evidence of such loss, and a record of the lost license from the marine inspection office where it was issued. Such license shall be issued as a duplicate by the addition of the following typewritten endorsement, "This license replaces License Num-\_\_, issued at the above date," as well as the port and date of the duplicate issue. The duplicate license, issued for the unexpired term, shall have the same force and effect as the lost license.

PART 27—REQUIREMENTS FOR MOTOR-BOATS AND MOTOR VESSELS OF MORE THAN 15 GROSS TONS CARRYING PAS-SENGERS FOR HIRE

INSTALLATION REQUIREMENTS FOR VES-SELS USING LIQUID FUELS STORED AT ATMOSPHERIC PRESSURE AND TEMPERA-TURE AND HAVING FLASH POINTS ABOVE 110° F.

Section 27.5-1 Machinery and exhaust pipe is amended by changing the reference in paragraph (a) Ex-

haust pipe from "\$ 27.4-1 (d), (e), (f), and (g)" to "\$ 27.4-1 (d), (e), and (f)." (11 F. R. 4546, 24 April 1946)

#### Subchapter D-Tank Vessels

PART 32-REQUIREMENTS FOR HULLS,

#### MACHINERY AND EQUIPMENT

HULLS AND HULL FITTINGS; GENERAL Section 32.1-5 Hull fittings—TB/ ALL is amended by deleting paragraph (e).

#### PART 33-LIFESAVING APPLIANCES

#### LIFE PRESERVERS

Section 33.6-3 is amended to read as follows:

§ 33.6-3 Shipboard inspections-TB/ALL. At each annual inspection of any vessel, or oftener if deemed necessary, the life preservers shall be examined by an inspector to determine serviceability. When life preservers are found to be in accordance with the requirements, the inspector shall stamp them with the word "Passed," his initials, port, and date. Life preservers found not to be in a serviceable condition shall be removed from the vessel's equipment and, if beyond repair, shall be destroyed in the presence of the inspector (11 F. R. 4668, 27 April 1946)

#### PART 36—LICENSED OFFICERS AND CER-TIFICATED MEN

#### LICENSED OFFICERS

Section 36.1-5 is amended by the addition of a new paragraph (e) reading as follows:

§ 36.1-5 Professional examination and service—T/ALL.

(e) Commensurate with the experience of the applicant the Officer in Charge, Marine Inspection shall in appropriate cases place a limitation upon the license.

Section 36.1-12 is amended to read as follows:

§ 36.1-12 Signing and thumbprinting licenses—T/ALL. Every person to whom a license is issued shall place his signature and left thumbprint thereon, and upon any sheets attached for additional endorsements.

Section 36.1-16 is amended by changing the heading and paragraph (a) to read as follows:

§ 36.1-16 Duplicate license-T/ ALL. (a) Whenever a person who holds a license loses his license, he shall report such loss to an Officer in Charge, Marine Inspection, who shall issue a duplicate license after receiving from such person a properly executed affidavit on Form NAVCG 719-E. giving satisfactory evidence of such loss, and a record of the lost license from the marine inspection office where it was issued. Such license shall be issued as a duplicate by the addition of the following typewritten endorsement, "This license replaces License Number \_\_\_\_, issued at \_. on the above date," as well as the port and date of the duplicate The duplicate license, issued issue. for the unexpired term, shall have the same force and effect as the lost license. (11 F. R. 4546, 24 April 1946.)

#### Subchapter E-Load Lines

#### PART 43—FOREIGN OR COASTWISE VOYAGES

#### ADMINISTRATION

Section 43.01 is amended by the addition of the following sentence at the end thereof:

§ 43.01 Establishment of regulations. • • The regulations in this part shall not apply to merchant vessels on foreign voyages that are being towed and which are carrying neither cargo nor passengers.

Section 43.02 Responsibility for administration is amended by changing the phrase "Secretary of Navy" to "Secretary of the Treasury."

Section 43.019 is amended by the addition of the following sentence at the end of the last undesignated paragraph:

§ 43.019 Zones and seasonal areas.

\* When loading a vessel in a favorable zone for a voyage on which the vessel will enter a less favorable zone, such allowance must be made that the vessel, when crossing into the less favorable zone, will conform to the regulations and freeboard for the less favorable zone.

Section 43.021 Control is amended by changing in the first, third, and fourth undesignated paragraphs the phrase "District Coast Guard Officer" to "Coast Guard District Com-

GENERAL RULES FOR DETERMINING MAXI-MUM LOAD LINES OF MERCHANT VESSELS

Section 43.27 is amended by deleting the fourth and fifth undesignated paragraphs and by changing the

heading and the first undesignated paragraph to read as follows:

§ 43.27 Scuppers and sanitary discharge pipes. Discharges from scuppers and sanitary pipes led through the vessel's sides from spaces below the freeboard deck are to be fitted with efficient and accessible means for preventing water from passing inboard. Each separate discharge may have an automatic nonreturn valve with a positive means of closing it from a readily accessible position above the freeboard deck, or two automatic nonreturn valves without positive means of closing, provided the upper valve is situated so that it is always accessible for examination under service conditions. The positive-action valve is to be accessible and is to be provided with means for showing whether the valve is opened or closed.

The footnote referring to the heading "Load Lines for Steamers " immediately preceding § 43.32 is amended to read as follows:

<sup>1</sup>The provisions of §§ 43.01 to 43.022, inclusive, and §§ 43.1 to 43.31, inclusive, apply to all vessels and, for steamers, are further supplemented by §§ 43.32 to 43.67, inclusive. Steamers taking advantage of special classifications, such as tankers, steamers carrying timber deck cargo, lumber schooners, etc., are also subject to these requirements except as specifically modified in their separate classifications as set forth in the regulations.

Section 43.65 is amended to read as follows:

§ 43.65 Winter North Atlantic free-board. The minimum freeboard for vessels not exceeding 330 feet in length on voyages across the North Atlantic from a port or place of departure north of latitude 36° N. to a port or place of arrival north of latitude 36° N., regardless of the route of the vessel while it is in either of the northern seasonal winter zones during the winter season, shall be the winter free-board plus 2 inches. For vessels over 330 feet in length it is the winter free-board.

The footnote referring to the heading "Load Lines for Steamers Carrying Timber Deck Cargoes" immediately preceding § 43.77a is amended to read as follows:

¹ The provisions of §§ 43.01 to 43.022, inclusive, and §§ 43.1 to 43.67, inclusive, also apply to steamers marked to carry timber deck cargoes except as they are modified by §§ 43.77a to 43.91, inclusive.

The footnote referring to the heading "Load Lines for Tankers" immediately preceding § 43.92 is amended to read as follows:

<sup>1</sup> The provisions of §§ 43.01 to 43.022, inclusive, and §§ 43.1 to 43.67, inclusive, also apply to tankers except as they are modified by §§ 43.92 to 43.106, inclusive.

Section 43.105 is amended to read as follows:

§ 43.105 Winter North Atlantic freeboard; tanker. The minimum freeboard for tankers on voyages across the North Atlantic from a port or place of departure north of latitude 36° N. to a port or place of arrival north of latitude 36° N., regardless of the route of the vessel while it is in either of the northern seasonal winter zones during the winter season, shall be the winter freeboard plus an addition at a rate of one inch per 100 feet in length.

PART 45—MERCHANT VESSELS WHEN ENGAGED IN A VOYAGE ON THE GREAT LAKES

#### ADMINISTRATION

Section 45.02 Responsibility for administration is amended by changing the phrase "Secretary of Navy" to "Secretary of the Treasury."

Section 45.018 Control is amended in the first, third, and fourth undesignated paragraphs by changing the phrase "District Coast Guard Officer" to "Coast Guard District Commander."

A new footnote referring to the heading "Load Lines for Steamers" immediately preceding § 45.32 is added reading as follows:

<sup>1</sup>The provisions of §§ 45.01 to 45.019, inclusive, and §§ 45.1 to 45.31, inclusive, apply to all vessels having Great Lakes load lines and, for steamers, are supplemented by §§ 45.32 to 45.64, inclusive. Tankers having Great Lakes load lines are also subject to these requirements except as specifically modified in §§ 45.65 to 45.78, inclusive.

## CONDITIONS OF ASSIGNMENT OF LOAD

Section 45.27 is amended by changing the first undesignated paragraph to read as follows:

§ 45.27 Scuppers and sanitary discharge pipes. Discharges from scuppers and sanitary pipes led through the vessel's sides from spaces below the freeboard deck are to be fitted with efficient and accessible means for preventing water from passing inboard. Each separate discharge may have an automatic nonreturn valve with a positive means of closing it from a readily accessible position above the freeboard deck, or two automatic nonreturn valves without positive means of closing, provided the upper valve is situated so that it is always accessible for examination under service conditions. The positive-action valve is to be accessible and is to be provided with means for showing whether the valve is opened or closed.

The footnote referring to the heading "Load Lines for Tankers" immediately preceding § 45.65 is amended to read as follows:

<sup>1</sup>The provisions of §§ 45.01 to 45.019, inclusive, and §§ 45.1 to 45.64, inclusive, shall apply to Great Lakes tankers except as they are modified by §§ 45.65 to 45.78, inclusive.

#### PART 46—SUBDIVISION LOAD LINES FOR PASSENGER VESSELS

Section 46.02 Responsibility for administration is amended by changing the phrase "Secretary of Navy" to "Secretary of the Treasury."

Section 46.022 Control is amended by changing in the first and second undesignated paragraphs the phrase "District Coast Guard Officer" to "Coast Guard District Commander."

Section 46.024 Plans and inspection of new and converted vessels is amended in the second undesignated paragraph by changing the phrase "District Coast Guard Officer" to "Coast Guard District Commander."

RULES FOR DETERMINING SUBDIVISION LOAD LINES FOR PASSENGER VESSELS EN-GAGED ON FOREIGN AND COASTWISE VOYAGES

Section 46.30 is amended by changing the first three undesignated paragarphs to read as follows:

§ 46.30 Inlets and discharges. All main and auxiliary inlets and discharges shall be so arranged as to prevent accidental admission of water into the vessel. Cocks or valves are to be fitted to each such inlet or discharge at or near the shell, so arranged that they can be readily opened or closed. Sea chests are to be made with the necks as short as practicable, and where they would require to have long necks if fastened directly to the shell of the vessel, they may, instead, be attached to structural boxes built onto the shell.

Pipes terminating at the shell are not to be fitted in a direct line between the outboard openings and the first rigid connection inboard, but are to be arranged with bends or elbows. Such bends or elbows are to be sufficient in number to provide for expansion of the pipe, any movement due to the working of the vessel, and to offer reasonable safeguard against damage to the piping due to rubbing or bumping of the vessel in the vicinity of the outboard ends.

Valves fitted on the vessel's sides are to be of substantial construction and are to be effectively protected against damage. Where operating gear is provided the lead of shafting should be as direct as possible and all parts of the gear are to be protected against damage. (11 F.R. 4668-4669, 27 April 1946)

#### Subchapter F-Marine Engineering

#### PART 55-PIPING SYSTEMS

Section 55.19-5 is amended by the addition of a new paragraph (k), reading as follows:

§ 55.19-5 Installation. \* \* \*

- (k) (1) On new installations or replacements for vessels of 150 gross tons and over, cast iron for any connection to the vessel's shell below the freeboard deck shall not be permitted, nor shall cast iron valves be secured to sea chests.
- (2) On ocean and coastwise vessels constructed prior to June 15, 1941, in which cast iron sea chests were installed, reinforcing with concrete or other suitable material in conjunction with structural bracing shall be fitted. (11 F.R. 4669, 27 April 1946)

Subchapter G-Ocean and Coastwise: General Rules and Regulations

#### PART 59—BOATS, RAFTS, BULKHEADS, AND LIFESAVING APPLIANCES (OCEAN)

Section 59.55 (j) is amended to read as follows:

§ 59.55 Life preservers. \* \* \*

(j) Shipboard inspections. At each annual inspection of any vessel, or oftener if deemed necessary, the life preservers shall be examined by an inspector to determine serviceability. When life preservers are found to be in accordance with the requirements, the inspector shall stamp them with the word "Passed," his initials, port, and date. Life preservers found not to be in a serviceable condition shall be removed from the vessel's equipment and, if beyond repair, shall be destroyed in the presence of the inspector.

PART 60—BOATS, RAFTS, BULKHEADS, AND LIFESAVING APPLIANCES (COAST-WISE)

Section 60.48 (j) is amended to read as follows:

§ 60.48 Life preservers. (See § 59.55, as amended, which is identical with this section.)

## PART 61—FIRE APPARATUS; FIRE PREVENTION

Section 61.14 is amended by changing the first sentence to read as follows:

§ 61.14 Fire-fighting equipment on vessels using oil as fuel. Steam-propelled vessels burning oil for fuel, and seagoing vessels in excess of 300 gross tons propelled by internal-combustion engines, except such seagoing vessels propelled by internal-combustion engines as are engaged in fishing, oystering, clamming, crabbing, or any other branch of the fishery or kelp or sponge industry, shall be fitted with the fire-fighting equipment of the type and character specified below: \* \* \* (11 F. R. 4669, 27 April 1946.)

#### PART 62—LICENSED OFFICERS AND CERTIFICATED MEN

#### INSPECTED VESSELS

Section 62.4 is amended by the addition of a new undesignated paragraph to follow immediately after the fourth undesignated paragraph, reading as follows:

§ 62.4 Professional examination. \* \* \* Commensurate with the experience of the applicant the Officer in Charge, Marine Inspection, shall in appropriate cases place a limitation upon the license.

Section 62.6 is amended to read as follows:

§ 62.6 Signing and thumbprinting licenses. Every person to whom a license is issued shall place his signature and left thumbprint thereon, and upon any sheets attached for additional endorsements.

Section 62.7 is amended by changing the heading and paragraph (a) to read as follows:

§ 62.7 Duplicate license. (a) Whenever a person who holds a license loses his licence, he shall report such loss to an Officer in Charge, Marine Inspection, who shall issue a duplicate license after receiving from such person a properly executed affidavit on Form NAVCG 719-E, giving satisfactory evidence of such loss, and a record of the lost license from the marine inspection office where it was issued. Such license shall be issued as a duplicate by the addition of the following typewritten endorsement, "This license replaces License Number \_\_\_\_, issued at \_\_ on the above date," as well as the port and date of the duplicate issue. The duplicate license, issued for the unexpired term, shall have the same force and effect as the lost

#### UNINSPECTED VESSELS

license

Section 62.103 (a) is amended by changing the third sentence to read as follows:

§ 62.103 Licenses issued. (a) \* \* \* They will be issued on the usual license form and shall be limited on their face to uninspected vessels.

#### LICENSED MASTERS, MATES AND ENGINEERS

Section 62.114 (a) is amended to read as follows:

§ 62.114 Signing and thumbprinting licenses. (a) Every person to whom a license is issued shall place his signature and left thumbprint thereon, and upon any sheets attached for additional endorsements.

Section 62.118 is amended by changing the heading and paragraph (a) to read as follows:

§ 62.18 Duplicate license. (a) Whenever a person who holds a license loses his license, he shall report such loss to an Officer in Charge. Marine Inspection, who shall issue a duplicate license after receiving from such person a properly executed affi-davit on Form NAVCG 719-E, giving satisfactory evidence of such loss, and a record of the lost license from the marine inspection office where it was issued. Such license shall be issued as a duplicate by the addition of the following typewritten endorsement, "This license replaces License Number \_\_\_\_, issued at \_\_\_\_ --- on the above date," as well as the port and date of the duplicate issue. The duplicate license, issued for the unexpired terms, shall have the same force and effect as the lost license. (11 F. R. 4546-4547, 24 April 1946.)

#### PART 63-INSPECTION OF VESSELS

Section 63.4 Inspection of hulls is amended by deleting the last undesignated paragraph. (11 F. R. 4669, 27 April 1946.)

Subchapter H—Great Lakes: General Rules and Regulations

#### PART 76—BOATS, RAFTS, BULKHEADS, AND LIFESAVING APPLIANCES

Section 76.52 (j) is amended to read as follows:

§ 76.52 Life preservers. (See § 59.55 of this chapter, as amended, which is identical with this section.)

#### PART 79-INSPECTION OF VESSELS

Section 79.4 Inspection of hulls is amended by deleting the last undesignated paragraph. (11 F. R. 4669, 27 April 1946)

#### PART 78—LICENSED OFFICERS AND CER-TIFICATED MEN

#### INSPECTED VESSELS

Section 78.4 is amended by the addition of a new undesignated paragraph to follow immediately after the fourth undesignated paragraph, reading as follows:

§ 78.4 Professional examina-

Commensurate with the experience of the applicant the Officer in Charge, Marine Inspection, shall in appropriate cases place a limitation upon the license.

Section 78.6 is amended to read as follows:

§ 78.6 Signing and thumbprinting licenses. (See § 62.6 of this chapter, as amended, which is identical with this section.)

Section 78.7 is amended by changing the heading and paragraph (a) to read as follows:

§ 78.7 Duplicate license. (See § 62.7 of this chapter, as amended,

which is identical with this section.)
(11 F. R. 4547, 24 April 1946)

Subchapter I-Bays, Sounds, and Lakes Other Than the Great Lakes: General Rules and Regulations

PART 94—BOATS, RAFTS, BULKHEADS,

Section 94.52 (j) is amended to read as follows:

§ 94.52 Life preservers. (See § 59.55 of this chapter, as amended, which is identical with this section.)

#### PART 97-INSPECTION OF VESSELS

Section 97.4 Inspection of hulls is amended by deleting the last undesignated paragraph. (11 F. R. 4669, 27 April 1946)

#### PART 96—LICENSED OFFICERS AND CERTIFICATED MEN

Section 96.4 is amended by the addition of a new undesignated paragraph to follow immediately after the third undesignated paragraph, reading as follows:

§ 96.4 Professional examination.

Commensurate with the experience of the applicant the Officer in Charge, Marine Inspection, shall in appropriate cases place a limitation upon the license.

Section 96.6 is amended to read as follows:

§ 96.6 Signing and thumbprinting licenses. (See § 62.6 of this chapter, as amended, which is identical with this section.)

Section 96.7 is amended by changing the heading and paragraph (a) to read as follows:

§ 96.7 Duplicate license. (See § 62.7 of this chapter, as amended, which is identical with this section.) (11 F. R. 4547, 24 April 1946)

Subchapter J-Rivers; General Rules and Regulations

PART 113—BOATS, RAFTS, BULKHEADS, AND LIFESAVING APPLIANCES

Section 113.44 (j) is amended to read as follows:

§ 113.44 Life preservers. (See § 59.55 of this chapter, as amended, which is identical with this section.)

PART 116-INSPECTION OF VESSELS

Section 116.4 Inspection of hulls is amended by deleting the last undesignated paragraph. (11 F. R. 4669, 27 April 1946)

#### PART 115—LICENSED OFFICERS AND CERTIFICATED MEN

Section 115.4 is amended by the addition of a new undesignated paragraph to follow immediately after the third undesignated paragraph, reading as follows:

§ 115.4 Professional examination. (See § 96.4 of this chapter, as amended, which is identical with this section.)

Section 115.6 is amended to read as follows:

§ 115.6 Signing and thumbprinting licenses. (See § 62.6 of this chapter, as amended, which is identical with this section.)

Section 115.7 is amended by changing the heading and paragraph (a) to read as follows:

§ 115.7 Duplicate license. (See § 62.7 of this chapter, as amended, which is identical with this section.) (11 F. R. 4547, 24 April 1946)

Subchapter K-Seamen

PART 132-ALLOTMENTS OF SEAMEN

Section 132.3 is amended to read as follows:

§132.3 Allotments to be in writing. All allotments executed by any seaman shall be in writing in triplicate on Form 722 and shall be approved by a shipping commissioner, deputy shipping commissioner, or consular officer of the United States.

Section 132.8 is amended to read as follows:

§ 132.8 Procedure with respect to allotments. All allotments shall be executed in triplicate by the seaman making the same and after the same are approved, shall be distributed by the shipping commissioner, or consular officer in the following manner:

(a) The original shall be sent to

the seaman's employer;

(b) The duplicate shall be sent to the person or bank in whose favor the allotment is drawn; and

(c) The triplicate shall be retained in the file of the official who approves the allotment.

Section 132.12 is amended to read as follows:

§ 132.12 Cancellation of allotment. Whenever a seaman, before the expiration of the allotment period, severs his contractual relationship with the vessel upon which he was employed, the master of such vessel should notify the employer of the seaman, by the quickest means of communication available, of this fact. Upon receipt of such information, the employer should notify the person in whose favor the allotment is drawn. (11 F. R. 4701, 30 April 1946)

PART 138—RULES AND REGULATIONS FOR ISSUANCE OF CERTIFICATES AND CONTINUOUS DISCHARGE BOOKS

Section 138.4 is amended by the addition of a new paragraph (g), reading as follows:

§ 138.4 Lifeboatman. \* \* \*

(g) A merchant mariner's document endorsed as Able Seaman shall be considered as the equivalent of a certificate as Lifeboatman or an endorsement as Lifeboatman and it shall be accepted as a certificate as Lifeboatman wherever required by law or regulation. (11 F. R. 4547, 24 April 1946)

# Navigation and Vessel Inspection Circular No. 71

Policy and Special Procedure in Maritime Labor Disputes

UNITED STATES COAST GUARD

WASHINGTON 25, D. C., 30 April 1946

1. The Coast Guard in the exercise of its functions under the Navigation and Vessel Inspection Laws may be confronted with certain problems created by and arising out of labor disputes in the nature of strikes. Since the Coast Guard is vested by statute with certain duties and obligations it. as a law enforcement agency, must and will invoke its authority when a violation of existing statutes or regulations occurs although such violation might be a direct result of a strike or other labor dispute. In such a situation, where proper complaint is made. the matter will be thoroughly investigated and action taken as indicated. but under no circumstances will the statutory machinery of the Coast Guard be used for the purpose of favoring either side of the controversy. In order to negative unjust charges of partisanship and discrimination, which might at the time or later be directed at the Coast Guard, it has been considered desirable to devise a special method of procedure to be followed in cases falling within the aforementioned category.

2. Complaints lodged in pursuance of R. S. 4450, as amended, and arising out of strikes or other labor disputes should, when circumstances permit, be in writing and signed. They should contain sufficient information concerning the persons and vessels involved and the alleged offenses, including time and place. If on the face of a complaint an investigation is warranted under existing instructions, one or more experienced examining officers will be assigned immediately to conduct an investigation. If in the course of the investigation it develops that charges should be preferred, the examining officer will procure signed statements from all

the witnesses and subpoena them to appear for the hearing. In all other respects investigations and hearings will be conducted in accordance with normal Coast Guard procedure.

3. Whenever the basis of a complaint is refusal or failure to obey an order, charges will not be preferred unless the evidence reflects that it was clearly an order and was not in the nature of a request, that it was properly communicated to the person charged, and that it was lawful and directly connected with the operation or safety of the vessel.

4. Shipping commissioners will view the contractural obligations of the master and seamen under the Shipping Articles to be the same as under normal conditions. Rulings made by them with regard to the discharge of seamen who have signed Shipping Articles will in no way be influenced by the existence of a strike.

(Signed) J. F. FARLEY, Admiral, U. S. Coast Guard Commandant

# Equipment Approved by the Commandant

BUOYANT CUSHIONS FOR MOTORBOATS

Approval No. B-297, 14¼" x 15¾" x 2" buoyant cushion, No. 1700, 20 oz. kapok, for use on motorboats of Classes A, 1, and 2 not carrying passengers for hire, Dwg. No. 1-109, dated 14 February 1946, manufactured by Wilber & Son, 116 New Montgomery Street, San Francisco 5, California.

Approval No. B-298, 14" x 48" x 2" tufted buoyant cushion, 70 oz. kapok, for use on motorboats of Classes A, 1, and 2 not carrying passengers for hire, Dwg. No. 313, dated 13 March 1946, manufactured by Elvin Salow Co., 379 Atlantic Avenue, Boston 10, Mass.

Approval No. B-299, 14" x 20" x 2" tufted buoyant cushion, 30 ounces kapok, for use on motorboats of Classes A, 1, and 2 not carrying passengers for hire, Dwg. No. 313, dated 13 March 1946, manufactured by Elvin Salow Co., 379 Atlantic Avenue, Boston 10, Mass.

Approval No. B-300, 18" x 22" x2" tufted buoyant cushion, 48 oz. kapok, for use on motorboats of Classes A, 1, and 2 not carrying passengers for hire, Dwg. No. 313, dated 13 March 1946, manufactured by Elvin Salow Co., 379 Atlantic Avenue, Boston 10, Mass.

Approval No. B-301, 15" x 15" x 2" seat, 20 oz. kapok; and 15" x 20" x 2" back, 27 oz. kapok, come apart style double buoyant cushion, for use on motorboats of Classes A, 1, and 2 not carrying passengers for hire, Dwg. No. 313, dated 13 March 1946, manufactured by Elvin Salow Co., 379 Atlantic Avenue, Boston 10, Mass. (11 F. R. 4442, 20 April 1946)

#### ELECTRICAL APPLIANCES

The following list supplements that published by the United States Coast Guard under date of 15 May 1943, entitled "Miscellaneous Electrical Equipment Satisfactory for Use on Merchant Vessels," as well as subsequently published lists, and is for the use of Coast Guard personnel in their work of inspecting merchant vessels. Other electrical items not contained in this pamphlet and subsequent listings may also be satisfactory for marine use but should not be so considered until the item is examined

and listed by Coast Guard Headquarters. Before listings of electrical appliances are made, it is necessary for the manufacturer to submit to The Commandant (MMT), U. S. Coast Guard, Washington 25, D. C., duplicate copies of a detail assembly drawing, including a material list with finishes of each corrosive part, of each item. An examination of the drawings submitted will be made and, if necessary, tests conducted on such appliances to determine their suitability for marine use.

CLEANING PROCESS FOR LIFE PRESERVERS

kapok life preservers, submitted by

Moreland's Industrial Laundry, 225

kapok life preservers, submitted by

Shipservice Dry Cleaning, Inc., 2-10 Provost Street, Brooklyn 22, New

York. (11 F. R. 4221, 16 April 1946)

Roy Street, Seattle 9, Washington.

Moreland's cleaning process for

Shipservice cleaning process for

Location apparatus may be used Passen-Machinger and Date of Manufacturer and description of equipment ery Pump crew action Open rooms quarters and decks of tank and public work vessels spaces spaces. Automatic Control Co., St. Paul, Minn.: Automatic Control Co., St. Paul, Minn.:

High water alarm contact maker, waterproof, 1A, 125V, drawing No. M55-3, Alt. 0.

Bailey Meter Co., Cleveland, Ohio:

High-low level alarm contact maker, drawing No. D712419M, revision 0-C R9440-LS415Q-Dripproof, single pole, normally open; make ampere 30, A C or DC; break ampere, DC, 2.5, 115V-0.8, 230V-0.25, 550V; break ampere AC, 30, 110V-15, 220V-7, 440V-5, 550V

Clark Cooper Co., Palmyra, N. J.:

Lubricating oil low pressure alarm contact maker, Type L, 4A, 120V, waterproof, drawing No. EC838-7, revision 0. × 4-8-46 4-2-46 4-9-46 sion 0 Lubricating oil low pressure alarm contact maker, Type L, Class 1, 4A, 120V, waterproof, drawing No. EC3-8, revision 32 4-29-46 The Dayton Manufacturing Co., Dayton, Ohlo: Berth light, recessed, fixture No. B-5601, nonwatertight, 25 watts maximum, drawing No. 1985, revision 2 Bracket fixture, No. B-5250-C, nonwatertight, 25 watts X 3-29-46 maximum, drawing No. 963, revision 5
Ceiling light fixtures C-10444 and C-10444A, nonwater-3-29-46 tight, 3 75-watt lamps maximum, drawing No. 648, 3-29-46 revision 6 X revision 6.

Ceiling light fixture No. C-10813, nonwatertight, 2 50watt lamps maximum, drawing No. 46D155, revision 1

Ceiling fixture, nonwatertight, fixture No. C-10814, 100
watts maximum, drawing No. 46D121, revision 0. 3-29-46 3-20-46 watts maximum, drawing No. 46D121, revision 0.
Louvre berth light, nonwatertight, fixture No. B-5004,
25 watts maximum, drawing No. 1993, revision 4.
Ceiling fixture, nonwatertight, fixture No. C-10799, 100
watts maximum, drawing No. 1972, revision 4.
Ceiling fixture, nonwatertight, fixture No. C-10802, 2 60watt lamps maximum, drawing No. 1975, revision 1.
Berth light, ceiling mounted, nonwatertight, fixture No.
C-10800, 95, watts maximum, drawing No. 1973 revision 3 - 20 - 46X 3 - 27 - 463-27-46 C-10800, 25 watts maximum, drawing No. 1973, revision 3-27-46 5.

Illuminated medicine cabinet No. 101, nonwatertight, drawing No. 1989, revision 6.

Illuminated sign fixture No. B-5511, nonwatertight, 25 watts maximum, drawing No. X46D251, Alt. 0.

Ceiling fixture No. C-10811, waterproof, less guard, 60 watts maximum, drawing No. X46D266, Alt. 0.

Berth light, surface mounted, louvre, fixture No. B-5610, nonwatertight, 25 watts maximum, drawing No. X45D266, Alt. 0. 4-5-46 4-15-46 × 4-15-46 nonwatertight, 25 watts maximum, drawing No. X46D244, Alt. 0.

Edwards and Co., Inc., Norwalk, Conn.:

Push button, nonwatertight, Cat. No. 850; 1A, 250V D. C.; 3A, 250V A. C.; 3A, 125V D. C.; 6A, 125V A. C., drawing No. 5613NN, Alt. 1.

Rumning and anchor light panel, dripproof, 115V D. C., Cat. No. M. D. 2961, drawing No. 7183, Alt. 0. 4-15-46 3-18-46 4-9-46

#### LIFEBOATS

26' x 9' x 3.6' steel motor-propelled lifeboat, 45-person capacity, General Arrangement Dwg. No. 2657 revised 2/21/46, submitted by Lane Lifeboat and Davit Corporation, Flushing, New York. (Supersedes approval 3 August 1943, 8 F. R. 10773 insofar as new construction is concerned.)

24' x 8' x 3.58' steel motor lifeboat, 35-person capacity, General Arrangement Dwg. No. 2981, dated 7 February 1946, altered 26 February 1946, submitted by Welin Davit and Boat Corporation, Perth Amboy, N. J. (11 F. R. 4221, 16 April 1946)

24' x 8' x 3.58' steel motor-propelled lifeboat, 37-person capacity, General Arrangement Dwg. No. 2605, dated 7 February 1946, Alt. 26 February 1946, submitted by Welin Davit and Boat Corp., Perth Amboy, New Jersey. (Supersedes approval 11 September 1943, 8 F. R. 12518, insofar as new construction is concerned.)

24' x 8' x 3.58' steel oar-propelled lifeboat, 40-person capacity, General Arrangement Dwg. No. 2602, dated 7 February 1946, Alt. 18 February 1946, submitted by Welin Davit and Boat Corp., Perth Amboy, New Jersey. (Supersedes approval 16 September 1943, 8 F. R. 12675, insofar as new construction is concerned.) (11 F. R. 4442, 20 April 1946)

#### LIFE PRESERVERS

Approval No. B-302, Model 5 child kapok life preserver, Specification 160.002, manufactured by Seaway Manufacturing Co., Inc., 511 North Solomon Street, New Orleans 19, La.

Approval No. B-303, Model 6 child kapok life preserver, Specification 160,002, manufactured by Seaway Manufacturing Co., Inc., 511 North Solomon Street, New Orleans 19, La. (11 F. R. 4442, 20 April 1946)

#### TELEPHONE SYSTEM

Sound powered telephone handset, Dwg. No. A-257, Alt. 2, manufactured by United States Instrument Corp., East Orange, New Jersey. (11 F. R. 4442, 20 April 1946)

# ITEMS SUITABLE FOR MERCHANT MARINE USE

#### **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. The following affidavit was received and accepted during the period from 16 January 1946 to 15 April 1946:

The Rud Machine Co., 1078 West 11th Street, Cleveland 13, Ohio, flanges.

	Location	on apparat	us may be	used	
Manufacturer and description of equipment	Passen- ger and crew quarters and public spaces	Machin- ery cargo and work spaces	Open decks	Pump rooms of tank vessels	Date of action
Lovell-Dressel Co., Inc., Arlington, N. J.: Pump room bulkhead fixture, Cat. No. 4150, drawing	1				2 444
No. M-5182, Alt. 1. Swimming pool fixture, submersible, 250 watts maximum,		*******	******	X	4-5-46
Cat. No. 617, drawing No. 617, Alt. 0	I	1	x	Jimese.	4-12-46
Bracket fixture, nonwaterlight, 40 watts maximum, fix- ture No. 982-B, Alt. 0.	x	-			4-12-46
Borth light, nonwatertight, 25 watts maximum, fixture No. 571, Alt. 0	Y				4-12-46
Ceiling fixtures, nonwatertight, 2 60-watt lamps, maxi-	x		-		4-12-46
minn, fixture Nos. 989, Alt. 0, and 900, Alt. 0.  Table lamp, nonwatertight, 1 150-watt and 2 60-watt lamps maximum, fixture No. 993, Alt. 0					
Bracket fixture, nonwatertight, 60 watts maximum, fix-	x	Stevens			4-12-46
ture No. 991, Alt. 9.  Table lamp, nonwatertight, 40 watts maximum, fixture	x				4-12-46
No. 988, Alt. 0 Ceiling fixture, nonwatertight, 60 watts maximum, fix-	1	********			4-12-46
ture No. 572, Alt. 0.  Desk lamp, nonwatertight, 25 watts maximum, fixture	x	********			4-12-46
No. 979, Alt. 0. Table lamp, nonwatertight, 40 watts maximum, fixture	x				4-12-46
No. 988-B, Alt. 0. Ceiling fixture, nonwatertight, 60 watts maximum, fix-	x				4-12-46
ture No. 977, Alt. 0	x				4-12-46
Russell & Stoll Co., Inc., New York, N. Y.: Switch and receptacle combination, waterproof, 2-wire, 3-pole, grounded, 10A, 250V, Cat. No. 478-45 (single-pole switch), cat. No. 1478-45 (double-pole switch), drawing					
No. C-6784, Alt. 3 Receptacle, 2-gang, angle type, waterproof, 2-wire, 3-pole, grounded: 10A, 440V, A. C., 250V D. C.; 20A, 125V	X	X	X		4-4-46
D. C.; drawing No. B-6810, Alt. 3. Switch and receptacle combination, 2-gang, angle type, waterproof, 2-wire, 3-pole, grounded, 10A, 250 volts, Cat. No. 175-45 (single-pole switch), Cat. No. 177-45, (double-pole switch), drawing No. C-6811, Alt. 3.	X	x	I		1-1-16
(double-pole switch), drawing No. C-6811, Alt. 3. Switch and receptacle combination, 3-gang, angle type, waterproof, 2-wire, 3-pole, grounded, 10A, 125V. Cat. No. 176-45 (single-pole switch), Cat. No. 178-45 (double-	14	x	x		4-4-46
pole switch), drawing No. C-6812, Alt. 3  Receptacle, single, angle type, waterproof, 2-wire, 3-pole, grounded; 10A, 440V, A. C., 250V, D. C.; 20A, 125V,	- X	x	x	*******	4-4-46
D.C.; Cat. No. 171-45, drawing No. B-6878, Alt. 3 Receptacle, 3-gang, angle type, waterproof; 19A, 250V D. C., 440V A. C.; 20A, 125V, D. C.; Cat. No. 173-45,	- X	x	x		4-4-46
drawing No. C-6888, Alt. 2  Receptacle, single, waterproof; 10A, 250V, D. C., 440V, A. C.; 20A, 125V D. C.; Cat. No. 479-45, 2-wire, 3-pole, Cat. No. 1479-45, 3-wire, 4-pole, grounded, drawing No.	X	x	x		4-4-46
B-6005, Alt. 1 Receptacle, 2-gang, waterproof, 2-wire, 3-pole, grounded, Cat. No. 405-45; 10A, 250V D. C., 440V A. C.; 20A, 125V	x	x	x		4-1-40
Receptacle, 3-gang, waterproof, 2-wire, 3-pole, grounded, Cat. No. 638-45; 10A, 250V D. C., 440V A. C.; 20A, 125V		, r	x		4-4-40
D. C., drawing No. C-6907, Rev. I. Switch and receptacle combination, 3-gang, waterproof, 10A, 230V, 2-wire, 3-pole, grounded; Cat. No. 498-45 (single-pole switch), Cat. No. 1498-45 (double-pole	x	x	X		4-4-10
switch), drawing No. C-6908, Alt. 1. Male plug: 10A, 250V D. C., 440V A. C.; 20A, 125V D. C.; Cat. No. 3720-B, 2-wire, 3-pole, grounded; Cat. No. 3730-B, 3-wire, 4-pole, grounded, drawing No. F-10536,	x	x	x		4-4-46
Alt. 4. Simplet Electric Co., Inc., New York, N. Y.: Nonwatertight boxes and devices for lighting fixtures, drawing No. MC-125, Alt. O:					4-4-4
Cat. No. P-AS or P-AF. Cat. No. P-CS or P-CF. Nonwatertight Wiring Devices, drawing No. MC-127,	X	*********		*******	3-25-46
Alt. O: Cat. No. PSS-101—Switch, Single Pole, 10A, 125V	x				
Cat. No. P8S-103—Switch, Three-way, 10A, 125V	x				
15A, 125V Cat. No. P-DS-Receptacle, Three-wire, Grounded,					
15A, 125V Cat. No. P-EF-Receptacle, Duplex, Three-wire, Grounded, 15A, 125V Cat. No. P-ES-Receptacle, Duplex, Three-wire,	- X			*******	
Sterling Bronze Co., Inc., Long Island City, N. Y.:	x	*******			3-25-4
Ceiling fixture, nonwatertight, 2 60-watt lamps maximum, drawing No. 77481-A, Revision 2 Cove light, nonwatertight, 4 60-watt lamps maximum,	X				3-26-4
drawing No. 77685-A, Revision 2	x				3-26-4

# Merchant Marine Personnel Statistics

### MERCHANT MARINE LICENSES ISSUED DURING MARCH 1946

#### DECK OFFICERS

	F				Mn	ster	12			3				- 1	Chie	mat	ė	96						S	econ	d mn	te		
Region	Oc	wan		ast- ise	Gr	eat kes		8. &	Riv	ers	Oe	ean.	Co	ast-	Gr	eat kes	В.	8. &	Ri	rers	00	ean		ast- ise	Gr	rent ikes		8. &	River
	0	R	0	R	0	R	o	R	0	R	0	R	o	R	0	R	0	R	o	R	o	R	σ	R	0	R	0	R	0
Atlantic coast	45 13	37 20	9 2	11 2	6	5 1 42	5	12 4	2 2	4 6	79 19	7 2	1	1			2 2	5 3	Taraca.	11	100.00	9 2						****	
Great Lakes and rivers Pacific coast	30	63	4	3		î	5	18		1	32	7					3	6			42	6	1	1	100	100		111	
Total	88	120	15	16	6	49	11	34	5	20	130	16	1	1			7	14	2	11	142	18	1	1		10.0			See 5

11/2/201					Thir	d mat	er.				63		Pi	lots			N	faster	mate			Total	
Region	Oce	an		ast- ise	Gi	reat ikes	В.	8. & L.	Ri	vers	Gr La	eat kes	В.	S. &	Riv	ers		spect	ed ve		Origi-	Re-	Grand
	0	R	0	R	0	R	0	R	0	R	0	R	0	R	0	R	0	R	0	R	nal	newal	total
Atlantic coast	22I 31	9											43 20	69 29		1	*****	1			476 119	171 71	647 190
Great Lakes and rivers Pacific coast	76	3	III		1000	11	1700				22	84	3 19	62	17 3	21 4	4	14	2	ī	53 221	170 196	223 417
Total	328	13	-						70	557.81	22	91	85	161	20	27	4	15	2	1	869	608	1,477

#### ENGINEER OFFICERS

	Ch	ief engir	neer, stear	n	First as	sistant	engineer,	steam	Second	assistan	t enginee	r, steam	Third a	ssistant	enginee	r, steam
Region	Oce	an.	Inla	nd	Oce	an	Inla	nd	Oce	an	Inh	and	Oce	an	In	land
	0	R	0	R	0	R	0	R	0	R	0	R	0	R	0	R
Atlantic coast Gulf coast Great Lakes and rivers. Pacific coast	68 15 2 28	118 21 6 43	9 11 1	45 4 39 5	88 22 3 41	28 4 3 16	1 19 1	8 3 24 4	129 29 3 54	29 4 3 11	6	1 1 17	237 33 7 73	17 5 2 2	4	
Total	113	188	21	93	154	51	21	39	251	47	7	19	350	26	4	

	,			Motor	vessels				t	ninspec	ted vesse	Is		Totals	
Region	Chief er	ngineer	First as		Second a			assistant ineer	Chief e	ngineer		nt engi- eer	Orig-	Re-	Grand
	0	R	0	R	0	R	0	R	o	R	0	R	inal	newal	total
Atlantic coast	42 3	68 12 10	15 2	25 2 5	6	14	156	10		1			752 113 64	364 .57 110	1, 116 176 176
Great Lakes and rivers	. 5	37	. 5	10	2	7	45	2	3	9	3	*******	261	146	400
Total	54	127	26	42	12	23	207	12	3	10	3		1, 190	677	1,86

### ORIGINAL SEAMEN'S DOCUMENTS ISSUED, MONTH OF MARCH 1946

Region	Contin- uous dis- charge book	Certifi- cate of iden- tity	A. B., green, 3 years	A. B., green, 9 months emer- gency i		A. B., blue, 6 months emer- gency:		Life- boat, 12-24 months	U. S. Mer. Mir. Doc.	Q. M. E. D., 6 months	Q. M. E. D., emer- gency	Radio oper- ators	Certifi- cate of service	Tanker man	Staff officer	Total
Atlantic coast	7 34 5 93	1 0 16 0	102 11 58 24	341 99 224 15	231 32 147 80	4 0 1 10	0 0 0	790 66 366 97	3, 504 848 1, 421 808	737 156 349 159	562 230 226 46	9 2 14 1	2, 422 734 1, 082 817	68 22 46 7	350 60 150 5	9, 128 2, 294 4, 105 2, 162
Total	139	17	195	679	490	15	0	1, 319	6, 581	1, 401	1,064	26	5, 055	143	565	17, 689

### WAIVERS OF MANNING REQUIREMENTS FROM 1 MARCH TO 31 MARCH 1946

# Authority for These Waivers Contained in Navigation and Vessel Inspection Circular No. 31, Dated 13 March 1943 and Navigation and Vessel Inspection Circular No. 37, Dated 6 July 1943

Region	Number of vessels	Deck officers substituted for higher ratings	Engineer officers sub- stituted for higher ratings	Able seamen substituted for deck officers	Ordinary seamen sub- tuted for able seamen	Qualified mem- bers of engine department substituted for engineer officers	Wipers or coal passers substi- tuted for quali- fied members of engine department	Wipers, coal passers or cadets sub- stituted for engineer officers	Ordinary seamen or endets sub- stituted for deck officers	Total
Atlantic coast Gulf coast Pacific coast Great Lakes	642 242 243 1	172 80 55	298 136 103	46 28 25	1, 532 629 542	90 50 90	382 150 246 1	31 6 8	34 9 9	2, 585 1, 088 1, 078
Total	1, 128	307	537	99	2, 703	230	779	45	52	4, 750

#### CREW SHORTAGE REPORTS FROM 1 MARCH TO 31 MARCH, 1946

### These Reports Submitted in Accordance With Navigation and Vessel Inspection Circular No. 34, Dated 1 May 1943

						Rating	s in which	shortages	occurred					
Region	Number of vessels	Chief mate	Second mate	Third mate	Radio	Able seamen	Ordinary seamen	Chief engineer	First engineer	Second engineer	Third engineer	Qualified member engine de- partment	Wiper or conl passer	Total
Atlantic coast	36 35 11 7	2 2	5 2 1	5 13 3 3	2	25 26 4 4	7 10 3 2		2	2 7	3 9 4 1	18 17 2 5	9 5	76 90 19 24
Total	89	4	8	24	2	59	22		2	. 9	17	42	23	212

Unlimited.
 Great Lakes, lakes, bays, and sounds.
 Tugs and towboats and freight vessels under 500 tons (miscellaneous).
 12 months deck or 24 months other departments.

Note.—There were 73 Panamanian Employment Cards issued.

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See page 68 for story on new license for merchant marine officers