

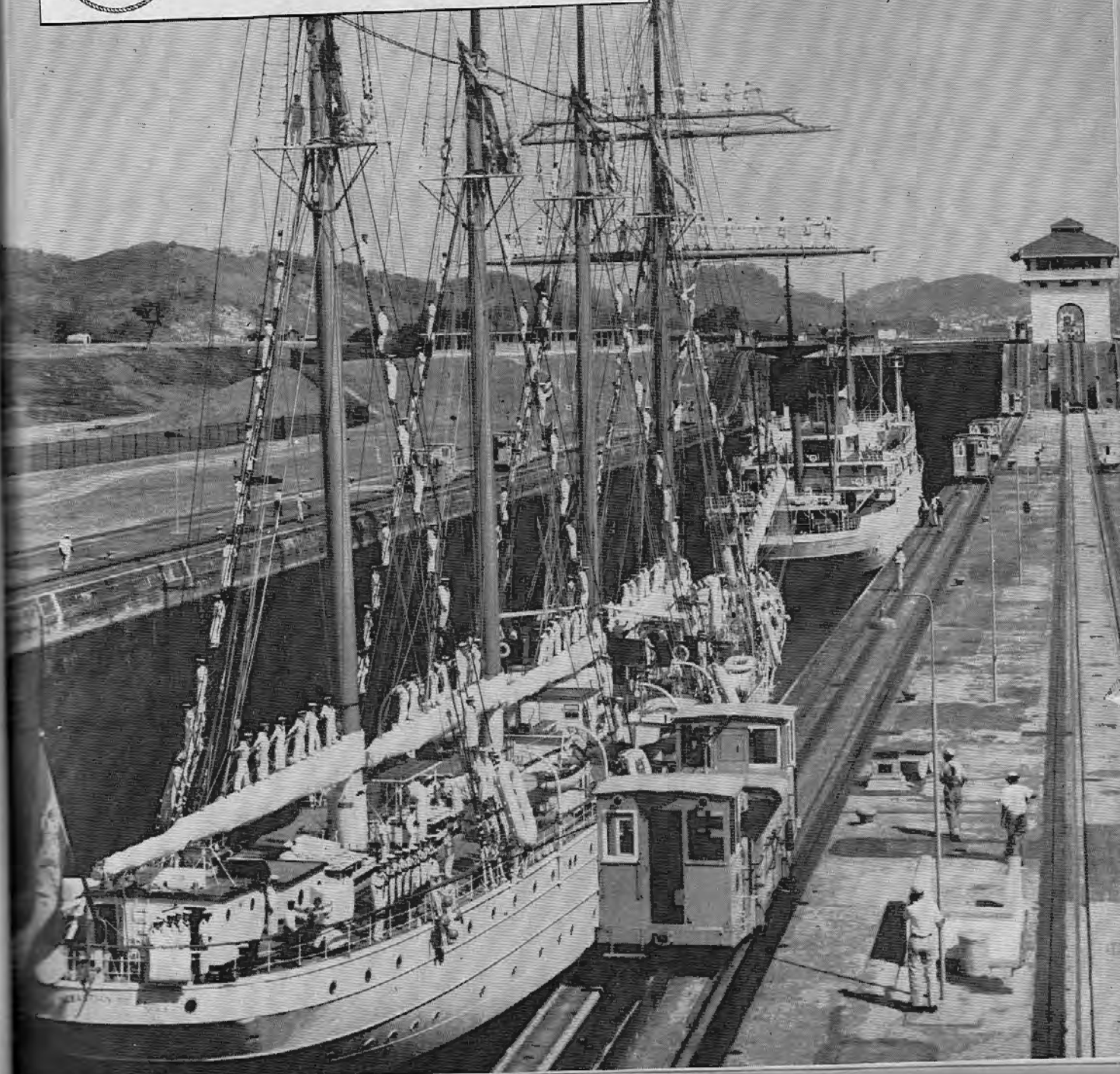
PROCEEDINGS

OF THE MERCHANT MARINE COUNCIL



UNITED STATES COAST GUARD
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PROCEEDINGS

OF THE

MERCHANT MARINE COUNCIL

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The Merchant Marine Council of the United States Coast Guard

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FRONT COVER

The old follows the new through the Panama Canal. Seen transiting one of the locks is the Spanish training ship *Juan Sebastian de Elcano* and a United Fruit Co. ship.

BACK COVER

Good advice from the National Safety Council. Don't use your rails for seats!

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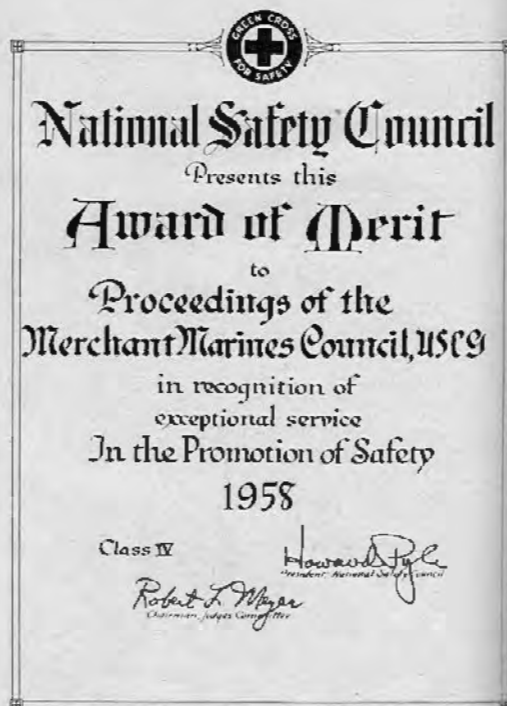
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PROCEEDINGS RECEIVE SAFETY AWARD

For the second consecutive year the *Proceedings* has been honored by the National Safety Council with an Award of Merit for exceptional service in the promotion of safety for 1958.

This publication was one of 18 to win an award from 172 entries from all parts of the U.S. and Canada and from Cyprus and Trinidad.

Our thanks to the National Safety Council for this honor and to the many helping hands who made the award possible.



U.S. LINES HONORS SAFETY RECORDS



ONE OF THE TEN company ships awarded the United States Lines Safety Award for completing a year without a lost-time injury is the SS *American Merchant*. Captain S. J. Topping, Jr., General Operating Manager, is shown above presenting the coveted award to Captain Edward B. Clayton of the *American Merchant*. Looking on are Evan Thomas, OS; William J. Fishel, AB; Carl E. Olson, deck utility; J. R. Taylor, bos'n; P. Hickey, AB; Willie Wiggins, OS; George Gerdes,

third mate; R. Van Morris, chief mate; A. J. Taylor, second mate; Tan Kee Teng, messman; and Oscar G. Jacobson, chief steward.

The other United States Lines vessels which received a similar award were: SS *Southland*, *American Reporter*, *American Shipper*, *Pioneer Surf*, *Pioneer Moor*, *American Trapper*, *American Packer*, *Southstar*, and *Pioneer Main*.

ENVIABLE SAFETY RECORD

During 1958 the 25 ships in the Texas Co. fleet had only 13 lost-time injuries for a frequency rating of 1.46 compared with 19 injuries in 1957 for a rating of 2.14. Our congratulations!

Following is a list of the 13 injuries reportable to the National Safety Council as published in *The Range Light*:

- Electrician renewing overhead light fixture leaned short ladder against shelf. Unsecured ladder tilted. Man fell and broke ankle.
- Pumpman fell while turning deck

valve wheel and flashlight in pocket bruised hip.

- Cook fell while standing drinking coffee in heavy weather. Strained back.
- Mate opening header valve when wheel wrench slipped and struck his leg. Bone fractured.
- Cook butchering meat slipped on small pieces that had fallen to deck. Bruised foot.
- Oiler, holding pump shaft, struck on hands by hammer wielded by work partner. Cuts and bruises.
- Engineer misstepped at foot of

ladder. Sprained ankle.

- Engineer looking through inspection glass on bunker return when it exploded. Sinus fractured.
- Pumpman stepped on water hose on deck and fell. Sprained ankle.
- Oiler replacing floor plate dropped it on foot. Abrasion.
- Wiper showered while intoxicated. Back burned.
- O. S. assisting to heave in headline when windlass drum collapsed. Leg fractured and head injuries caused by severed manila line.
- O. S., same incident as above. Knee bruised.

A WORD TO THE WISE

By James H. Molloy

THE WARNINGS contained in the following article are to alert or re-alert all motorboat and/or yacht owners to the terrific potential dollar liability they may have perforce of any damages, or injuries to the persons, or losses of life occasioned via the operation of their craft. This would apply from an open outboard all the way up to any size yacht operated by and/or under the immediate control and supervision of the owner.

There seems to be some common misunderstanding that the admiralty doctrine of limitation of and from liability for damages occurring through any casualty involving a vessel insofar as the owner is concerned, is generally, if not always, limited to the value of his craft, which has been determined by the courts to be the value of the vessel or craft after the casualty.

For example, if the owner's craft was sunk as a result of a casualty and was not in a position to be raised economically, obviously its value would be relatively nil and the owner's liability therefore would be relatively nil provided that he comes within the provisions of the statute in such case made and provided. However, the limitation of and from liability statute found at 46 United States Code, Section 183 provides in substance that the liability of the owner of any vessel for such damages may only be limited if it be shown that any such damage done or occasioned or incurred was "without the privity or knowledge of such owner or owners."

A most recent case in this connection is that of the petition of Lewis H. Follet et ux for limitation of liability. This case was in the U.S. District Court for the Southern District of Texas, in Admiralty, No. 2038, and the opinion was rendered only last September 5, 1958. It is preliminarily reported in *American Maritime Cases*, 1959, AMC No. 1, January, page 259, *Advance Reports*.

In that case Mr. Follet and his wife were operating their motorboat and



LAWYERS PROVIDE for fines and imprisonment for reckless navigation. A recent Federal Court case resulted in a \$500 fine, and a suspended sentence of six (6) months on two (2) years' probation, even though no actual damage or injury occurred.

became involved in a collision. Two Texas State court actions were commenced against them claiming damages in the aggregate sum of \$207,490. Mr. Follet and his wife then filed the indicated petition in the U.S. Federal Court for exemption of and from liability to the extent of the motorboat's value following the collision, which did not exceed \$3,600.

In disposing of and dismissing the petition, the court said inter alia:

Though the meaning of "privity or knowledge" as used in the statute has been the subject of considerable speculation and discussion, there is now ample authority to support the view that the owner who operates his own pleasure craft is not entitled to limit, as any occurrence would clearly be with his privity or knowledge.

Here the court cites the following cases.

Petition of Davis 1950 AMC 1028 (N.D. Cal. 1950); King, ADM, R. v. Liotti, 1948 AMC 476, 76 N.Y. Supp. (2) 98 (N.Y. Supp. Ct. 1947); Petition of H. & H. Wheel Service, Inc., 1955, AMC 1017, 219 F. 2d, 904 (Sixth Circuit 1955).

The court also said at page 260:

It is undisputed that petitioners were both on board their small motorboat at the time of the collision. No other party was alleged to have been with them, either as pilot or passenger. * * * this being the case I find that the petitioners are not entitled to the benefits of having their liability (if such be found) limited to the value of their interest in the vessel.

It was also contended in the Follet, supra, case that even though a limitation of liability be denied, the Federal Court must retain exclusive jurisdiction of the case and adjudicate all claims arising out of the particular voyage in question. However, the court ruled that while the court had jurisdiction and could retain the case to settle all claims where the equities required, this course is not a required one, citing *Hartford Accident and Indemnity Co. v. Southern Pacific Co. (The Bolikow)* 273 U.S. 207, 1927, AMC 402.

The court went on to point out that where, as in this case, the claimants desired to pursue common law remedies, and that the right to limit, as conferred by statute, was not in-

ABOUT THE AUTHOR

Mr. Molloy is Chief Hearing Examiner, U.S. Coast Guard, a position he has held since 1948. A graduate of Temple University Law School, he is a member of the Philadelphia Bar and the Cruising Club of America.

fringed, then this court (the Federal Court) may in its discretion permit them to do so. (Citing: *Lake Tankers Corp. v. Henn* 354 U.S. 147, 1957 A.M.C. 1165). The court finally concluded that since the petitioners were not entitled to limit their liability, no useful purposes would be served by the Federal Court retaining jurisdiction because to do so would deny the claimants their rights under common law remedies, including jury trials, without protecting any established rights of the petitioners.

In the case of the petition of *H. & H. Wheel Service, Inc.*, supra, some light is thrown upon the question of whether the owner might be entitled to limitation of and from liability if the yacht was being operated, for example, by a paid captain or sailing master or pilot and that said paid employee was not so to speak operating the vessel from the navigational standpoint under the more or less direction of the owner of the vessel. In this last mentioned case it was a 47-foot fast power cruiser, coming down the Detroit River at night. A professional boatman or yacht captain, who was in the employ of one of the guests aboard, was utilized by the owner on this particular voyage as his helmsman. Also, at the direction of the owner the automatic pilot was put into operation. Also, it appeared from the evidence that the port (red) running light of the vessel was not burning.

It also appeared that all the guest personnel and the owner had been imbibing to some extent in alcoholic beverages. In the course of coming down the Detroit River, in what the court determined to be constricted and congested waters, the 47-foot cruiser at fairly high speed ran down and ran over an open outboard motorboat containing three men, one of whom was drowned instantly; one of whom died subsequently of injuries sustained, and the owner received injuries but not of a too serious nature. The court first found that this vessel was being operated with the privity and knowledge of the owner and under his direct supervision. Furthermore, it pointed out that from the construction of the vessel it was impossible to be able to see sufficiently far ahead from the helm position inside the deckhouse.

Therefore, the court held that an additional lookout should have been posted on or nearer the bow of the motor cruiser. The court, of course, found that failure to have the port (red) running light burning was negligence. The court also found that the use of an automatic pilot in con-

stricted and congested waters was extremely bad practice and something that should not be resorted to, but that such automatic steering contrivances should only be used with any safety on long courses and upon broad waters. In fact, an expert testifying at the trial decried the use of these automatic pilots on small vessels, as being highly dangerous and to be studiously avoided. The court also refused upon request to find that the three men in the open outboard were on a joint adventure in the nature of a fishing trip and that negligence, if any, of the owner and operator of the outboard motorboat could be imputed to his two fellow fishing guests.

However, the court did not find any negligence on the part of the owner and operator of the outboard motorboat. As a result, in denying the petition for limitation of and from liability, the court awarded the estates of the two men who had been lost as a result of this casualty the sum of \$37,000 each, and awarded the owner of the outboard motorboat \$10,000. These awards were sustained when the case was appealed to the Court of Appeals for the Sixth Circuit.

It, therefore, appears to this commentator that since probably 90 percent of all motorboats and motor yachts and sailing yachts today are operated by and with the privity and knowledge of their owners, all yacht and motorboat owners should carry heavy liability insurance, particularly for injuries to the person, generally known as Protection and Indemnity (P&I). It can be seen from the case first hereinabove mentioned, where the small motorboat being operated by a man and his wife and valued not over \$3,600, how one can quickly incur a potential liability for upwards of \$200,000, so that a general overall public liability coverage of \$300,000 would seem to be requisite for the protection of yacht owners and operators. Even in those cases where a professional paid captain and/or sailing master or pilot is retained to maintain and operate the yacht for the owner it is not entirely clear that the owner may escape liability if he takes any part whatsoever in the directional aspects or operational aspects of the navigating features of the craft.

The foregoing should be kept squarely in mind in connection with these fast moving outboards, now made of not only wood but of aluminum and steel and fibreglass. At such high speeds as they now attain they are an extremely lethal weapon, particularly if they strike persons in bathing areas or if they come into collision and climb over other open

boats in which several persons are fishing. This has occurred on a number of occasions in the past resulting in loss of life, loss of limb, and terrible disfigurement on the parts of various individuals. In the opinion of this commentator, the liabilities would be the same and certainly there would be no right to limitation of and from liability in accordance with the admiralty doctrine.

In keeping with the title of this article, owners of motorboats and motor yachts should also realize that this same liability for injuries in all likelihood would apply to all passengers and/or guests upon his own craft if it were shown that the resulting injury was the fault of the owner. In the Davis case above cited the damages awarded were in excess of \$300,000 for injuries to the person.

To not heed the warnings herein is to gamble with whatever estate you may have accumulated, including your home. There are one or two other steps that can be taken to perhaps minimize liability, in which regard it is recommended you consult your legal advisor. But the surest and safest protection is to carry adequate, and I mean plenty, insurance coverage.

And one thing more—laws now provide for fines and imprisonment for reckless navigation. A very recent Federal Court case for violation of Sec. 526 of Title 46, U.S. Code (Reckless or Negligent operation of a motorboat) resulted in a \$500 fine, and a suspended sentence of six (6) months on two (2) years' probation, even though no actual damage or injury occurred.

MORAL: KNOW YOUR RULES OF THE ROAD AND THEN ABIDE THEM IN A SAFE AND SANE MANNER OF OPERATION.



Courtesy The Range Light

NYLON GOES TO SEA



EVER WRESTLE with a boa constrictor? Or even worse, with a twisting, waterlogged, jackass-stubborn coil of hawser? Anyone who has ever had to drag one of these manila backbreakers from fo'c'sle head to rope locker can take heart, for there's good news tonight!

After 2 years of sea trials by the Navy's Bureau of Ships and Military Sea Transportation Service, the nylon so fashionable with the ladies, bids fair to replace the muscle-bound manila line of sail and pirate days. Tests aboard the USNS *Darby* and the USNS *Kingsport Victory* show nylon mooring lines to be far lighter, more flexible, less bulky, and easier to handle and stow, than manila.

Other advantages reported by *Darby's* First Officer A. M. Ekblad and *Kingsport Victory's* skipper, Capt. Philip Stanich:

Nylon is nonabsorbent; sheds water, ice.

Easy to splice. Worn sections may be cut out and new sections spliced in without worry about hidden deterioration from rot in the remaining portions.

Unaffected by mold—no dry-rot problem.

It s-t-r-e-t-c-h-e-s safely as much as 40 percent, yet returns to its original length; a distinct advantage

This article is reprinted courtesy of the *MSTS Magazine*, published by the Navy's Military Sea Transportation Service, and describes tests of nylon mooring lines aboard ship.

where impact and shock loads are encountered. (But look out for backlash if it breaks.)

Heat from bitt friction when it is necessary to surge or slack away will cause nylon to smoke, but it has a relatively high melting point.

No insect problems.

For purposes of the test, which began March 13, 1957, eight nylon mooring lines were installed on the transport and six aboard the cargo ship. Nylon lines of 5½-inch circumference replaced 8-inch manila lines, and 6½-inch nylon replaced 10-inch manila.

Reports the *Darby*: "The nylon mooring lines have now been in use almost 2 years aboard this ship. After an overall survey, all mooring lines still remain in good condition, and in our opinion the nylons are far superior and five times as durable as the manila or sisal ropes."

In addition to verifying the longer life feature, *Darby* says nylons averted mishaps. Two instances are cited.

During the fall of 1957, in Casablanca, a tug towing the ship parted a 9-inch manila line in a matter of seconds. A 6½-inch nylon line was quickly passed to the tug, and the mooring operation continued without mishap.

In the spring of 1958, again in Casablanca, the first officer reported a heavy swell outside the harbor, causing all ships moored within the harbor to surge dangerously. He noted that a French passenger liner near the *Darby* using grass ropes for auxiliary mooring lines, surged badly. But the *Darby* barely moved, as the spring action of the nylon ropes kept her in place.

Reports the *Kingsport Victory*: "The lightness and ease of handling makes these lines superior to manila in this respect, especially on cargo-type ships where manpower is limited. It was also noted that after extreme and severe strain, lines showed no ill effects."

Average service life of manila lines on these two MSTS ships was known to be from 6 to 9 months. The nylon lines have already outlasted the manila from two to three times, with another 12 to 18 months expected.

Further extensive tests are being conducted aboard the MSTS tankers *Santa Ynez*, *San Antonio*, *Los Angeles*, and *Santa Cruz*. Nylon has

also been used with singular success by Lant's USNS *Chattahoochee* in resupply moorings at the difficult Texas Tower off Cape Cod.

Here, tricky tidal currents, fog and wind conditions put nylon to perhaps the severest test of all, with results reported as follows by First Officer R. E. Salman:

"In view of the small size of bits aboard ship, it was possible to get more turns on the bits, and due to the flexibility of the line, tighter turns were possible, making it superior to manila. Also, the nylon lines did not stiffen up when wet and were not as slippery as manila.

"The nylon lines were used when going through the locks in Milford Haven. There were eight bollards on each side of the lock and the lines were shifted from one to the next and a strain taken to keep the ship in the center of the lock.

"During the transit, the lines were taken to the windlass drums and thrown off repeatedly. The nylon lines were found excellent for this type of maneuver for their good handling qualities, and especially because they did not kink up as manila does under such conditions."

Other tests are being made by the Navy on destroyers, submarines, and sub rescue craft with equally favorable preliminary reports.

Meanwhile, nylon rope sections showing the greatest evidence of wear after 2 years have been taken from the *Darby* and the *Kingsport Victory* for study at the Boston Naval Shipyard lab. Breaking strength of this 2-year-old nylon is expected to compare favorably with similar sections of manila lines with only 6-months' service.

Will nylon replace manila as standard equipment aboard MSTIS ships—and if so, how soon? Pending BuShips' review of the current lab tests, MSTIS contemplates the gradual replacement of existing manila lines with lighter nylon lines of equivalent breaking strength (6½-inch as against 10-inch, for example). Area commands have been requested to submit their comments and recommendations.

Savings as a result of such replacements are expected to run into the hundreds of thousands—not to mention the saving in aching backs. Nylon lines cost approximately three times more than manila, but with proper care will give four or five times the service life. Considering that MSTIS spends around \$1 million per year for manila mooring lines alone, enough to stretch from Miami to Havana—one thing is sure: These nylons won't run!

SUNRELAY LIGHTED AIDS

Since the U.S. Coast Guard is responsible for the establishment and maintenance of some 39,000 aids to navigation (approximately 9,000 more than there are total personnel in the Coast Guard), it is always alert to devices and procedures that will maintain or improve efficiency, and at the same time lessen its per capita workload. The adoption of the use of the Sunrelay in lights is such a device.

The Sunrelay is used with electrically operated signal lights automatically to open the light circuit during the day, extinguishing the aid, and with the approach of darkness, automatically to close the circuit, and thus turn on the aid. It is mechanically operated by light—the operation being based on two well-known physical principles: (1) a dark object readily absorbs light energy, converting it to heat; and (2) heat causes metal to expand. These simple principles applied in the Sunrelay automatically open and close silver controls in the electric circuit.

There are no moving parts in the Sunrelay to wear out; there are no sensitive light-actuated chemical reactions to break down. The economy of the Sunrelay is therefore obvious. And its increased value to navigation is this: it is actuated by the presence or absence of light; thus when the sky darkens, reducing visibility, the Sunrelay will automatically turn on the light, regardless of the hour of the day. Maintenance is cut down, since during daylight hours the light is not normally drawing current from the



light's batteries, thereby extending the batteries' service life. This conservation requires fewer trips by Coast Guard personnel to recharge the batteries.

RULES OF THE ROAD

Owners and operators of ships who have operated in compliance with the International Rules of the Road who may be planning to navigate on the Great Lakes must comply with all of the Rules of the Road for the Great Lakes.

For example, with respect to running lights, operators are directed to Great Lakes Rule 3 (e) and (f) which requires an all around range light.

3(e) A steamer of over 100 feet register length shall carry also, when under way, a bright white light so fixed as to throw the light all around the horizon, and of such a character as to be visible at a distance of at least three miles. Such light shall be placed in line with the keel at least 15 feet higher than, and more than 50 feet abaft, the light mentioned in subdivision (a) of this rule; or in lieu thereof two such lights of the

same character and height as herein described placed not over 30 inches apart horizontally, one on either side of the keel, and so arranged that one or the other or both shall be visible from any angle of approach.

3(f) A steam vessel not more than 100 feet in length shall carry also a bright white light aft to show all around the horizon. Such light shall be placed in line with the keel higher than the light required by subdivision (a) of this rule.

There is no provision in the Rules of the Road for the Great Lakes to permit seagoing vessels to display the lights required by International Rules while navigating on the Lakes.

Violation of the Rules of the Road make the pilot, engineer, mate or master liable to a penalty not exceeding \$500. In addition the vessel may also be liable to a penalty of \$500.

TURBINE GEAR TOOTH CONTACT AND ALIGNMENT

Reproduced below is a copy of a letter written by the American Bureau of Shipping to owners of vessels propelled by geared turbine units and classed by that bureau.

AS A RESULT of the occurrence of several serious propulsion gear failures after relatively short periods of operation, the Bureau formed a small advisory group of gear specialists to explore the possibility of developing procedures which might prove helpful in avoiding such casualties.

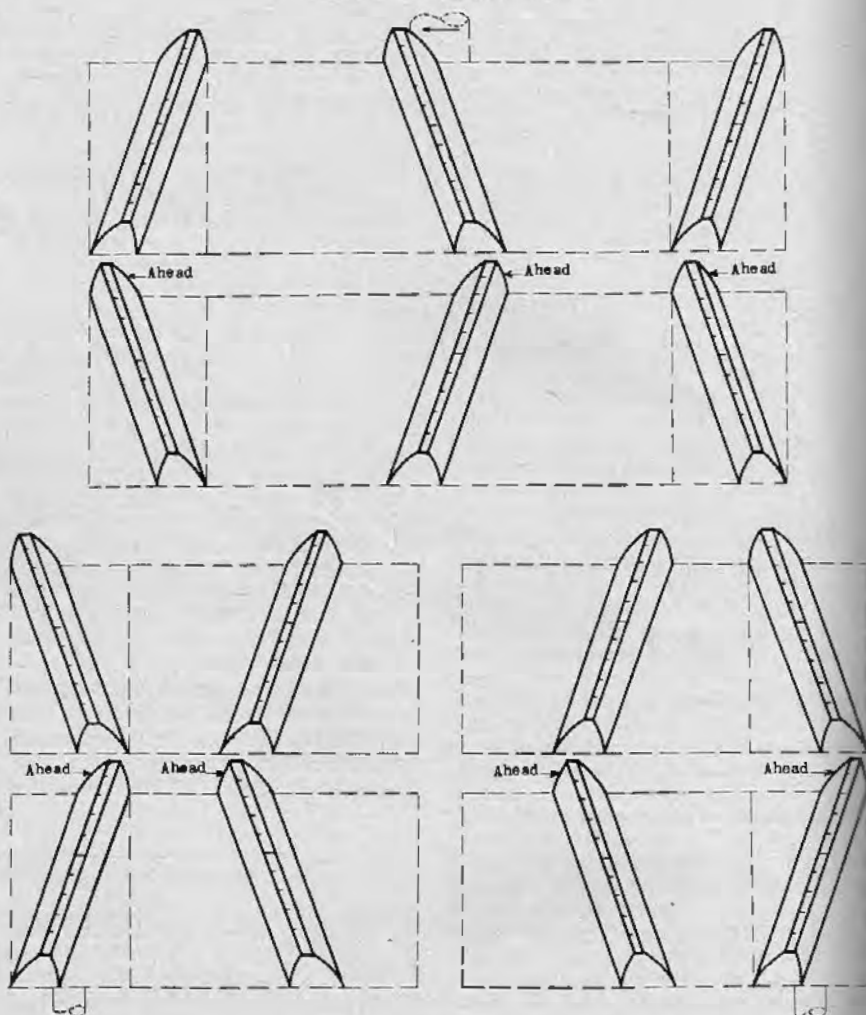
Investigations carried out by our technical staff and discussed with the panel indicate that there are many factors in design, manufacture and operation which may contribute to gear failure. An overall test of accuracy in cutting and assembling the gears, however, is afforded by checking tooth contact and alignment at the trials. Unfortunately, it has been found that gears initially installed in satisfactory alignment may get out of alignment in service for various reasons such as bearing wear, movements of hull and gear casing under varying service conditions, grounding or other casualties, and it is believed that this is one of the factors contributing to some of the recorded failures.

In order to determine when such a condition exists or may be developing, the panel suggested that a record of the tooth contact obtained during sea trials be retained on the ship for reference purposes and that the alignment of the gears, as represented by the tooth contact pattern, might profitably be rechecked during the guarantee period by a representative of the gear manufacturer and subsequently from time to time by the ship's crew.

If any serious loss of tooth contact area is noted, the cause should be investigated and properly supervised corrective measures taken as required because such a condition may be the first indication of potential trouble of a serious nature. However, this should not be construed as a recommendation for casual or repetitive adjustments without good cause. If a gear is operating satisfactorily and has, or is in the process of achieving, good contact by "running-in" it may be preferable to avoid disturbing it, even though the alignment may be different than that originally established.

In obtaining the tooth contact, the use of metal dye, copper sulphate, or other suitable coating material is recommended in order to improve contrast between contact and non-contact surfaces. In particular it will serve to indicate the contact

INDICATE TOOTH CONTACT BY SHADING



TOOTH CONTACT FORM used by ABS Surveyors

existing at the time of the check, whereas reliance on the polished contact surface alone may be misleading as it could have been developed previously under other conditions. Dykem metal dye has been found satisfactory for this purpose. It is usually applied to a band of teeth on the pinions, after cleaning with a suitable agent such as trichlorethylene or perchlorethylene. Immediately after appli-

cation of the metal dye the surplus liquid should be removed by rubbing vigorously with a soft clean cloth, leaving an extremely thin, uniform coating. Both ahead and astern faces should be coated to avoid reflection highlights.

After the coating is applied the gears should be operated for at least one-half hour at normal service rating and conditions if possible. Since the

coating will adhere to the teeth for a considerable length of time, it may be applied in one port and the inspection made at the next port. As mentioned above, it is suggested that a complete record of tooth contact at the sea trials and at subsequent examinations be kept aboard the ship so that changes can be noted. This, of course, can be done on existing ships as well as on new ones, particularly when the first records are taken while the gears are operating satisfactorily. A copy of the tooth contact form used by our Surveyors is printed for your ready reference; forms of this kind being widely used for recording tooth contact. One operator states that he has found photographic records, taken with the aid of metal dye or copper sulphate to improve contrast, very satisfactory. He uses a camera of the self-developing type which makes it possible to obtain photographs that can be examined immediately to determine whether a satisfactory picture record of the tooth contact has been obtained.

The necessary safety precautions should be taken when using the cleaning agent and it should be emphasized that extreme care must be exercised to avoid any possible physical damage to the gears or the introduction of any foreign materials into the gear case during the coating or inspection procedures. As is well known, the slightest nick or bruise leaving a high spot on a tooth can rapidly lead to fatigue failure and destruction of the gears.

Since a few operators have reported good results with the above procedure for assuring continued good alignment of their gears, it was the feeling of our Engineering and Technical Committees that other operators might also be interested in trying it on their ships. The panel feels that more frequent checks on gear alignment, particularly during the early life of the gears, might prove beneficial in disclosing whether poor alignment is developing, but they caution that the evaluation of the records, and the determination and carrying out of the proper corrective measures should be done only under the supervision of trained experts. Excessive opening up for inspection and needless unsupervised adjustment of gears could easily do more harm than good as persistent unintelligent tampering with gears can also lead to catastrophe. It is believed, however, that if the suggested procedures are properly and intelligently carried out they could prove to be a useful tool.

FOR THE RECORD



Fast ocean passages by ships is a fascinating subject. Most almanacs and fact books include information on record crossings and they help to settle many a fo'e'sle argument.

Best known among the blue ribbon ships is the SS *United States* holder of both the east and westbound Atlantic records. On her maiden trip in 1952 she sprinted eastbound at an average speed of 35.59 knots and raced homebound at 34.51.

Lesser known, but over the longer Pacific runs several long-time marks still are included in the record books. In 1937, the old *President Coolidge* made the Yokohama-San Francisco trip in 9d-9h-51m, and in 1951 the USS *Philippine Sea* cruised from Yokosuka to Alameda, Calif., in 7d-13h-00m, averaging 27.6 knots.

Latest claim for a place in the record book has been made by the Japanese MV *Nevada Maru* for a 9-day, 15-hour, and 10-minute crossing

from Yokohama to San Francisco with an average speed of 19.6 knots.

Now that's a real fast trip for a cargo ship, particularly a motor vessel, but two of American President Lines converted Mariners have consistently bettered this mark. On an average of 16 such eastbound voyages the *President Garfield* and *President Buchanan* averaged 6 percent faster and the best single voyage is 11 percent better.

On four successive voyages between Japan and California the fleet-footed *Garfield* averaged 21.49, 21.68, 21.12, and 21.30 knots. On westbound trips the *Buchanan* averaged 19.01 on 16 successive trips.

On the shorter California-Honolulu run, a 31-year old record stands unchallenged. In June 1928 the USS *Lexington* made the distance in 3d-00h-36m for an average speed of 30.66 knots.

FOR WANT OF A LIGHT

A Greek seaman sued to recover damages for personal injuries sustained by him while serving aboard a Liberian flagship and a U.S. District Court awarded him \$7,000 damages. Reported in *American Maritime Cases* (1959 A.M.C. 2255), the award was made for an eye injury suffered when the seaman was carrying out an order to turn off the cargo lights on the after mast of the vessel. To turn out the lights the man had to enter a storage compartment of the after mast house in which there was a ceiling light which could be turned on by a switch on the lefthand side of the door. On this occasion, however, the light did not go on when the switch was operated, but he nevertheless proceeded through the compartment feeling for the cargo light switches. In doing so in the darkness, he collided with a pile of rope and guy wires and suffered the injury complained of.

The court concluded that "the vessel was unseaworthy in that the light in the compartment did not operate when the light switch was activated, even though it was a part of the ship in which this man, as well as other seamen were directed to enter." The court further found that "this unseaworthiness was the proximate cause of the injury to the seaman's eye since it left the compartment in darkness and made it possible for the man to injure his eye by coming into contact with something stored therein."

The court did, however, find there was negligence on the part of the seaman for failure to obtain a flashlight which he admitted was in his room. If he had obtained his flashlight, the court held the injury would probably not have occurred, and the damages assessed at \$10,000 were, therefore, reduced by 30 percent because of the seaman's own negligence.

MERCHANT VESSEL REPORTING PROGRAM

Enthusiastic support by mariners of all nations has marked the first year of the Coast Guard's voluntary Atlantic Merchant Vessel Position Reporting Program (AMVER).

Statistics compiled after 12 months of operation point out that approximately 4,000 ships flying the flags of 46 countries have participated in the program covering the North Atlantic Maritime Region, including the Caribbean Sea and Gulf of Mexico.

Placed in effect on July 1, 1958 the plan was developed to establish and maintain a comprehensive and effective merchant ship reporting system in order to improve search and rescue procedures by:

- Reducing the time element in search procedures through having available a maximum number of vessel positions for immediate use.
- Improving the probability of successful rescue through prior position knowledge.
- Reducing cost and inconvenience of searches by indicating the ships nearest an incident capable of handling the particular situation, thereby avoiding unnecessary diversions.

A Ships Plot Center in the New York office of the Commander, Third Coast Guard District, electronically tracks about 1,500 ships monthly on more than 4,000 port-to-port voyages and receives from 200 to 250 reports daily. These AMVER messages are used to keep each vessel's position up to date and provide an immediate rescue potential in the event of disaster at sea.

As AMVER reports are received, information relative to position, course, and speed of advance of each ship is fed into an electronic computer which automatically advances the position either by great circle or rhumb line route. Deviations of more than 25 miles from a projected position must be corrected by additional AMVER messages so that the computer may be corrected, Coast Guard officials pointed out.

In the event assistance is required at sea, any ship may call one of the Coast Guard Radio Stations participating in the program who immediately forwards the information to the Ships Plot Center. Here, the electronic computer indicates the positions of all vessels within a given radius of the distressed ship. Within a matter of minutes this data is sent to the nearest Rescue Coordination Center and an assistance plan is put into effect. It is apparent, the more ships participating in the program the



NERVE CENTER of the AMVER program is this Ships Plot Center located in the New York office of the Commander, Third Coast Guard District. Ship position reports are received on the teletypewriter seen in the left foreground and processed by an electronic computer partially visible at the right.

greater the probability there is of success in saving lives and property.

Vessels requiring medical assistance and requesting the positions of other ships with a doctor on board would be handled in the same way.

To date the AMVER system has only been used for minor assistance and MEDICO cases, but with the co-operation of ships plying the North Atlantic sea lanes it stands ready for

use in any emergency.

Copies of instructions for Participation in the Atlantic Merchant Vessel Position Reporting Program may be obtained from any Coast Guard Marine Inspection or Captain of the Port office along the Gulf or East Coast of the United States, or by writing directly to the Commandant, U.S. Coast Guard, 1300 E St. NW, Washington 25, D.C.

NORWEGIANS WIN LIFEBOAT RACE

The 20th annual International Seamen's Lifeboat Race in New York harbor on May 19, 1959, was won by a crew from the Norwegian American Line's passenger ship *Stavangerfjord*, who rowed the 1-nautical-mile course in 12 minutes 25.5 seconds. Second officially, was a crew from the American tanker *Esso Gettysburg*, and in third place, a boat from the USNS *General Simon B. Buckner*.

Actually, the boat nearest the *Stavangerfjord* was rowed by cadets from the Merchant Marine Academy, but they were not counted in the official competition, since none of the crew were professional seamen cur-

rently employed on a ship.

In ceremonies after the race, the winning crew received temporary possession of two large silver cups—the Joseph W. Powell Trophy and the Millard G. Gamble Trophy. The *Stavangerfjord* first won the race in 1957, and if she triumphs again next year, will retain permanent possession of the Gamble Trophy. The Powell award is made each year to the winning crew.

Besides the Norwegian and American entries in the race, other crews represented Finnish, British, Danish, and Icelandic steamship lines.

AIR HEATER FIRES

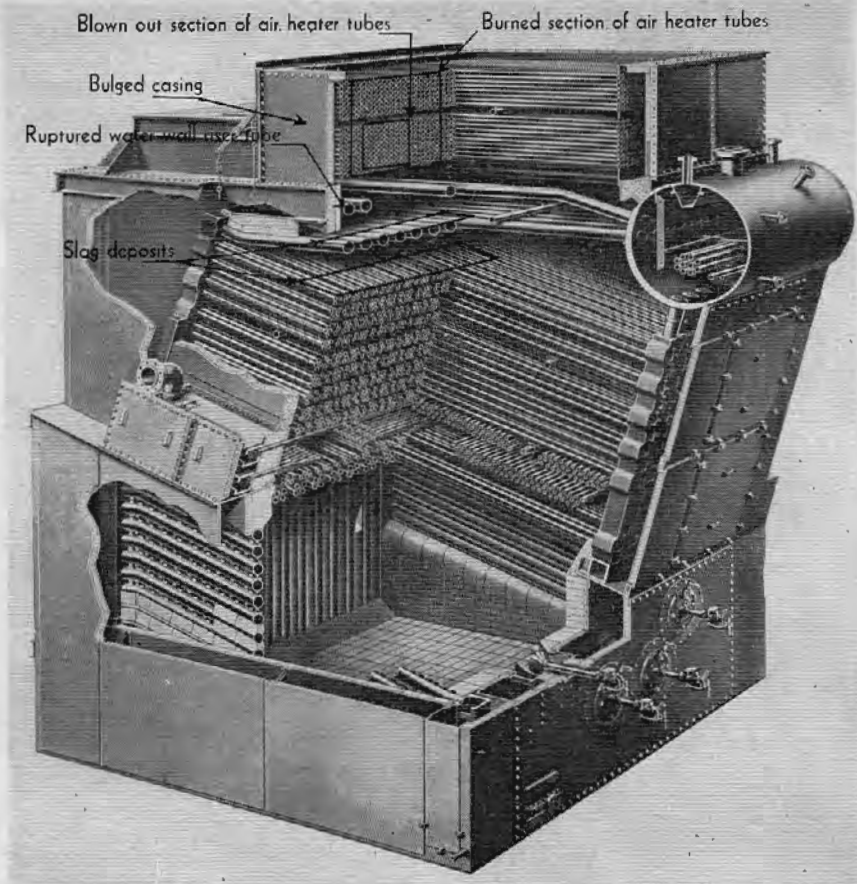
AIR HEATER and uptake fires are often regarded as ever present hazards forced upon engineers by prohibitions against blowing tubes in port. They are fairly common, and in many cases they are extinguished before serious damage is done. However, fires of this type have caused as much as \$50,000 damage, and recently an air heater fire was responsible for the loss of three lives.

Early this year a foreign flag T-2 tanker arrived in port at approximately 2 a.m. While at anchor, the crew started to work on the port boiler. At about 3 p.m. the forced draft fan on the starboard boiler was lost due to bearing trouble, necessitating transfer to the center fan. The work on the port boiler was expedited and by 11:15 p.m. the port boiler was on the line and the starboard boiler secured.

At this time the starboard boiler had approximately 430 p.s.i. of steam and better than one-half glass of water. The boiler was left to cool pending the repair of the blower fan. Three members of the engineroom crew—an electrician, a fitter and a greaser, started work on the starboard blower fan shortly after 1 a.m. Within ten or fifteen minutes after the work was begun, a noise—described as sounding like a cannon shot—was heard.

Soot came out the boiler fronts in the lower fireroom and soot and steam, estimated to be still over 300 p.s.i. in the boiler, filled the upper fireroom and the passageway adjacent to the area where the men were working. All three men were seriously burned and were subsequently transferred by the Coast Guard to a Public Health Service hospital. Two of the men received first-, second- and third-degree burns of more than 80 percent of their body surface, while the third received first-, second- and third-degree burns of more than 60 percent of his body surface. Within a week all three men had died.

It was concluded that the primary cause of this casualty was a soot fire around the air heater tubes which reached such intensity as to cause sections of the air heater tubes to melt and drop down on the boiler tubes. As the boiler had been secured circulation had stopped in the 4" water wall return tubes which were above the water level in the boiler and thus dry. The water wall return tube rapidly overheated and ruptured. The jet of steam from the tube tore out the air heater tubes and some of the steam was diverted through the rear tube sheet and out through the air duct and fan on to



DAMAGED PORTIONS of the starboard boiler are outlined on the above cutaway. This illustration of a T2-SE-A1 boiler supplied for illustrative purposes courtesy of Combustion Engineering, Inc.

the men.

The tubes were last blown approximately 36 hours before the explosion.

In this case, because of the timing and placement of the men the results of an air heater fire were fatal.

PERSONAL INJURY

An interesting decision recently reported in *American Maritime Cases* (1958 A.M.C. 2261) involves the maintenance, cure, and wages of a seaman in a personal injury case. A U.S. district court found that even gross fault on the part of the seaman proximately causing his injuries will not defeat his right to wages and maintenance.

This man signed foreign articles aboard an American-flag ship and 2 days later was struck by a taxicab while running to catch a streetcar. The evidence shows that he was knocked 10 to 12 feet in the air. He was taken to a local hospital in an ambulance where he was treated for minor injuries and released within a few hours. He returned to his home in the same town where he rested for several days before calling at the company office. There he was paid 2 days wages and told how to get to

the Public Health Service hospital.

He was refused admittance to the hospital because he failed to present a certificate from the master of his vessel and for the further reason that he had not been a seaman for 60 days. He thereupon went back to the original hospital where he received outpatient treatment for injuries resulting from the accident.

The court found that since his injuries did not result from his own willful misconduct he was entitled to unearned wages to the end of the voyage and to maintenance at \$8 per day up to the time he reached maximum cure, which in this case was found to be the day on which he was discharged from the hospital. *Farrell v. United States, supra; Algular v. Standard Oil Co., 318 U.S. 724, 1943 A.M.C. 451.*

PHAROLOGIST'S DELIGHT



The highest intensity aid-to-navigation in the Coast Guard and the second most powerful in the world is the Oak Island Light in North Carolina. During good and fair weather, this impressive light loafs along on only 1,400,000 effective candlepower. But with a flick of a switch the light is capable of exhibiting 14,000,000 candlepower.

Only one other light in the world exceeds this effective intensity—the French lighthouse at Creac'h on the Isle d'Ouessant at the southern entrance to the English channel—which achieves an advertised peak intensity of 500,000,000 beam candlepower.

The light was designed with a charted visibility of 19 miles and marks an important milestone in lighthouse engineering both struc-

turally and optically. The silo-type tower was erected by use of the Swedish moving slip-form method of pouring concrete into a frame and when that dried the frame was moved up and another section poured. The lantern is made of aluminum and glass, is 11 feet high 14 feet in diameter, and weighs 1,740 pounds. A unique aside to the construction is in the fact that when the tower was completed the lantern was placed in its position by two Marine Corps helicopters, thus eliminating a costly rigging job.

Located 162 feet above sea level, it replaces Cape Fear Light at the entrance to Wilmington, N.C., one of the important landmarks along the eastern seaboard.

NO. 1 KILLER

Accidents know no peer as a killer of young people, the National Safety Council reports. It cites this evidence: More persons 15-24 years of age die in accidents than from all diseases and other causes combined.

Accidents are the leading cause of death among persons in the 1-36 age group.

The motor vehicle is the No. 1 accidental death-dealer among persons aged 5-74. Falls are No. 2.

The Council says accidents cost

the Nation nearly 12 billion dollars a year.

Nearly one in three hospital emergency-room patients is an accident victim. Accident victims spend more time in the hospital, on the average, than other patients.

An American is hurt in an accident every 3 seconds. One person is killed every 6 minutes.

"These are pretty shocking statistics," the Council said. "They certainly emphasize the urgent need for keeping a sharp eye out for hazards."

2182 KC/S FOR EMERGENCY BROADCASTS

In order to provide the maritime public with the best possible service, the Coast Guard now makes broadcasts of emergent marine information on the International Radiotelephone Distress and Calling Frequency 2182 kilocycles.

The broadcasts will include emergency weather warnings issued by the Weather Bureau and other types of emergency "notices to mariners." The new procedure was adopted after trials in limited areas received gratifying public acceptance and clearly indicated the program should be expanded for nation-wide use.



It was suggested that the boating public, especially pleasure boat enthusiasts, keep the radios aboard their craft turned on and tuned to 2182 kc/s whenever underway or preparing to get underway.

The broadcasts will be made, subject to the following limitations:

- The preliminary call and text will be transmitted on 2182 kc/s.
- The broadcast will be made at a speed of 60 words per minute.
- Duration of the broadcast text will be limited to 3 minutes or less. During this period, a break of 5 to 10 seconds will be observed approximately every minute of the text in order to listen on 2182 kc/s for possible distress. For the average broadcast, this totals about two or three breaks during the 3-minute transmission.



STATES MARINE LINES HONOR SAFEST SHIP



WINNER OF THE States Marine Lines Safety Plaque for 1958 is the *SS Magnolia State*. Each year the company awards this recognition to a vessel of their fleet with the best safety record. In addition to the plaque, won with only two minor accidents, the *Magnolia State* received a monetary prize of \$500, which is split between the licensed and unlicensed personnel for shipboard welfare, recreation, and entertainment. Left to right, are: M. Pilar, Chief Engineer; Capt. J. Kvamme of the *Magnolia State*; E. E. Davis, Marine Superintendent; Poder M. Johannesen, deck delegate; Joseph Brass, stewards delegate holding the award; George Robertson, National Maritime Union patrolman; Owen King, engine delegate; and Capt. D. R. Davenport, States Marine Lines Director of Safety and Training.

LYKES CHALKS UP OUTSTANDING SAFETY RECORD



WINNER OF THE best overall safety record in the Lykes Bros. 54-ship fleet is the *SS Gibbs Lykes* who led 9 other company vessels through 1958 without a single lost-time injury aboard. Commenting on this remarkable record, Lykes President Solon B. Turman said, "Your record is a tribute to the effort each of you has made in the prevention of accidents on your ships. Safety is every man's job and your record indicates that each of you has lived and worked together with each other's safety in mind." We agree—safety is everybody's business. Participating in presentation ceremonies aboard the *Gibbs Lykes*, were, left to right, Clarence Conley, oiler; Captain T. C. Bryan, supervisor of accident prevention for Lykes; Captain L. G. Pierson of the *Gibbs Lykes*; James Walters, chief engineer; Charles Cheney, third mate; Luther F. Lora, Lykes maintenance and repair division; Pete Ochoa, Jr., first assistant engineer; John T. Lisi, chief mate; and LeRoy Jackson, messman. Photo Courtesy Lykes Bros. Steamship Co., Inc.

MERCHANT MARINE STATISTICS

There were 947 vessels of 1,000 gross tons and over in the active oceangoing U.S. merchant fleet on June 1, 1959, according to the Maritime Administration. This was three fewer than the number active on May 1, 1959.

There were 31 Government-owned and 916 privately owned ships in active service. These figures did not include privately owned vessels temporarily inactive, or Government-owned vessels employed in loading grain for storage. They also exclude 28 vessels in the custody of the Departments of Defense, State, and Interior.

There was a decrease of six active vessels and an increase of six inactive vessels in the privately-owned fleet. Five freighters, the *Sealady*, *Julia*, *Penn Vanguard*, *Gulfwater*, and *Gal-loway*, were returned from foreign to U.S. flag. One combination cargo-passenger ship, the *SS Leilani*, was taken over by the Government for mortgage default, and four freighters were traded in to the Government on new construction. This left the total privately owned fleet at 1,012.

Of the 96 privately owned inactive vessels, 20 dry cargo ships and 49 tankers were laid up for lack of employment, the same as on May 1. The others were undergoing repair or conversion.

The Maritime Administration's active fleet was three more than that of the previous month, while its inactive fleet decreased by three. Seven Liberty ships were sold for scrap. Two vessels owned by the Navy were turned over to the Administration for layup in the National Defense Reserve Fleet while one vessel was taken for mortgage default and four as trade-ins.

Two new oceangoing tankers were delivered to foreign flag, the *Maine* and the *Lake Palourde*, and conversions of a freighter, a tanker, and a bulk carrier, were completed. Three new freighters were ordered. The total of large merchant ships on order or under construction in U.S. shipyards dropped by 4 ships to 76.

Seafaring jobs on active oceangoing U.S.-flag ships of 1,000 gross tons and over, excluding civilian seamen manning Military Sea Transportation Service ships were 50,955. Prospective officers in training in Federal and State nautical schools numbered 1,949.





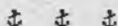
MARITIME SIDELIGHTS

Three Southern California stevedoring companies received special awards from the Accident Prevention Bureau of the Pacific Maritime Association for achieving the best safety records in preventing injuries to longshoremen during 1958. Winning first place in the entire Pacific Coast area was Outer Harbor Dock and Wharf Co. Second place award went to Matson Terminals, Inc., and West Coast Terminals of California won the third place citation.



The July-August issue of *Safety Standards*, published by the U.S. Department of Labor, includes this classic:

Sigvold Juliussen, Business Agent of Local 1140, Anchorage, Brotherhood of Painters, Decorators, and Paperhangers of America, explains his members' resistance to wearing hard hats this way: "The basis for the opposition to this is that 90 percent of our members are of Scandinavian descent and we find it impossible to fit those square heads into round hats. The other 10 percent of the membership have such heads that they find hard hats unnecessary."



All United Fruit Co. deck officers, from the senior captain to the newest junior, have qualified as radar observers. It was announced that 108 licensed officers completed training in Maritime Administration radar schools and received certificates attesting to their professional qualifications.



Starting in March 1960, the United States Lines plans to replace its entire fleet of 46 C-2 cargo vessels at a cost of between \$250 and \$275 million. The new ships will have a dead weight of 10,728, a length of 527 feet, and a beam of 75 feet. They will be capable of maintaining a speed of 18 knots, compared with the 15½-knot speed of the C-2's, and will be of modern design with advanced cargo handling and other features.

Annual meeting of the Western Rivers Panel of the Merchant Marine Council will be held in St. Louis, Mo., on September 16, under the direction of Braxton B. Carr, President, American Waterways Operators, Inc., who has been redesignated chairman of the panel for 1959.



Permission has been granted to Farrell Lines, Inc., to withdraw their two combination passenger-cargo liners, the SS *African Endeavor* and SS *African Enterprise*, from service to South and East Africa on U.S. Essential Foreign Trade Route 15-A and replace them with cargo vessels. Farrell submitted as the reason for their request that the anticipated expansion of passenger traffic to South and East Africa had failed to materialize. They revealed that their two combination vessels had not filled their available passenger space over their nine years of operation to Africa, 1950-58, and had averaged a net loss each year after subsidy.

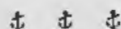


Matson's flagship *Lurline* will depart from her regular Pacific Coast-Hawaii service to make a 2-week cruise to Acapulco, Mexico, during the Christmas holidays.



The 250,000 barrel tanker *Gulpride* was launched in the Bethlehem Spar-

rows Point Yard in June. The newest addition to the Gulf Oil Corp. fleet is 645 feet long and has a gross of 29,250 tons.



Dr. Lauchlin M. Currie, vice president in charge of the atomic energy division of Babcock and Wilcox Co., predicted that nuclear-powered tank ships should be operating on world trade routes within the next 10 years.



First edition of the Coast and Geodetic Survey Small-craft Chart Series 101, Potomac River, has been released to the public. Regarded as the "most significant development in the progress of nautical charting since the adoption of color in 1862," the charts are designed for the safety and pleasure of small boat owners. The chart is printed on 14½ x 32 inch paper, folded into four panels, and represents the preferences of more than 23,000 small boat owners and operators who responded to a questionnaire distributed by the Coast and Geodetic Survey as to design and construction of this entirely new aid to navigation. The chart makes the Potomac River an experimental area to serve as a prototype for new charts of other selected areas, and may be obtained from the Washington office of the Coast and Geodetic Survey at \$1.50 a copy.



FIRST MAJOR SHIPS to be built in the Los Angeles area since World War II are the two fast cargo ships for Moore-McCormack Lines, Inc. This is a model of the 12,000 horsepower under construction at the San Pedro plant of Todd Shipyard Corp. When completed the modern freighters will be 484 feet in length, have a 68-foot beam, and are part of the company's \$430 million ship replacement program of 45 new ships, 43 of which are cargo ships.

ACCIDENTS IN BRIEF

Here is a condensation of some accidents reported to Coast Guard Headquarters during the past month. A capsule glimpse into the cause * * * and effect. In each case the victim was incapacitated for at least 72 hours.

CAUSE

EFFECT

- | | |
|------------------------------------|----------------------------|
| Slipped on bar of soap----- | Fractured arm. |
| Oil on deck----- | Slipped and fractured rib. |
| Hand caught in conveyor motor----- | Hand lacerated and torn. |



Standing on boiler tops----- Burns on bottom of feet.

- | | |
|---|--------------------|
| Leg caught between two fishing boats----- | Severed right leg. |
| Swinging door----- | Smashed thumb. |

Slipped while wearing wooden sandals-----

Injury to back.



- | | |
|--|--------------------------|
| Hand caught between cable and bit----- | Lost end of two fingers. |
| Failure to wear goggles while installing outlet box for flood-light----- | Metal particles cut eye. |



Handling wire with gloves----- Lacerated hand and fingers.

- | | |
|--------------------------------|-------------------------------|
| Lost control of fire hose----- | Nozzle hit face and left eye. |
| Bull rope carried away----- | Severe body injuries. |

The tanker was en route from the Gulf to an east coast port. During nice weather en route the mate ordered No. 3 and No. 4 lifeboats stripped and painted. As preparation the covers were removed and lashed to the strongbacks.

Four days later the weather began picking up with a northwesterly wind, sea, and swell. Although the sea was fairly rough and the vessel was taking some spray over the main decks, she was riding steadily with very little motion. The course was north which brought the wind on the port bow. Visibility was good. Air temperature was 50°, sea temperature was 76°.

The mate told the bos'n to take a couple of seamen and cover the lifeboats. The boats on this tanker are secured in chocks under quadrantal davits and located on the port and starboard sides with the outboard gunwale flush with the vessel's side. The two seamen started to cover No. 4 boat by themselves, but they had some difficulty because of the wind and asked the bos'n to give them a hand, which he did. After No. 4 boat was covered, the three men then moved to the starboard side to cover No. 3 boat. The cover on this boat was lashed to the strongback with about six lashings. None of the men were wearing a life preserver. The two seamen entered the boat while the bos'n remained on deck to let the forward lashing go near the bow of the boat.

It seemed each man was working independently without any coordination or direction from the bos'n. One moved aft to release the after end of the cover while the other was working amidships from the outboard or lee side of the strongback. When the lashings were released, the wind took charge and blew the cover overboard, carrying with it the seaman who had been working outboard of the strongback.

The bos'n first realized something was wrong when he felt the cover jerk, billowing, and sailing overboard. The other seaman saw his partner in the act of falling into the water feet first with his arms stretched over his head. Both men on deck claimed they had not touched the center lashings; however, neither saw, noticed, nor paid any attention whatever to what the third man was doing.

Although recovery efforts were immediately initiated, before the ship could be brought around and the lifeboat lowered, the man disappeared beneath the surface of the water.

Remember, one hand for yourself and one hand for the ship.



nautical queries

Q. What precautions should be taken prior to changing an electric globe in the pumproom of a tank vessel?

A. Before changing a globe in a pumproom or other compartment subject to vapor accumulation, the controlling switch for the entire circuit should be opened and marked "open."

Q. What are the two principal functions of the main and auxiliary condensers?

A. The primary function of the condensers is the production and maintenance of a low exhaust pressure, thereby increasing the work delivered by the engine. A secondary function is the conservation of the ship's supply of fresh water by returning the steam used in the engineering plant to the condensate system.

Q. During what operating conditions does the deaerating feed heater frequently tend to overheat? How should this overheating be kept to a minimum?

A. The deaerating feed heater will overheat if excessive high pressure drains are blowing into it, which most frequently occurs when starting up or securing the plant. To keep such overheating to a minimum the high pressure drains should be throttled and the condensate recirculated from the heater back to the condenser.

Q. Why is it necessary that air be removed from both the cooling water side and the condensate side of a surface condenser?

A. Air should be removed from the cooling water side in order to keep the oxidation of the tube interiors at a minimum. The air and uncondensable gases must be removed from the steam and condensate side in order to maintain the vacuum formed by the condensing steam, thereby reducing the back pressure against which the engine has to work.

Q. How can the number of heat units (b.t.u.'s per hour) of the fuel that is lost to the cooling water of a diesel engine be ascertained?

A. The number of heat units carried away by the cooling water per hour is equal to the quantity of water in pounds that is circulated per hour multiplied by the number of degrees F. rise in temperature of the water.

Q. How does the angularity of the connecting rod affect the piston speed

during one revolution of the crankshaft?

A. The effect of the angularity of the connecting rod is that it produces a higher ratio of crank speed to piston speed during the lower half of the crank circle than that existing during the upper half of the crank circle.

Q. If you noticed a large number of sparks at the exhaust, what operating troubles would you look for?

A. Imperfect combustion; leaking exhaust valve; leaking fuel injection valve; too much lubrication in cylinder; crank case lubricant being carried into cylinders by scavenging air; and accumulation of soot in exhaust pipes or in silencer.

Q. Should the cylinders of diesel engines be warmed up before starting? If so, how is this done?

A. Yes, especially in cold weather. Use warm water in the cylinder jackets, or run a small steam pipe into the cooling water supply line leading to the jacket, turning off the steam as soon as the engine is started.

Q. What is a dummy piston and on what type of turbine is it used?

A. The dummy piston is an extension of the rotor drum within the forward end of the casing in a section known as the dummy cylinder. Dummy pistons are used on single-flow reaction turbines to counteract the axial thrust caused by the pressure differential acting on each row of moving blades.

Q. Describe briefly the operation of an overspeed control governor on a main propulsion turbine.

A. The overspeed control valve is usually held open against spring pressure by oil at constant pressure supplied by the lubricating oil service pumps. This oil is supplied to the operating cylinder through a pilot valve which, when actuated by the governor, will shut off the oil flow and drain the operating cylinder allowing the spring pressure to close the overspeed control valve. The pilot valve may be actuated hydraulically by a small centrifugal oil pump directly connected to the turbine shaft or by mechanically connected speed governor weights.

Q. Describe the difference between the "Impulse Type" and "Reaction Type" of steam turbine.

A. The "Impulse Type" turbine is one wherein the steam is expanded

in the nozzles and the work is done by the high velocity steam impinging on the blading of the movable wheel.

The reaction turbine is, strictly speaking, an impulse-reaction unit. The steam is partially expanded in the stationary blades and part of the work is done by the impulse of the steam entering the blade passages and part by the reaction of the steam leaving the blade passages as the steam continues to expand in its passage through the moving blades. In the reaction turbine the steam pressure decreases in every row of moving and fixed blades, whereas in the impulse turbine the steam pressure decreases only in the nozzles.

Q. In a cross-compound turbine, where is the astern turbine usually installed? How does horsepower of the astern turbine generally compare with the ahead turbine?

A. Astern turbines are usually installed in the casing of the low pressure ahead turbines with the rotors mounted directly on the ahead turbine shaft. In general, the astern turbines are much smaller, and develop only from one-fifth to one-half of the maximum power of the ahead turbines.

Q. (a) Why is the mean cylinder temperature generally higher in 2-cycle engines than in 4-cycle engines?

(b) Why is exhaust temperature generally lower in 2-cycle engines than in 4-cycle engines?

A. (a) The mean cylinder temperature is generally higher in 2-cycle engines because there is a power stroke for each revolution of the crank, whereas on 4-cycle engines there is a power stroke on every second revolution of the crank.

(b) The exhaust temperatures of 2-cycle engines are generally cooler than the exhaust temperatures of 4-cycle engines because of the dilution of the exhaust gases with the scavenging air with subsequent cooling of the exhaust gases.

CORRECTION

The second paragraph of the answer under DIRECT CURRENT, "Nautical Queries," June 1959 issue of *Proceedings* is corrected as follows:

"If the resistance at A is increased, the field current decreases, the field becomes weaker, and the speed of the motor builds up."

BROADCAST SCHEDULES

U.S. Coast Guard Radio Stations Transmitting Weather, Storm Warnings, Hydrographic Data, and Notice to Mariners by Radiotelephone

Location	Call sign	Freq	Type of broadcast	Time (GMT)	Routine weather	Storm warnings	Hydro data	Notice to Mariners
Boston, Mass.	NMF	2694 2182	Regular Emergency	0420 and 1620 Upon receipt ..	..... .....	x x	x x	x x
New York, N.Y.	NMY	2662 2182	Regular Emergency	0450 and 1650 Upon receipt ..	..... .....	x x	x x	x x
Cape May, N.J.	NMK	2662 2182	Regular Emergency	0550 and 1750 Upon receipt ..	x	x x	x x	x x
Baltimore, Md.	NMX	2182 2182	Regular Emergency	1630 Upon receipt ..	x	x x	x x	x x
Norfolk, Va.	NMN	2702 2182	Regular Emergency	0520 and 1720 Upon receipt ..	..... .....	x x	x x	x x
Fort Macon, N.C.	NMN37	2702 2182	Regular Emergency	1700 Upon receipt ..	x	x x	x x	x x
Charleston, S.C.	NMB	2678 2182	Regular Emergency	0420 and 1620 Upon receipt ..	..... .....	x x	x x	x x
Jacksonville, Fla.	NMV	2678 2182	Regular Emergency	0620 and 1820 Upon receipt ..	x	x x	x x	x x
Miami, Fla.	NMA	2678 2182	Regular Emergency	0450 and 1650 Upon receipt ..	..... .....	x x	x x	x x
St. Petersburg, Fla.	NOF	2678 2182	Regular Emergency	0420 and 1620 Upon receipt ..	..... .....	x x	x x	x x
San Juan, P.R.	NMR	2678 2182	Regular Emergency	0300 and 1500 Upon receipt ..	x	x x	x x	x x
New Orleans, La.	NMG	2686 2182	Regular Emergency	0550 and 1750 Upon receipt ..	x	x x	x x	x x
Galveston, Tex.	NOY	2686 2182	Regular Emergency	0520 and 1720 Upon receipt ..	x	x x	x x	x x
Long Beach, Calif.	NMQ	2694 2182	Regular Emergency	0500 and 1700 Upon receipt ..	x	x x	x x	x x
San Francisco, Calif.	NMC	2662 2182	Regular Emergency	0430 and 1630 Upon receipt ..	..... .....	x x	x x	x x
Seattle, Wash.	NMW	2702 2182	Regular Emergency	0530 and 1730 Upon receipt ..	x	x x	x x	x x
Ketchikan, Alaska.	NMJ	2678 2182	Regular Emergency	0600 and 1800 Upon receipt ..	x	x x	x x	x x
Kodiak, Alaska.	NOJ	2678 2182	Regular Emergency	0700 and 1900 Upon receipt ..	..... .....	x x	x x	x x
Honolulu, T.H.	NMO	2686 2182	Regular Emergency	0600 and 1800 Upon receipt ..	..... .....	x x	x x	x x

AMENDMENTS TO REGULATIONS

[EDITOR'S NOTE.—The material contained herein has been condensed due to space limitations. Copies of the Federal Registers containing the material referred to may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER N—EXPLOSIVES OR OTHER DANGEROUS ARTICLES OR SUBSTANCES AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

[CGFR 59-9]

PART 147—USE OF DANGEROUS ARTICLES AS SHIPS' STORES AND SUPPLIES ON BOARD VESSELS

Cylinders Containing Compressed Gas Used as Ships' Stores

In the Marine Engineering Regulations in 46 CFR 55.16-10(b) it is stated that the liquefied petroleum gas cylinders used in cooking and heating aboard inspected vessels are to be constructed, tested, marked, etc., in accordance with the regulations of the Interstate Commerce Commission, which govern the land transportation of such cylinders. This requirement does not apply to the carriage of liquefied petroleum gas cylinders carried as ships' stores and supplies. The regulation in 46 CFR 147.04-1 governs the carriage of liquefied petroleum gas cylinders as ships' stores and supplies. Due to an oversight this regulation still contains a requirement that such cylinders shall be tested every five years. This five-year test is no longer required by the Interstate Commerce Commission of certain cylinders which are used exclusively for liquefied petroleum gas.

Since the amendment in this document contains revised requirements to agree with existing ICC Regulations or is editorial in nature, it is hereby found that compliance with the Administrative Procedure Act (respecting notice of proposed rule making, public rule making procedure thereon, and effective date requirements thereof) is unnecessary.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Orders 120, dated July 31, 1950 (15 F.R. 6521), 167-14, dated November 26, 1954 (19 F.R. 8026), and CGFR

56-28, dated July 24, 1956 (21 F.R. 5659), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendment to § 147.04-1 is prescribed and shall become effective on the date of publication of this document in the Federal Register.

DETAILED REGULATIONS GOVERNING USE OF SHIPS' STORES AND SUPPLIES

§ 147.04-1 Cylinder requirements.

(a) Cylinders containing a compressed gas, other than liquefied petroleum gas, for use as an article of stores on board any domestic vessel subject to the regulations in this subchapter shall conform to the following conditions:

(1) All cylinders shall be constructed, tested and marked in accordance with the Interstate Commerce Commission specifications in effect upon the date of manufacture and test.

(2) Cylinders shall bear upon the shoulder thereof a test date marking indicating such cylinder has been tested within a period of 5 years. A cylinder continuously installed in place on board a vessel as part of the vessel's equipment for a period of time exceeding 5 years, shall, after 12 years have elapsed from the date of previous test and marking, be removed from the vessel, its contents discharged, the cylinder retested and remarked.

(3) Any cylinder, the contents of which have been discharged or which for any cause has been removed from a vessel subsequent to 5 years from the last test, as indicated by the marking, shall be retested and remarked.

(4) Retesting, remarking, or recharging shall be in accordance with the regulations of the Interstate Commerce Commission in effect at the time the operation takes place.

(5) Cylinders forming part of a system installed on board a domestic vessel shall not be removed from said installation and placed on board any other vessel (except in an emergency) when the test date marking indicates that more than 5 years have elapsed since the cylinder was last tested.

(6) Cylinders marked showing a test date within the preceding 5 years but which show dents or other evidence of rough usage or corrosion to such extent as to indicate possible weakness or that have lost more than 5 percent of their official tare weight or that have been involved in a fire shall not be used or continued in use as a container of any compressed gas as an article of stores on board a vessel until retested and remarked in accordance with the Interstate Commerce Commission regulations.

A cylinder reclaimed from a previous installation and showing a test date marking exceeding a period of 5 years shall not be used as a container of compressed gas on board a vessel unless the residue of gas within the cylinder has been discharged and the cylinder retested and remarked in accordance with requirements of the Interstate Commerce Commission regulations for the particular gas and cylinder involved. Cylinders retested under any of the above conditions shall have new or renewed valve and safety relief devices of the proper design installed in the cylinder.

(b) Cylinders containing liquefied petroleum gas for use as an article of stores on board any domestic vessel subject to the regulations in this subchapter shall conform to the following conditions:

(1) All such cylinders shall be constructed, tested, marked, maintained and retested in accordance with the regulations of the Interstate Commerce Commission.

(2) All liquefied petroleum gas cylinders in service shall bear a test date marking indicating that they have been retested in accordance with the regulations of the Interstate Commerce Commission.

(3) Regardless of the date of the previous test, a cylinder shall be rejected for further service when it leaks; when it is weakened appreciably by corrosion, denting, bulging or other evidence of rough usage; when it has lost more than five percent of its tare weight; or when it has been involved in a fire.

(R.S. 4405, as amended, 4462, as amended, 4472, as amended; 46 U.S.C. 375, 416, 170. Interpret or apply sec. 3, 68 Stat. 675; 50 U.S.C. 198; E.O. 10402, 17 F.R. 9917, 3 CFR, 1952 Supp.)

Dated: April 27, 1959.

[SEAL] A. C. RICHMOND,
Vice Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 59-3695; Filed, Apr. 30, 1959;
8:49 a.m.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 59-22]

WORK VESTS

Pursuant to the notice of proposed rule making published in the FEDERAL REGISTER on April 9, 1959 (24 F.R. 2742-2751), and Merchant Marine Council Public Hearing Agenda CG-249, dated April 27, 1959, the Merchant Marine Council held a Public Hearing on April 27, 1959, for the purpose of receiving comments, views

and data. The proposals considered were identified as Items I to XII, inclusive. The proposed regulations to govern the use of work vests were set forth in detail as Item VII in the Agenda, CG-249, and a summary of the proposals was set forth in the previously mentioned FEDERAL REGISTER of April 9, 1959.

This document is the fifth of a series covering the regulations and actions considered at the April 27, 1959, Public Hearing and annual session of the Merchant Marine Council. The first document, CGFR 59-17, contains the actions taken with respect to Item VIII regarding power-operated industrial trucks. The second document, CGFR 59-20, contains the actions taken with respect to Item XI regarding suspension or revocation proceedings involving licenses, certificates or documents issued to individuals. The third document, CGFR 59-16, contains the final actions taken with respect to Item X regarding licensing or certifying of seamen, motorboat operators, or staff officers. The fourth document, CGFR 59-15, contains the final actions taken with respect to Item XII regarding the person in charge of a manned platform and emergency signals, and with respect to use of work vests on offshore artificial islands and fixed structures considered with Item VII.

The proposals regarding work vests in Item VII of the Agenda are approved with several minor changes. The comment requesting that similar provisions regarding work vests be added to cover motorboats was considered and accepted by adding similar regulations designated 46 CFR 185.35-1 to 185.35-20, inclusive, to the requirements governing small passenger vessels inspected and certificated under the Act of May 10, 1956 (46 U.S.C. 390b). The use of work vests NOT approved by the Commandant, U.S. Coast Guard, on inspected and certificated vessels is prohibited by the provisions in section 4491 of the Revised Statutes, as amended (46 U.S.C. 489), or implementing regulations. In 46 CFR 160.053-2(a) a provision was added authorizing consideration to be given equivalent alternate designs.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Orders 120, dated July 31, 1950 (15 F.R. 6521), 167-14, dated November 26, 1954 (19 F.R. 8026), 167-15, dated January 3, 1955 (20 F.R. 840), 167-20, dated June 18, 1956 (21 F.R. 4894), and CGFR 56-28, dated July 24, 1956 (21 F.R. 5659), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendments and

regulations are prescribed and shall become effective 90 days after the date of publication of this document in the FEDERAL REGISTER:

(Federal Register of June 18, 1959)

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER N—ARTIFICIAL ISLANDS AND FIXED STRUCTURES ON THE OUTER CONTINENTAL SHELF

[CGFR 59-15]

PART 146—OPERATIONS

Person in Charge of a Manned Platform, Emergency Signals, and Work Vests

(Federal Register of June 18, 1959)

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 59-24]

ALTERNATE REQUIREMENTS AND EDITORIAL CHANGES

Requirements governing United States citizenship for a person who is born outside the United States and who claims citizenship because one of his parents was a United States citizen at the time of his birth are in 8 U.S.C. 1401 (a) (7) and (b). Determinations with respect to citizenship under this law are made by the United States Immigration and Naturalization Service and such determinations may be evidenced by their Certificates of Citizenship. The amendment to 46 CFR 10.02-5(c) (9) in this document provides for the acceptance of Certificates of Citizenship issued by the United States Immigration and Naturalization Service held by a person born outside of the United States and who is a United States citizen in accordance with 8 U.S.C. 1401 (a) (7) and (b).

The proviso in 46 CFR 10.13-7(b) is obsolete and is therefore canceled. This regulation authorized applicants of 18 years of age who had 6 months' service at sea prior to April 1, 1949 to be eligible for a license as a radio operator.

The requirements governing certification of able seamen and qualified members of the engine department under wartime regulations in 46 CFR 12.05-13 and 12.15-13 expired on July 1, 1953 and therefore these sections are canceled.

The amendments to 46 CFR 35.20-20 (second sentence), 39.01-1(a), 67.50-20(g), 92.05-5 (headnote),

78.30-20, 97.27-5, 110.15-75, 185.30-5 (d), 187.05-35(a) and 187.20-1(b) are editorial in nature and correct cross references, misspelled words or insert omitted words from common definitions.

The provisions regarding lookouts to be stationed at or near the bow of ships navigating the oceans or coastwise waters during the nighttime in 46 CFR 35.20-20 (first sentence), 78.30-1 and 97.27-1 are canceled because they are ambiguous and are not necessary, as the statutory lookout requirements are stated in the so-called "general prudential rule" in the various "Rules of the Road."

It is hereby found that compliance with the Administrative Procedure Act (respecting notice of proposed rule making, public rule making procedures thereon, and effective date requirements thereof) is deemed to be unnecessary.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F.R. 6521), Treasury Department Order 167-14, dated November 26, 1954 (19 F.R. 8026), and Treasury Department Order CGFR 56-28, dated July 24, 1956 (21 F.R. 5659), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendments are prescribed and shall become effective on the date of publication of this document in the Federal Register:

(Federal Register of June 20, 1959)

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS DURING EMERGENCY [CGFR 59-25]

PART 154—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS¹

Navigation Lights for Royal Canadian Naval Vessels on the Great Lakes, 1959

The purpose for the following waiver order designated § 154.60(c), as well as 33 CFR 19.60(c), is to waive the requirements in the "Rules of the Road" for the Great Lakes and their connecting and tributary waters, which are administered and enforced by the Coast Guard to the extent necessary to permit Royal Canadian Naval Vessels to operate in the Great Lakes and their connecting and trib-

¹ This is also codified as 33 CFR Part 19.

utary waters, which are under the jurisdiction of the United States, without complying in all details with the navigation light requirements governing vessels while in Great Lakes waters.

It is hereby found that compliance with the Administrative Procedure Act (respecting notice of proposed rule making, rule making procedure thereon, and effective date requirements thereof) is contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by an order of the Acting Secretary of the Treasury, dated January 23, 1951, identified as CGFR 51-1, and published in the Federal Register January 26, 1951 (16 F.R. 731), the following waiver order is promulgated and shall be in effect during the period of time specified below unless sooner terminated by proper authority:

§ 154.60 Navigation lights for certain British Naval vessels on Great Lakes, 1959

(c) Pursuant to the provisions of section 1 of the Act of December 27, 1950 (64 Stat. 1120; 46 U.S.C. note prec. 1), I hereby waive in the interest of national defense compliance with the provisions of the "Rules of the Road" for the Great Lakes and their connecting and tributary waters relating to navigation light requirements, as well as any regulation prescribed relating thereto and published in 33 CFR Part 90, to the extent necessary to permit the operation of Royal Canadian Naval vessels in all of the Great Lakes and their connecting and tributary waters, which are under the jurisdiction of the United States, without complying in every detail with the navigation light requirements governing Great Lakes' vessels. This waiver order shall be in effect from June 15 to and including September 15, 1959, unless sooner terminated by proper authority.

(Sec. 1, 64 Stat. 1120; 46 U.S.C., note prec. 1)

Dated: June 5, 1959.

[SEAL] A. C. RICHMOND,
Vice Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 59-4863; Filed, June 11, 1959;
8:46 a.m.]

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

PART 19—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS

Navigation Lights for Royal Canadian Naval Vessels on the Great Lakes, 1959

CROSS REFERENCE: For addition of § 19.60(c), see Title 46, Part 154, F.R. Doc. 59-4863, *infra*.

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

PART 19—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS

Vessels Operated by Pacific Micronesia Lines, Inc.

CROSS REFERENCE: For promulgation of § 19.35, see Title 46, Chapter I, Part 154, *infra*.

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS DURING EMERGENCY [CGFR 59-23]

PART 154—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS¹

Vessels Operated by Pacific Micronesia Lines, Inc.

The Acting Assistant Secretary of Defense (Supply and Logistics) in a letter to the Secretary of the Treasury dated May 25, 1959, requested a general waiver of Navigation and vessel inspection laws of the United States as follows:

Each year since 1951, the Secretary of Defense has recommended waiver of the vessel inspection laws of the United States for certain vessels operating in the waters of the Trust Territory. This is to recommend a limited waiver similar to the one recommended last year.

By Department of Defense Directive 5100.21 published in the Federal Register on April 16, 1959 (24 F.R. 2912) the Secretary of Defense delegated to the Assistant Secretary of Defense (Supply and Logistics) authority to recommend such waivers.

In the interest of national defense it is requested pursuant to the provisions of Public Law 891, 81st Congress, that the requirements of the vessel inspection laws relating to licensed and unlicensed personnel, passengers' quarters, crews' quarters, lifesaving equipment and the number of passengers allowed to be carried on freight vessels be waived for the period July 1, 1959 to June 30, 1960, for vessels which are or will be operated by the Pacific Micronesia Lines, Incorporated, for the Department of the Interior in Trust Territory waters.

Section 1 of the act of December 27, 1950 (64 Stat. 1120; 46 U.S.C., note preceding 1), states in part as follows:

¹ This is also codified as 33 CFR Part 19.

That the head of each department or agency responsible for the administration of the navigation and vessel inspection laws is directed to waive compliance with such laws upon the request of the Secretary of Defense to the extent deemed necessary in the interest of national defense by the Secretary of Defense. * * *

In Federal Register Document 59-3175 published in the Federal Register dated April 16, 1959 (24 F.R. 2912), the Secretary of Defense, the Honorable Neil McElroy, delegated to the Assistant Secretary of Defense (Supply and Logistics) full power and authority to act for and in the name of the Secretary of Defense, and to exercise the powers of the Secretary of Defense upon any and all matters concerning which the Secretary of Defense is authorized to act pursuant to Public Law 891, 81st Congress, 2d Session (64 Stat. 1120; 46 U.S.C., note preceding 1) except as delegated to the Secretary of the Army insofar as such act is related to the St. Lawrence Seaway Power Project, the St. Lawrence Seaway Navigation Project, and the Great Lakes Connecting Channels Project.

The purpose for the following waiver order designated § 154.35, as well as 33 CFR 19.35, is to waive the navigation and vessel inspection laws and regulations issued pursuant thereto which are administered by the United States Coast Guard as requested by the Acting Assistant Secretary of Defense (Supply and Logistics) and to publish this waiver in the Federal Register. It is hereby found that compliance with the Administrative Procedure Act respecting notice of proposed rule making, public rule making procedure thereon, and effective date requirements thereof is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by an order of the Acting Secretary of the Treasury dated January 23, 1951, identified as CGFR 51-1, and published in the Federal Register, dated January 26, 1951 (16 F.R. 731), the following waiver order is promulgated and shall be in effect to and including June 30, 1960, unless sooner terminated by proper authority, and § 154.35 is revised as follows:

§ 154.35 Department of the Interior vessels operated by Pacific Micronesia Lines, Inc.

Pursuant to the request of the Acting Assistant Secretary of Defense (Supply and Logistics) in a letter dated May 25, 1959, made under the provisions of section 1 of the act of December 27, 1950 (64 Stat. 1120; 46 U.S.C., note prec. 1), I hereby waive in the interest of national defense compliance with the provisions of the navigation and vessel inspection laws

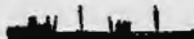
relating to licensed and unlicensed personnel, passenger quarters, crew quarters, lifesaving equipment, and the number of passengers allowed to be carried on freight vessels, administered by the United States Coast Guard, as well as the regulations issued thereunder and published in 33 CFR Chapter I or in this chapter, to the extent necessary to permit the operation of vessels of the Department of the Interior and now operated by Pacific Micronesian Lines, Inc., or other vessels which may be used as substitutes for such vessels, in the Trust Territory of the Pacific Islands, as well as between the Trust Territory of the Pacific Islands and all the ports of the United States, including its territories and possessions, and foreign ports. This waiver order shall be in effect from July 1, 1959, to and including June 30, 1960, unless sooner terminated by proper authority.

(Sec. 1, 64 Stat. 1120; 46 U.S.C., note prec. 1)

Dated: June 11, 1959.

[SEAL] A. C. RICHMOND,
Vice Admiral, U.S. Coast Guard,
Commandant.

[F.R. Doc. 59-4874; Filed, June 12, 1959;
11:23 a.m.]



NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 3-59

May 29, 1959

Subj: Inspection status of vessels certificated for Ocean and Coastwise (Unlimited) Service trading to Great Lakes Ports

1. *Purpose.* To advise owners, agents, masters and other interested parties of the applicability of Great Lakes inspection regulations and Rules of the Road when the subject vessels are operating on the Great Lakes.

2. *Discussion.*

a. With the opening of the St. Lawrence Seaway, many inquiries are being received concerning what requirements apply or if special endorsements are needed on certificates of inspection to authorize vessels carrying valid certificates of inspection for ocean voyages or unlimited coastwise voyages, to operate on the Great Lakes.

Until recently there was no positive recognition in the regulations of the fact that the rules and regulations governing the inspection and certification of ocean and unlimited coast-

wise vessels demand higher standards than the rules and regulations governing the inspection and certification of Great Lakes vessels. However, it is well established that vessels certificated for ocean or coastwise voyages are required to meet higher standards of construction, subdivision, fire extinguishing capability, and must carry more primary lifesaving equipment, although it is not of the same type and character, than required for Great Lakes vessels. It has been the practice to recognize administratively that the highest inspection standards are required for ocean and coastwise vessels; and that vessels certificated for Ocean or Coastwise (Unlimited) service are acceptable to the Coast Guard as suitable for operation on the Great Lakes and other inland waters. In order to inform all concerned of this acceptance, however, new regulations have been added and are designated 46 CFR 30.01-7, 70.05-7, 90.05-7 and 167.01-7. These regulations, which became effective on April 25, 1959, apply to all types of vessels including tank vessels, passenger vessels, cargo and miscellaneous vessels and nautical schoolships and provide that

"vessels inspected and certificated for ocean or unlimited coastwise routes shall be considered suitable for navigation insofar as the provisions of this subchapter are concerned on any inland route, including the Great Lakes."

b. In addition to the matter of these regulations set forth in the Code of Federal Regulations as above there is the question of the applicability of Great Lakes Rules of the Road to the subject vessels.

In this regard there is no provision in the Rules of the Road for the Great Lakes to permit seagoing vessels to display the lights required by International Rules while navigating on the Great Lakes. Owners and operators of ships which have operated in compliance with the International Rules of the Road who may be planning to operate these same vessels on the Great Lakes should refer to the pamphlet "Rules of the Road—Great Lakes" (CG-172) (Formerly titled "Pilot Rules for the Great Lakes and Their Connecting and Tributary Waters"). Vessels operating on the Great Lakes must comply with all of these rules unless specifically exempt under Rule 13 or unless a specific waiver has been issued. Some of the Rules of the Road for the Great Lakes are at variance with the International Rules; for example, Rules 3 (e) and (f) require an all around range light as follows:


"3(e) A steamer of over 100 feet register length shall carry also, when underway, a bright white light so fixed as to throw the light all around the horizon, and of such a character as to be visible at a distance of at least three miles. Such light shall be placed in line with the keel at least 15 feet higher than, and more than 50 feet abaft, the light mentioned in subdivision (a) of this rule; or in lieu thereof two such lights of the same character and height as herein described placed not over 30 inches apart horizontally, one on either side of the keel, and so arranged that one or the other or both shall be visible from any angle of approach."

"3(f) A steam vessel not more than 100 feet in length shall carry also a bright white light aft to show all around the horizon. Such light shall be placed in line with the keel higher than the light required by subdivision (a) of this rule."

3. *Action.* This circular is published for the information and guidance of owners, agents, masters, and other interested parties.

4. *Effective Date.* Upon receipt.

H. T. JEWELL
Rear Admiral, U.S. Coast Guard
Chief, Office of Merchant Marine
Safety
By direction of the Commandant



HEARING EXAMINER CIRCULAR NO. 1-59

February 19, 1959

Subj: Hearing Examiner Circular series; establishment of

1. *Purpose.* To establish a separate directive series for the guidance of Hearing Examiners.

2. *Directives and Publications Affected.* General Administration Instruction No. 1-55 and the Directives, Publications and Reports Index, CG-236, will be amended accordingly.

3. *Authorization and Administrative Procedures.*

a. The Hearing Examiner Circular series shall be utilized as the medium for stating policy of the Commandant and for furnishing guidance and advice to Examiners on particularly important points of law or regulation and procedures to be observed in suspension and revocation proceedings.

b. Directives in this series shall be serially numbered by calendar year and shall receive the minimum distribution indicated below.

c. Hearing Examiner Circulars are special series directives and are not subject to automatic cancellation under Section 1-3-1A, Coast Guard Regulations, CG-300.

d. A complete and current file of this series will be available for public inspection during normal working hours at Headquarters, each district office and each marine inspection office.

4. *Action.* Hearing Examiners will be bound in the performance of their duties by the published regulations in 46 CFR 137 and this series.

A. C. RICHMOND,
Vice Admiral, U.S. Coast Guard,
Commandant.



HEARING EXAMINER CIRCULAR NO. 2-59

March 23, 1959

Subj: Policy of rescission of revocations of documents because of narcotics violations

1. *Purpose.* To state the Commandant's policy with respect to rescission of revocations of documents made as a result of a narcotics violation and to provide for those cases where the court action has become final.

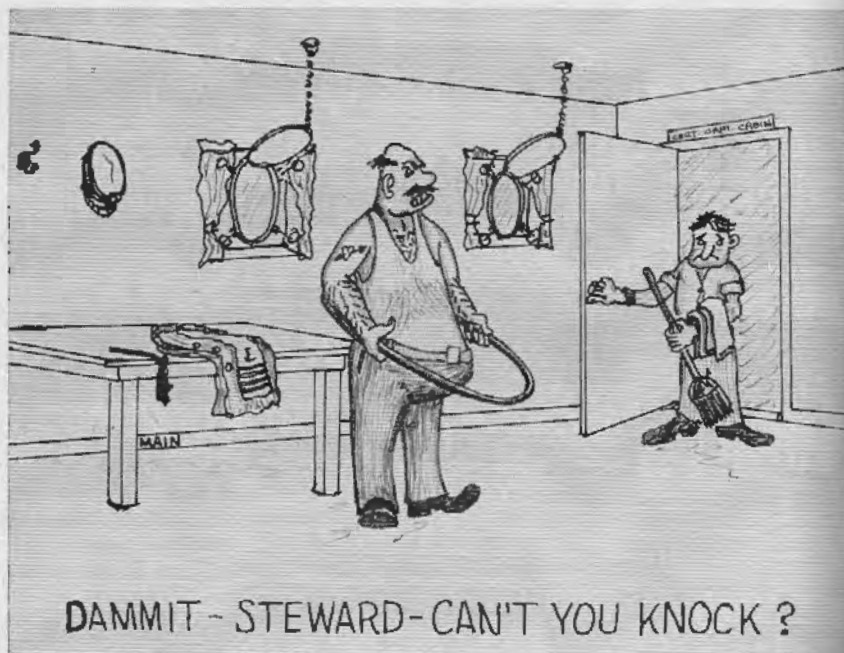
2. *Policy statement.* It is the policy of the Commandant that under the provisions of 46 CFR 137.04-15, no rescission of the revocation of a document made as a result of a conviction under 46 U.S.C. 239b will be considered, whether the court action is final or not, until the person applying for rescission of the revocation presents a properly authenticated copy of a specific court order to the effect that his conviction has been unconditionally set aside for all purposes. The Commandant reserves unto himself the determination in all such cases and individual Examiners shall not set aside prior orders of revocation which were based on the provisions of 46 U.S.C. 239b.

3. *Procedures.* In order to present evidence to the Commandant for his consideration in cases where a request for rescission of a revocation of a document is made, the procedures of 46 CFR Subpart 137.11 will be utilized, except that the time limit of 30 days specified in 46 CFR 137.11 (a) and (b) will not apply. In addition to the complete record of

SMALL PASSENGER VESSEL CERTIFICATES

Following is a tabulation of certificates of inspection issued to small passenger vessels under the provisions of Public Law 519 for the first 12 months the law has been in effect (June 1, 1958 to May 31, 1959). Figures are based on reports and records submitted to the Merchant Vessel Inspection Division, U.S. Coast Guard Headquarters:

DISTRICT	CERTIFICATES ISSUED	SURRENDERED	REVOKED
FIRST.....	169	2	None
SECOND.....	140	2	None
THIRD.....	927	10	4
FIFTH.....	151	7	1
SEVENTH.....	319	15	10
EIGHTH.....	783	8	4
NINTH.....	226	3	4
ELEVENTH.....	257	6	8
TWELFTH.....	196	11	1
THIRTEENTH.....	148	1	1
FOURTEENTH.....	31	2	None
SEVENTEENTH.....	19	1	None
TOTAL.....	3,366	68	28



the hearing which led to the revocation, the Commandant will accept the authenticated copy of the court order referred to in paragraph 2 hereof.

4. *Action.* Effective upon receipt.

A. C. RICHMOND,
Vice Admiral, U.S. Coast Guard,
Commandant.

EQUIPMENT APPROVED BY THE COMMANDANT

[EDITOR'S NOTE.—Due to space limitations, it is not possible to publish the documents regarding approvals and terminations of approvals of equipment published in the Federal Register dated June 20, 1959 (CGFR 59-19). Copies of these documents may be obtained from the Superintendent of Documents, Washington 25, D.C.]

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from 1 June to 30 June 1959, inclusive, for use on board vessels in accordance with the provisions of Part 147 (46 CFR 146-147) of the Dangerous Cargo Regulations are as follows:

CERTIFIED

Tect, Inc., Northvale, N.J., Certificate No. 387, dated 2 June 1959, TECELENE.

The Klenzoid Corp., 1604 Girard Trust Co. Bldg., Philadelphia 2, Pa., Certificate No. 388, dated 5 June 1959, KLENZOID FUEL OIL STABILIZER.

Trio Chemical Works, Inc., 341-347 Scholes St., Brooklyn 6, N.Y., Certificate No. 389, dated 12 June 1959, TRIO DEGREASING SOLVENT NO. 625, SELF EMULSIFYING.

New Process Chemical Co., Marine and Industrial Chem., 121 Clay St., San Francisco 11, Calif., Certificate No. 390, dated 12 June 1959, ALL PURPOSE FUEL CONDITIONER.

Dunn Chemical & Sales Co., 656 Townsend St., San Francisco, Calif., Certificate No. 391, dated 15 June 1959, DUNALL L. D. (Light Degreaser).

AFFIDAVITS

The following affidavits were accepted during the period from 15 May 1959 to 15 June 1959:

Todd Shipyards Corp. (Los Angeles Division), P.O. Box 231, San Pedro, Calif., VALVES, FITTINGS, FLANGES, CASTINGS, FORGING, AND BOLTING.

Pneu-Trol Devices, Inc., Division of Auto-Ponents, Inc., 3001 Grant St., Bellwood, Ill., VALVES.

Sarasota Precision Products, Inc., 1314 North Lime Ave., Sarasota, Fla., VALVES.

Seaboard Foundry, Inc., P.O. Box 2835, Elmwood Station, Providence 7, R.I., CASTINGS.

Minneapolis-Honeywell Regulator Co., Valve Division, 300 Commerce Drive, Fort Washington, Pa., VALVES.

¹ Listed only for new location of Valve Division.

MARINE SAFETY PUBLICATIONS AND PAMPHLETS

The following publications and pamphlets are available and may be obtained upon request from the nearest Marine Inspection Office of the United States Coast Guard. Date of each publication is indicated following title.

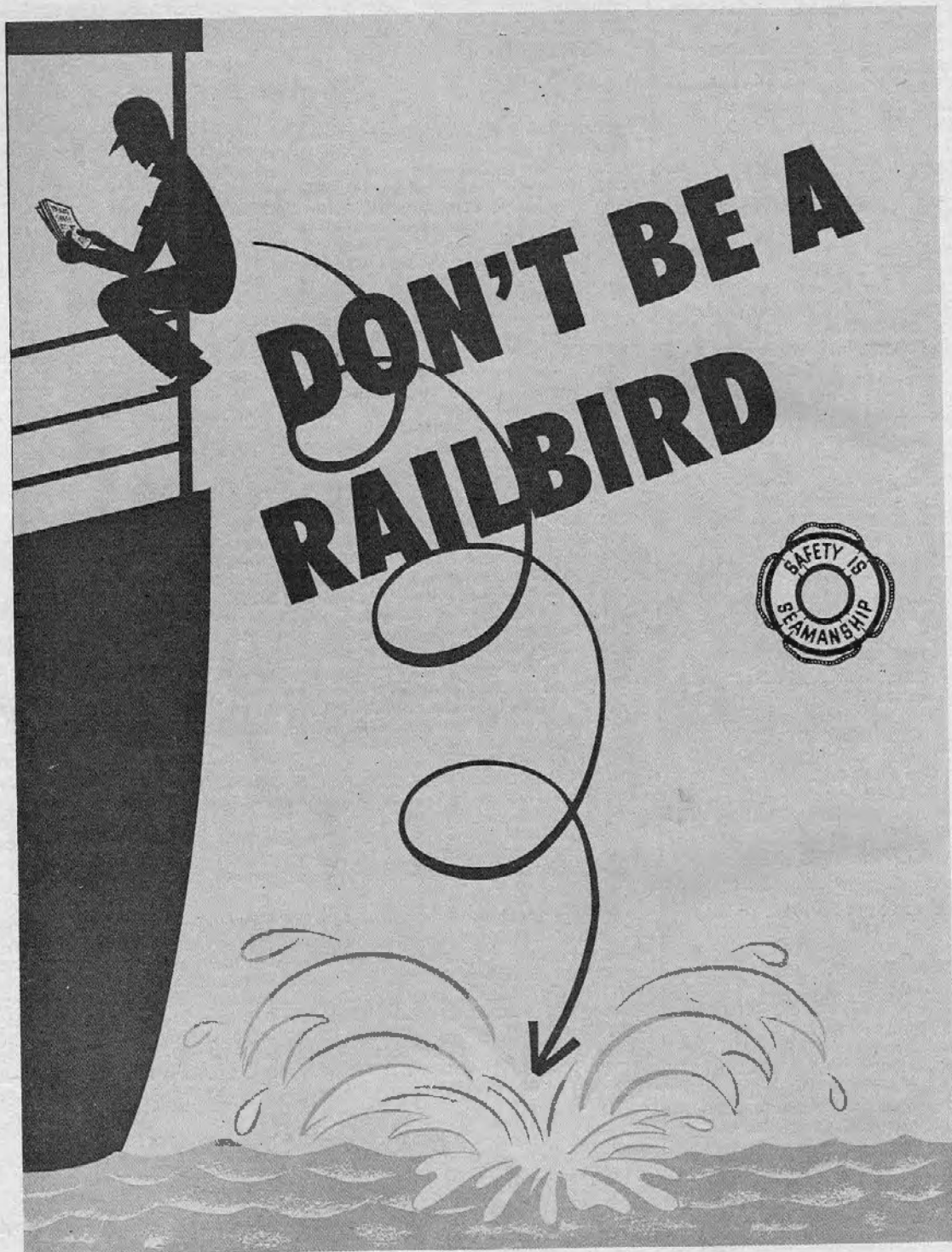
CG No.	Title of Publication
101	Specimen Examinations for Merchant Marine Deck Officers. 7-1-58
108	Rules and Regulations for Military Explosives and Hazardous Munitions. 8-1-58
115	Marine Engineering Regulations and Material Specifications. 3-1-58
123	Rules and Regulations for Tank Vessels. 4-1-58
129	Proceedings of the Merchant Marine Council. Monthly
169	Rules of the Road—International—Inland. 5-1-59
172	Rules of the Road—Great Lakes. 5-1-59
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids. 7-2-51
175	Manual for Lifeboatmen and Able Seamen, Qualified Members of Engine Department, and Tankerman. 6-1-55
176	Load Line Regulations. 9-2-58
182	Specimen Examinations for Merchant Marine Engineer Licenses. 5-1-57
184	Rules of the Road—Western Rivers. 5-1-59
190	Equipment Lists. 4-1-58
191	Rules and Regulations for Licensing and Certifying of Merchant Marine Personnel. 9-15-55
200	Marine Investigation Regulations and Suspension and Revocation Proceedings. 7-1-58
220	Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels. 4-1-57
227	Laws Governing Marine Inspection. 7-3-50
239	Security of Vessels and Waterfront Facilities. 7-1-58
249	Merchant Marine Council Public Hearing Agenda. Annually
256	Rules and Regulations for Passenger Vessels. 3-2-59
257	Rules and Regulations for Cargo and Miscellaneous Vessels. 3-2-59
258	Rules and Regulations for Uninspected Vessels. 7-1-55
259	Electrical Engineering Regulations. 9-2-58
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267	Rules and Regulations for Numbering Undocumented Vessels. 1-15-53
268	Rules and Regulations for Manning of Vessels. 9-3-57
269	Rules and Regulations for Nautical Schools. 11-1-53
270	Rules and Regulations for Marine Engineering Installations Contracted for Prior to July 1, 1935. 11-19-52
290	Pleasure Craft. (Formerly "Motorboats"). 1-2-59
293	Miscellaneous Electrical Equipment List. 3-10-59
320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf. 1-2-57
323	Rules and Regulations for Small Passenger Vessels. (Not More Than 65 Feet in Length) 6-1-58
329	Fire Fighting Manual for Tank Vessels. 4-1-58

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Changes Published During June 1959

The following have been modified by Federal Register:

CG-123, CG-258, CG-257, CG-289, CG-320, and CG-323 Federal Register, June 18, 1959.
CG-123, CG-190, CG-191, CG-258, CG-257, CG-259, CG-270, and CG-323 Federal Register, June 20, 1959.



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