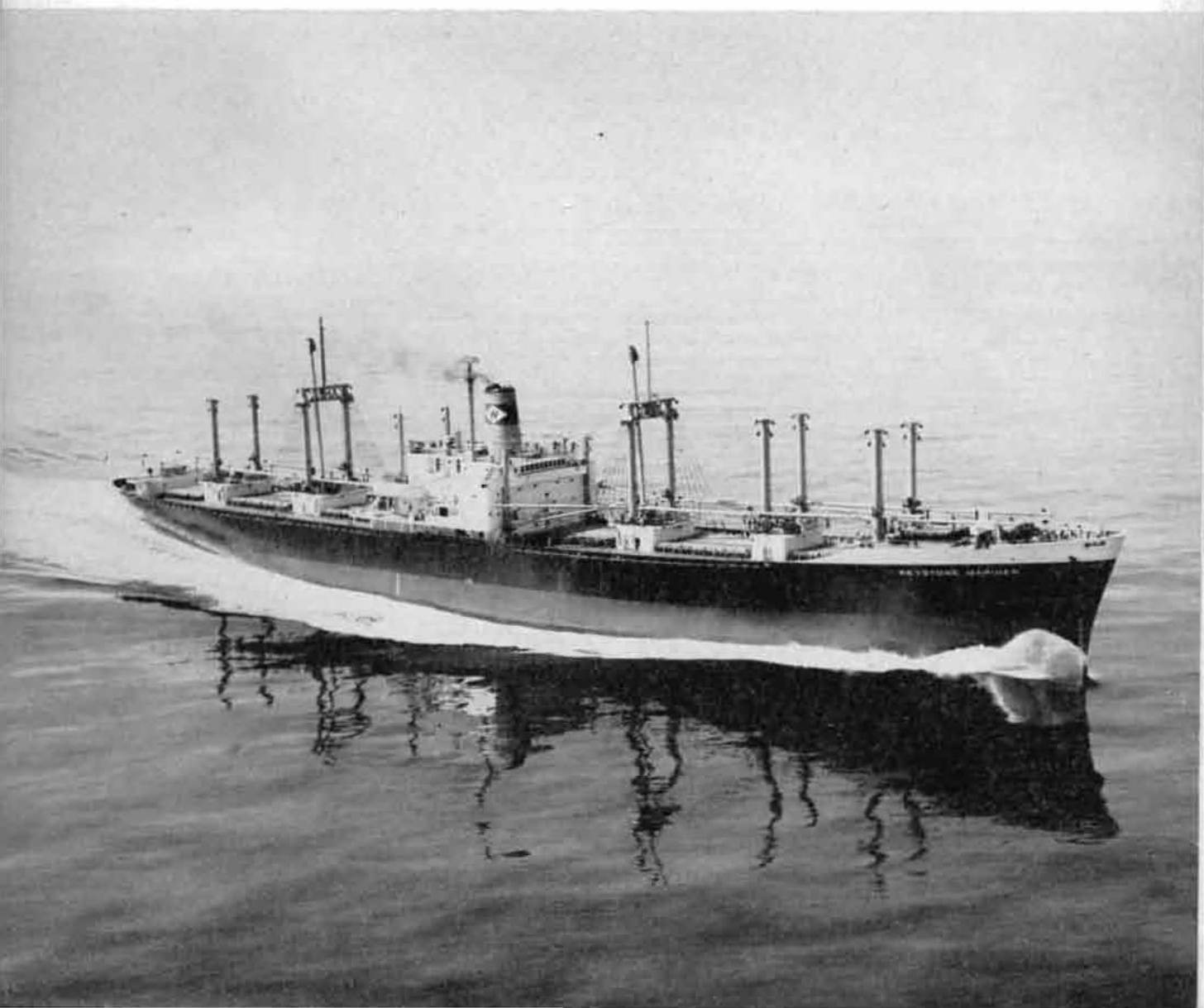
PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL
UNITED STATES COAST GUARD

The printing of this publication has been approved by the Director of the Bureau of the Budget, March 11, 1952.

CG 129

Vol. 9 November 1952 No. 11



Proceedings of the

MERCHANT MARINE COUNCIL

Published monthly at Coast Guard Headquarters, Washington 25, D. C., under the auspices of the Merchant Marine Council, in the interest of safety at sea. Special permission for republication, either in whole or in part, with the exception of copyrighted articles or pictures, is not required provided credit is given to the Proceedings of the Merchant Marine Council.

The Merchant Marine Council of the United States Coast Guard

CONTENTS

COVER PICTURE

The KEYSTONE MARINER, built by the Sun Shipbuilding and Dry Dock Co., of Chester, Pa., shown here on its first speed trials off the Delaware coast, is one of the first Maritime Administration's C type cargo vessels completed. A total of 34 sister ships are presently under construction in seven shipyards. These ships will be named after States in the vicinity of place constructed—The KEYSTONE MARINER representing the Keystone State (Pennsylvania). Particulars are: length between perpendiculars, 528 feet; beam, 76 feet; load draft, 29 feet 10 inches; deadweight approximately 13,400 tons; normal shaft horsepower, 17,500.

DISTRIBUTION (SDL 51):

A: a, aa, b, c, d, dd (2); remainder (1).
B: e (35); c 16); g (5); f (4); h (3); d (2); remainder (1.
C: All (1.
D: 1 (5); remainder (1).
E: mo (1).
List 141M.

I WONDER. DO YOU?

Perhaps the most common boast is—"My word is my bond!" This may be the spoken word or the written word. Which is immaterial—if true—for a man is really no better than his word. A man's word bespeaks his veracity and dependability. It implies the execution of a trust. In the case of a master or officer making a log entry it implies the recording of an accomplished fact.

For instance, should the log contain an entry as to the wind being force seven the tendency is to accept the fact the wind was force seven at the time. If the log says, "0800 changed course to 070° T," there is seldom occasion to doubt the course was changed to 070° T at 0800. Or, if there were to be an entry in the log to the effect liberty was granted at a certain time, again there would be no reason to doubt that it was.

That being the case one might say, "Then what's the purpose of stressing log entries in relation to a man's word being his bond?" That would be a good question. For, we accept the log at face value. Not to do so would be to lose faith with those who can and do honestly say, "My word is my bond!"

However, suppose you were to receive a report of a marine casualty which reported what appeared to be a minor, accidental fire damage. Then much to your surprise this was followed a few days later by a flock of reports from a west coast Hearing Unit relating to disciplinary action arising out of the *same, minor, accidental fire damage.* Minor? Accidental? I wonder? These questions would pop into your mind. Somewhat vexed by curiosity, you probably would look into the matter further, especially if this were not the first time such a thing happened.

If you did, here's what you would find:

Scene: Sokcho-Ri, Korea. A vital link in the war effort is in the process of unloading vitally needed drummed gasoline cargo. Anchored approximately a mile from shore, the early light reveals little activity on the waterfront. In the screech of the winches, war is forgotten. Those on

board the ocean freighter are busily engaged in transferring the drums to a smaller Korean vessel tied alongside.

Time: 0600, June 1952.

Suddenly, a sharp, cracking twang splits the screech of the winch. Reverberations of explosion follow in echo. Liquid fire laces the deck about number two hatch. Bomb? Mortar? No. This is far from the front lines. Due to the winch driver having carelessly two blocked the hoist, the swivel on the head block has parted, dropping its load of drums abreast number two hatch on the port side of main deck. The twang was the parting of swivel; the explosion, the exploding of the fallen drums; the liquid fire, the flash fire of the spilled gas. So far, a normal casualty.

The third mate, who is on watch, sounds the fire alarm. The master, awakened by the alarm, dashes to the bridge. He sounds the fire alarm a second time, at the same time directing that each man on board man his fire station. A few respond. Confusion reigns. First, one man abandons ship. Then, another and another. In all seven, yes seven men dash helter-skelter over the side, while the rest, blinded by ignorance and confusion, grope and mill, until in desperation someone grasps fire hose and attacks the flaming liquid.

This no longer appears to be a normal casualty.

Checking further, as the facts unfold, it becomes clear, good fortune smiles upon this not so fortunate vessel. Though the fire is being fought in ignorance, by chance, the pressurized stream, though not enough to put out the fire, does wash it off the ship. Thus we find the reporting vessel is saved. But, alas! Here good fortune ceases its smile, for the fire, washed off one ship is washed on the smaller. The smaller, instead of receiving a cargo of drummed gas, gets a cargo of inflamed liquid gas. Nature takes its course, and it is lost. So ends this normal (?) casualty.

The seven *brave* men returned in time and found themselves charged with inattention to duty. The hearing brought out each claimed he understood the fire alarm to be an abandon-ship alarm. One of these was a licensed radio officer, one a chief cook, two wipers, another a fireman, the remaining two a messman and ordinary seaman. All were found to be guilty as charged. The radio operator's license was revoked. The remaining six had their documents suspended for periods ranging from six to nine months.

In commenting on the failure of the radio operator to take his fire station the Hearing Examiner had this to say:

"It is the opinion of this Examiner that the actions of the person charged in this instance indicates such a lack of responsibility as to warrant most extreme penalties. This person charged, as radio operator aboard this vessel, was in a most unique and unusual position, in that his steadfast and faithful duty to his position aboard the ship could have meant, had this casualty been more severe, the saving of the vessel and the lives of those men aboard. His abandonment of his station at a time of crisis, such as could well have resulted here, meant that this officer undoubtedly failed to meet his responsibility under the license issued to him as a merchant marine officer in the American Merchant Service."

The Examiner then went on to say in relation to each of the other six men charged with inattention to duty:

"Perhaps one of the most disastrous experiences that can happen to a seaman aboard any ship is when that ship catches fire at sea. From the time that fire occurs and when he is ordered either by direct order or by the signals of the vessel to undertake his station to combat those flames, that seaman becomes a man unto himself. Any dereliction of duty that he has in regard to that station is not only an insult to his own individual character, but is certainly an insult to the rest of the members of his crew. Regardless of where the fire may occur aboard the vessel, the inability of a seaman or his neglect to perform his duties in reference to manning his station must necessarily result in a hardship on the rest of the members of the ship's crew, and on the ship's officers. No excuse can ever be offered by any seaman for failing to respond to his duty when his ship is placed in danger, and there is no worse danger aboard a merchant vessel than that of fire. In this particular instance, that fire hazard was greatly enlarged by the fact that the vessel itself was fully loaded with combustible material, and that had the vessel not been protected by other members of the crew, it is entirely possible that the person charged would have also lost his life, even had he been on a lighter alongside. Consequently, this Examiner can find no excuse, even that of inexperience, for the actions of the person charged in this instance."

To this one can but say, "Yea, verily!"

So, sitting back, reflecting on the common statement—My word is my BOND—by now somewhat cynical, perhaps somewhat on the verge of becoming a doubting Thomas, the reflection brings to mind known cases of falsely logged drills. The comparision raises immediate questions. Why did these men think a twice repeated fire alarm was the abandon ship alarm? Why was there such confusion on board? Why did the fire-fighters use a strong stream of water to fight a fuel fire? Could it be that when fire drill is logged it is done with tongue in cheek? Is this an instance of a master slyly saying to himself, "You have my word, that's all?"

Those found inattentive to duty by reason of deserting their fire stations cannot be excused. Any man qualified to sail must necessarily be held responsible for proper conduct in an emergency. It's his duty to find out what his station is and what the various alarms are. But, if this tragic series of errors resulted in part from the neglect of proper drills, then, a portion of the blame must lie with the man who did not back up his word with his bond.

When a ship logs a fire drill, it should mean just that—Not a perfunctory exercise. A fire drill entry in the log should mean:

(1) A fire drill was held.
(2) Each man responded to and knew the proper alarm.
(3) Each station was manned.
(4) Fire-fighting equipment was tested.
(5) Each man knew how to combat each type of fire.
(6) The drill was satisfactory in all respects as to the preceding five points.

Only then can the one making the entry say, "My word is my BOND! When I say fire drill, I *mean* fire drill. When I say lifeboat drill, I *mean* lifeboat drill. Whatever I say, you can depend on it."

NATIONAL CARGO BUREAU—PURPOSES AND ORGANIZATION

BY

CARL E. McDOWELL

EXECUTIVE VICE PRESIDENT, NATIONAL CARGO BUREAU, INCORPORATED

These comments about the National Cargo Bureau have been prepared in collaboration with Mr. Walter Maloney, President of the American Merchant Marine Institute, Rear Admiral Halert C. Shepheard, USCG, Chief of the Coast Guard's Office of Merchant Marine Safety, and with other persons engaged in the shipping industry, marine underwriting, Government and elsewhere.

PURPOSES OF NATIONAL CARGO BUREAU

Collaboration is the essence of the National Cargo Bureau. The "N. C. B." is created in accord with the general purposes of the International Convention for the Safety of Life at Sea, 1948. It is a nonprofit membership organization incorporated on May 15, 1952, under the laws of the State of New York and will commence its principal functions about November 1st. The new agency is absorbing and expanding the Bureau of Inspection of the Board of Underwriters of New York and similar functions of the Board of Marine Underwriters of San Francisco. Its purposes are to do the following things:

(1) To provide a private agency to formulate recommendations to Government as to regulations that Government will promulgate on the safe stowage of dangerous goods. Industry, shippers, Government and all other interested parties will have a voice in reaching these recommendations.

(2) To be the medium in this country to work at industry level in the international field to achieve uniformity of safety standards and regulations for the stowage of cargo and to remove obstacles that result from lack of uniformity.

(3) To be a central information agency to specialize in assembling data on the thousands of commodities offered for water transportation. This information service is available to the shipping industry and also to other groups.

(4) To offer the shipping industry a low-cost cargo-loading inspection service directly at the loading operation. The inspection is made by surveyors who are deemed qualified to advise ship operators and stevedores with regard to the safe stowage of cargo. This service is available, on a cost basis, to shipowners and operators, who wish to avail themselves of it. The presence of an impartial, objective N. C. B. surveyor supports the efficiency of the ship operator's personnel. The surveyor supplements the operating and stevedoring personnel. One instance of unsafe stowage by the ship operator that would result in damaged cargo or the disabling of a ship at sea would cost far more than many N. C. B. inspection fees. N. C. B. should assist the ship operator to achieve the satisfactory discharge of his obligations.

To express these thoughts in another way, the purpose of the N. C. B. is to administer certain functions on behalf of shipper, carrier, underwriter and Government at one of those points in the flow of ocean-borne commerce where all those interests are joined, namely, at the point of stowage of cargoes aboard ship. The National Cargo Bureau, in relation to seeking standards for the safe stowage of cargoes, is patterned generally after the American Bureau of Shipping which sets standards for the hull.

An address presented to the 26th Annual Convention of the Propeller Club and American Merchant Marine Conference at Los Angeles, California, October 11–14, 1952.

In connection with dangerous goods and grain the Coast Guard already has some, and anticipates having additional legislative authority and responsibility for promulgating the standards as Government regulations. The N. C. B. will act for the Coast Guard to mobilize the data and recommendations of all parties at interest in such regulations. The ship owner is well aware that his observance of these regulations is mandatory.

Industry may ask whether such a cargo bureau will superimpose further regulation and expense on industry, whether it will lead to complicated international regulations, whether cargo-loading inspection will be mandatory, and whether the N. C. B. will overlap or conflict with the work of existing private and governmental agencies. The intention certainly is that all such questions may with confidence be answered in the negative. In fact, one purpose of N. C. B. is to try to guarantee that these questions will continue to be answered in the negative.

The purpose of a bureau such as the N. C. B. is to render a service. Such a service should be in response to a need. In this instance, the need arises out of the many specialized types of commodities that are included in the commerce of the United States. Shipping and stevedoring personnel at each pier can hardly be expected to be competent in the knowledge of all of these goods. The existing Coast Guard regulations applicable to explosives or other dangerous articles on board vessels already cover some 1800 items detailed in 350 pages of fine print. And our enormous industrial chemical industry is expanding every day and constantly developing new products, many of which are added each month to the regulated list.

This country is the greatest producing nation in the world, producing some 40 percent of the world's goods and providing a substantial proportion of all the goods that enter into the world's pool of international commerce. The foreign commerce of the United States is in reality a composite of the goods and services that are involved in getting the goods from the point of production through all of the intermediate steps until they are delivered overseas to the customer. Accordingly, the function of N. C. B. is to render a service to all of these interests. That service is to know the characteristics of goods entering into ocean-borne commerce and to take the lead in recommending reasonable standards for their safe stowage aboard ship.

HISTORY OF STOWAGE INSPECTION

The N. C. B. is an outgrowth of an organization that was started long ago by marine underwriters. In fact, it has existed for nearly 100 years. The records of the Board of Underwriters of New York show that in the 1850's the marine insurance underwriters were inspecting the loading of cargo aboard ship. A similar service on the Pacific Coast was initiated by underwriters as long ago as 1886 and is now provided by the Board of Marine Underwriters of San Francisco and private surveyors. The ship and its cargo in those early days were usually owned by the same people and often the master was part owner. Hence, when marine underwriters were asked to insure the venture it was common practice to inspect the ship and the stowage of the cargo. It was a practical detail to establish certain standards regarding stowage, to guide both the ship operator and the surveyor. Eventually certificates were issued as evidence that, in the opinion of the surveyor, the cargo was stowed in accordance with the standards of the Board of Underwriters. This system expanded over the years until it became an accepted service in the maritime commerce of the country.

Over the years this activity has assumed the nature of public service. This is apparent in the history of the rules for the handling of explosives and hazardous goods. Prior to 1935, the only rules and recommendations applicable to off-shore shipments of these goods were those of the Board of Underwriters of New York which were well recognized by all authorities. In that year the Bureau of Explosives of the Interstate Commerce Commission issued Tariff #3 to cover the transportation of explosives and other dangerous articles on common carriers by water on coastal and inland waters.

When the Coast Guard issued its regulations for hazardous cargoes in 1941, it turned to the rules of the Board of Underwriters of New York. And earlier this year when the Coast Guard undertook to set up regulations for the stowage of grain, it took over the existing grain rules of the Board of Underwriters of New York.

There has been a logical transition of cargo stowage rules affecting commerce from a private organization to the hands of Government agencies or agencies in which Government is represented and having the broader direction by the several parties at interest. The change to Government regulation is particularly important where public safety is concerned. The change recognizes the public service character of the Board of Underwriters' organization for preparing stowage standards and for offering cargo-loading inspection surveys. This century-old cycle of transition is now completed with the establishment this year of the National Cargo Bureau and the transfer to N. C. B. of the cargo-loading inspection services of the Boards of Underwriters.

SAFETY OF LIFE AT SEA CONVENTION

Several years prior to the holding of the London Conference of 1948 to revise the International Convention for the Safety of Life at Sea, the Coast Guard was aware that the revision contemplated some regulations for the stowage of hazardous goods and grain. The Coast Guard was also aware that industry already had in the underwriters' inspection services an agency to perform most of the functions that would become the Coast Guard's responsibility under the Convention. And if industry would continue to perform the functions, on behalf of the Coast Guard, it would not be necessary for Government to initiate a new bureau and begin from the bottom to recreate the necessary service. Accordingly, the Coast Guard invited the Board of Underwriters to adapt its Bureau of Inspection to the situation that will exist when the 1948 Convention becomes effective on November 19, 1952, and to provide a nation-wide, non-profit service. It was not practicable to work the matter out along precisely the lines originally visualized; but the underwriters have since worked closely with the shipping industry and the Coast Guard to achieve a cooperative agency that will be under the joint direction of industry and Government. N. C. B. is that agency.

The United States, as a contracting Government, assumes obligations with respect to the carriage of dangerous cargoes under Chapter VI of the International Convention for the Safety of Life at Sea; that is to say, cargoes which are dangerous either from their inherent nature or from their liability to shift at sea. In the United States, the Coast Guard exercises those functions that are involved in Chapter VI. And the legislative basis for the relationship between the Coast Guard and the National Cargo Bureau exists in the present shipping law (U. S. Code, Title 46, Sec. 170), and in a bill concerning grain and other bulk goods subject to shifting that has now been approved by the Bureau of the Budget and will be introduced at the next session of Congress.

ORGANIZATION OF NATIONAL CARGO BUREAU

Both the Board of Underwriters of New York and the Board of Marine Underwriters of San Francisco relinquish to the N. C. B. their established cargo-loading inspection services. In making these comments I wish to introduce a parenthetic remark which, as a newcomer to the marine insurance industry, I can make objectively. The phrase "established cargo-loading inspection services" is a modest understatement of a fact. Marine underwriters have consistently and staunchly supported the purposes as well as the personnel of their services. Therefore, the underwriters are turning over a thoroughly organized operation that has accumulated years of experience and a reservoir of good will in the shipping industry.

In order to give continuity of experience and direction to the new Bureau, the New York Board will serve for the time being as its fiscal agent. A Board of 18 Directors will determine the policies and general plans of the Bureau. The Directors will include the Commandant of the Coast Guard and the Administrator of the Maritime Administration (Department of Commerce). Other directors from the Atlantic, Gulf and Pacific Coasts are men in the shipping and insurance industries who have a particular interest in stowage of cargoes. Membership in the Bureau will be composed of persons elected to membership who are or have been prominently identified with the maritime commerce of the United States, persons in or officially connected with the United States Government and persons in civil life prominent in branches of science affecting the carriage of cargo in maritime commerce. The Bureau will be financed by the inspection fees earned.

Mr. Louis B. Pate, Vice President of Seas Shipping Company, has been elected President of the N. C. B. The First Vice President is Mr. Owen E. Barker, Executive Vice President of Appleton & Cox, Inc. and for many years Chairman of the Committee on Loading of Vessels in the Board of Underwriters. Mr. Richard W. Berry, Assistant to the Vice President of United Fruit Company, is Treasurer and Mr. Joseph A. Cerina is Secretary. These positions are in addition to that of Executive Vice President. Capt. Harry J. Parker, who has rendered faithful and valuable service to the Board of Underwriters of New York for 22 years and has long been its Chief Surveyor will be the Chief Surveyor of the N. C. B. The Bureau will have salaried or fee surveyors in approximately 40 ports, all of whom

on the Atlantic and Gulf Coast will be surveyors who have served the Board of Underwriters of New York. The appointment of surveyors at Pacific Coast ports is now being concluded. Almost all of these men have held Master's papers and have had years of experience at sea.

There is one feature of N. C. B. that is paramount, namely, it is an advisory service. In the process of formulating Government regulations with respect to stowage of dangerous goods and grain, the Coast Guard will look to N. C. B. to obtain the recommendations of industry. N. C. B. will undertake through committees or panels to assemble the experience and recommendations of the shipping industry, the producers, manufacturers and shippers of the goods, the underwriters and others. The cargo bureau will supplement and not duplicate nor functionally be in conflict with the work of other organizations. It is intended that its technical and other committees and its Chief Surveyor will work closely with the Bureau of Explosives of the Interstate Commerce Commission, the Manufacturing Chemists Association, and similar organizations.

After receiving these findings and recommendations of N. C. B. on any specific subject, the Coast Guard will follow its own procedures leading to the promulgation of Government regulations. With respect to nondangerous goods, with which the Coast Guard is not concerned, N. C. B. will undertake to gather together the existing information in order that ship operators will have available guides or standards for their stowage.

The National Cargo Bureau, then, is intended to service the ocean-borne commerce of the United States. By assisting to develop adequate rules for stowage of cargoes and a good record of satisfactory delivery of goods to customers, the N. C. B. will contribute to the prosperous flow of our world trade. The N. C. B. will take its place alongside other services in helping to make the merchant marine strong in peace and a "fourth arm of defense".

Observations of the Old Mariner

THE MAN WHO KNOWS *HOW* GETS BIG WAGES BUT THE MAN WHO KNOWS *WHY* IS HIS BOSS

Lack of caution on a ladder often makes a feller sadder

Safety starts between the ears

Your Fact Forum

Q. What are the four kinds of wounds?

A. (a) Abrasions.
(b) Incised or cut.
(c) Lacerated or cut.
(d) Puncture wounds or stabs.

Q. What are two dangers in wounds?

A. (a) Infection.
(b) Hemorrhage.

Q. What should you do first to stop severe bleeding?

A. Apply direct pressure on the wound.

Q. What else should you do to stop severe bleeding?

A. Apply digital pressure if the wound is in an area where digital pressure can be effective.

Q. How often should you loosen a tourniquet?

A. Every 15 minutes.

Q. Why are puncture wounds dangerous?

A. Danger of tetanus.

Q. What should you do in case of a puncture wound?

A. Apply a dressing and send the patient to a physician.

Q. Give five examples in which the body cells suffer a lack of oxygen.

A. (a) Drowning.
(b) Electric shock.
(c) Gas asphyxiation.
(d) Choking.
(e) Puncture wounds or compression of chest.

Q. What is the first step to be taken in rendering first aid in asphyxial accidents?

A. Start artificial respiration *at once.*

Q. In what type of asphyxial accident may resuscitations require *several* hours?

A. In cases of electrical shock.

Q. What are the first aid measures used in gas asphyxia accidents?

A. (a) Artificial respiration if patient not breathing.
(b) Warmth.
(c) Inhalator if possible.
(d) Physician's care.

Q. In what cases are breathing patients not benefited by artificial respiration?

A. (a) Stroke.
(b) Concussion.
(c) Various types of heart disease.

Q. Name three occasional errors in first aid to drowning cases.

A. (a) Failure to start artificial respiration at once.
(b) Trying to get water from the lungs.
(c) Failing to keep patient properly warm.

Q. Regardless of the *method* of artificial respiration applied, what must the operator maintain?

A. Regular rythm.

Q. What are the symptoms of an infected wound?

A. (a) Pain, redness, heat, swelling.
(b) Sometimes pus, red streaks, swollen lymph glands, or fever are present.

Q. What can you do for an infected wound until the physician arrives?

A. Put on hot applications for one-hour periods or longer.

Q. What should you do for chemical burns of the eye?

A. (a) Flush eye thoroughly with clear water or milk.
(b) Drop in mineral, olive, or castor oil.
(c) Apply loose bandage.
(d) Send to physician.

Q. What should you do for internal injuries?

A. (a) Treat for shock.
(b) Call a physician.

Q. What are the purposes of first aid?

A. To train people to do the right thing at the right time; to prevent added injury or danger; to provide transportation if necessary.

Q. What are the general directions in first aid?

A. (a) Keep the injured person lying down in a comfortable position, his head level with his body, until you know whether the injury is serious.
(b) Look for serious bleeding, cessation of breathing, poisoning, then wounds, fractures, and dislocations. Be sure you find all the injuries.
(c) Keep the injured person warm.
(d) Send someone to call a physician or an ambulance.
(e) Keep calm and do not be hurried into moving the injured person unless it is absolutely necessary.
(f) Never give water or other liquid to an unconscious person.
(g) Keep onlookers away from the injured.
(h) Make the patient comfortable and keep him cheerful.
(i) Don't let the patient see his own injury.

TO REPLACE THE OLD DAYS—CONSTANT TRAINING

(Exerpts from The Engineers Digest, No. 76, by courtesy of CDR Harry F. Frazer, USCG, Editor)

"Now, when I was in the old *Apache* . . .", is the accepted launching of the sea story. If the coffee cups receive intensive, frowning study, it means "Hold your hats, boys, here we go again." If it is a new story somebody will signify consuming interest by at least a slow, casual, sidelong glance at the yarn spinner. Whether new or ancient, you are sure of just one thing: an important item is that *it wasn't like this on the old Apache.* When we get settled down, when things get back to normal, then the work will get done with no strain.

Times have changed. Some of us have not. The days when everyone supposedly knew what to do without being told are gone forever. We have many more jobs and relatively fewer really proficient people to do them. Reminiscing about the old *Apache* will not help matters a tiny bit. We must accept the facts, however reluctantly, and do something. We need continuing, organized training.

Providing the old *Apache* crew were as experienced and proficient as alleged, not many of them were ever hurt. They knew the job so well, perhaps, that they had few accidents. No one can say for sure because we did not bother with accident records then. Since there was just as much carelessness, men may have learned safety the hard way—by survival of the fittest. At least, such training as existed could be carried on lackadaisically, and there was not a comparable need for a driving safety program. The situation is different today. Let's realize it. Let's stop long enough to revise our thinking, to include in our time budget a space for training and safety. The two are inseparable, being merely opposite sides of the same coin.

If you have even glanced through these pages in the past, you know that one important "must" has been repeatedly stressed. To prevent accidents, it is necessary to make safety a part of every job. Suppose we reverse our approach and consider how we contribute to safety from the time we enter until we leave the Service. Our contribution may be apparent and obvious, but without some thought the implications are obscured. Because safety is a part of every job—designs, plans, orders issued, equipment or supplies procured, drills held, training—all our efforts are directed toward getting the job done, and when it is finished being always ready for the next one.

The right way is the safe way. Since one of the underlying and leading causes of accidents is the "don't know" factor, proper training and knowing the right way is one of the most important tools of accident prevention.

If you remember that lack of knowledge or skill is a leading accident cause, this subject may take on some personal meaning. You may learn, and continue to learn, the wrong methods. Or you may have a "know-it-all" attitude; you may continue to get the same message when you repeat similar experiences. This means you must want to profit and learn from daily occurrences. You must want to overcome the feeling that your duties give you no opportunity of expansion or of improving yourself. The August issue of NSC's *The Industrial Supervisor*, recently distributed, has this important little note at the top of page 1: *Those who dare to teach or lead must never cease to learn.* If you want to be a leader or to teach others, you must have the straight dope to give them. No matter where you are or where you go, training is needed, and training in right methods.

Some people feel that training is another word for experience. If you learn wrong ways first, your experience merely repeats the wrong methods that you have been using because of improper training. You may get by for a long time; then finally, one job doesn't get done due to the inevitable accident.

Furthermore, experience in doing things right can be limited to, too narrow a field.

The ultimate answer and only answer is training. Good training, for you, for me, each in his job, is the only substitute that exists. Intelligent, evaluated, constant training, consciously developed for application over a long period of time, training which meets the particular needs of the unit, which gives our men the "know-how," that is the long standing and continuing need. Whether you are interested in your own neck, in safety generally, in cost, or in efficient and successful operation, real training is a prerequisite to survival.

THE EFFECT OF THE 1948 CONVENTION ON OUR MERCHANT VESSEL REQUIREMENTS

BY CAPT. CHARLES P. MURPHY, U. S. COAST GUARD
CHIEF, MERCHANT MARINE TECHNICAL DIVISION, OFFICE OF MERCHANT MARINE SAFETY

On the 19th of next month the 1948 Convention for the Safety of Life at Sea will come into effect for the United States and for 15 other countries which have ratified this Convention. This will be a significant date for those interested in shipping throughout the world since the acceptance of the 1948 Convention represents the third great step in the development of minimum safety standards on an international basis. The first Convention was drafted in 1914 after the tragic loss of the British steamship TITANIC drew the attention of the world to the need for establishment of minimum safety standards for the protection of the travelling public. The 1914 Convention was a start in the right direction, but it left many important phases of this complicated subject uncovered. In 1929 a second Convention was prepared which filled many of the gaps, but such subjects as stability in damaged condition, fire protection in accommodation spaces, and protection of electrical installations were not adequately covered. The 1948 Convention covers these items for the first time and also includes certain requirements relating to stability, fire extinguishing appliances, and life-saving equipment applicable to cargo vessels.

For those particularly interested in the American Merchant Marine the circumstances surrounding the coming into effect of the 1948 Convention have special significance. The 1914 Convention never was ratified by this Country for reasons generally attributed to the interruption caused by the outbreak of World War I. The 1929 Convention was not ratified by the United States until 1936, and then it was under the pressure of public opinion resulting from a serious casualty to a ship which did not meet the minimum standards of that Convention.

Compare these records with the fact that the United States was the third country to submit its acceptance of the 1948 Convention. This acceptance was deposited almost three years before the Convention is to come into effect. The difference in attitude which these changed conditions represent can be attributed to the position of leadership which the American Merchant Marine has attained among maritime nations of the world and to the fact that during these intervening years the safety standards to which American ships have been built have overtaken and passed the prevailing International standards.

The United States delegation to the 1948 Convention took with it as this country's proposals the standards of safety which, for the most part, had been in use in this country for over 10 years. The Delegation was instructed to press for the adoption of these proposals insofar as possible, but as it turned out most other nations were not prepared to accept, unqualified, the major advancements which were being embodied in new ships under construction in this country on such subjects as watertight subdivision and fire-resistant construction. The U. S. Delegation was probably the only delegation in London which was given a blanket authorization to agree to any proposals, provided they were advanced by and substantially supported by other delegations, which attained a higher standard of safety than that attained in the delegation's own proposals.

An address presented to the 26th Annual Convention of the Propeller Club and American Merchant Marine Conference at Los Angeles, California, October 11–14, 1952.

The adoption of the 1948 Convention is not causing any very great change in the substance of the Coast Guard Regulations which apply to American merchant vessels. The majority of the changes which will occur can be attributed to improvements recognized as a definite contribution to safety and which were either included in the U. S. proposals to the Convention, or were proposed by other governments during the discussions in London and were recognized as improvements which should be supported.

The majority of the items which cause a change in our existing requirements come under the heading of lifesaving equipment. During World War II all of the maritime nations had plenty of experience with the use of various items of lifesaving gear under the most rugged conditions. The knowledge based on this experience was pooled at the time of the Conference with the result that the items which had demonstrated the most usefulness were incorporated in the final draft of the Convention. The equipment to be carried in lifeboats was augmented by such items as a bilge pump, a first aid kit, a sea painter, and an increased amount of drinking water for each person to be carried. A motor lifeboat or a mechanically propelled lifeboat is required on each cargo ship. Lifeboat skates are required to assist in launching, and life lines will be suspended from the davit spans. Bilge grab rails will be required to enable persons in the water to cling to a lifeboat if it should capsize. Portable radio apparatus will be required on seagoing ships which do not have fixed radio installations in at least one lifeboat on each side of the vessel. Diesel engines must be used in some of the motor lifeboats on new passenger ships. Most of these items were required on American merchant ships during the war, and their effectiveness was amply demonstrated.

The 1948 Convention laid down requirements for the determination of the amount of stability a passenger ship must maintain in order to effectively resist collision damage. These requirements represented a major step forward as compared to the 1929 Convention but, being in substantial accord with the practices already used in this country, they called for almost no change in our methods of computation. In regard to the stability of cargo ships one significant change will be apparent in that all new cargo ships must be inclined upon their completion and the masters of all such ships must be furnished with sufficient information on this subject to enable them to properly handle their ships. The acceptance of this requirement will make mandatory the inclining of at least one representative ship from each class of oceangoing cargo ships constructed.

In recent years the inclining of new cargo ships has been quite common, so it is not felt that this requirement will produce any great hardship. The Coast Guard's new regulations will simply call for the furnishing to the

master of each ship the basic results of the stability test, together with other information as to the vessel's characteristics which will enable him to investigate the vessel's stability at any time he may find it necessary. No requirements relating to the amount of stability to be maintained will be specified except in those cases where this is done under the present regulations, where the proportions or service of the ship are of such nature that unusual precautions must be taken to maintain adequate stability.

The standards to be set up for determining the degree of watertight subdivision for ocean passenger ships have always received the most careful consideration at the International Conferences on Safety of Life at Sea, and the 1948 meeting was no exception. The U. S. Delegation presented a standard higher than the 1929 Convention Standard for consideration. Ships are judged in the matter of subdivision by a Criterion of Service which assets where a ship should fall on a scale between ships primarily engaged in the carriage of passengers as contrasted to ships primarily engaged in the carriage of cargo. It was pointed out at the Conference that under the 1929 formulations even such ships as the British Queens and the French liner NORMANDIE would not be assessed as "primarily engaged in the carriage of passengers." It is felt that the logic of the arguments presented was recognized by other delegations but lack of experience with increased standards made them reluctant to accept even the moderate increase proposed by the U. S. The conference did adopt higher standard of subdivision for vessels, such as those in cross-channel service, which do not carry full boatage for all on board, but there are no ships under the American Flag to which these requirements would apply.

The formulation of Criterion of Service and Factor of Subdivision to be contained in the new Coast Guard regulations which will go into effect next month will be in excess of the requirements of the 1948 Convention and will be based on the high standards which have been successfully used in this country during recent years. For those who want to blame someone for this increase in requirements the Coast Guard is willing to assume the blame. However, the Coast Guard prefers to consider that credit for making this higher standard of safety possible should go to the shipowners and naval architects whose vision and ability have created ships which have proven that such increased safety is practicable.

The fire protection requirements of the 1948 Convention were adequately covered by existing Coast Guard regulations with the exception that a fixed fire extinguishing system is now required in the boiler rooms of cargo ships and a minor amendment is necessary which will increase the amount of steam which must be available for a steam smothering system. Here again there will be another change apparent in the new regulations which goes beyond the 1948 Convention in that CO_2 systems fitted for the protection of boiler rooms must be of the total flooding type rather than of the type which protects the bilges only. The advisability of making this change has been demonstrated in several serious fires in recent years, some of which resulted in loss of the vessel, and this change has the support of the shipowners' associations which will be affected by it.

The Coast Guard is required by the 1948 Convention to publish regulations dealing with the handling of grain cargoes. The methods of handling this question are being discussed in detail by another speaker of this panel.

Having summarized briefly the major substantive changes which the 1948 Convention will cause in our merchant vessel requirements, it becomes apparent that the new regulations will not bring about any serious upheaval of the practices being used in American Merchant Ship construction today. Since the changes are nominal, your are probably wondering why it has been necessary for the Coast Guard to spend the past two years working on the regulations, why it was necessary for the industry to mobilize its committees to study the six volumes of proposed regulations which resulted and why they had to brave the heat of Washington on July 22d for a public hearing. These are good questions, and the answer to them lies in a somewhat indirect effect of the new Convention.

When the 1948 Convention was ratified by this country in January 1950, it appeared that the time was at last ripe for a general revision of the form of our merchant vessel regulations. The need for a revision had become apparent in 1938 and the draft begun at that time was circulated to the industry for comment in 1939, but due to the imminence of World War II this effort had to be abandoned. Following the War the need for bringing the 1929 International Convention up-to-date was apparent, so the project of overhauling our regulations was again held up. However, early in 1950 this project got the green light.

The first problem was to carefully study the form of the regulations to determine how they could be presented in the most clear and concise manner. The old regulations contained a chapter which applied only to motor propelled vessels. They contained several chapters applying to the various waters on which a vessel could operate. There was one chapter which covered only vessels in a particular service, Tank vessels. And there were several chapters on miscellaneous subjects such as Marine Engineering, Load Lines, etc. At times it was difficult for an owner to know whether he must be guided by all of these books or just some certain few.

After careful consideration, it was decided that the best format would be to follow the lead of the Tank Vessel Regulations. All the requirements which apply to passenger vessels have been put in one book, all of which apply to cargo vessels are in another, and of course the Tank Vessel Regulations have been retained in their present form. The sections covering requirements which apply to all types of vessels such as the machinery requirements have been retained in separate publications and a new one has been prepared detailing for the first time the requirements applicable to electrical installations.

The regulations have not been changed simply because they are old. In fact, in the redrafting, the old wording which has stood the tests of time and has resisted the onslaught of many "interpreters" has been retained in all cases where possible. However, an example of the type of requirement which has succeeded in hiding itself in the book for too many years is this quotation from the chapter on Fire Protection. "The use of glass lamps shall be prohibited unless the same are securely fitted into suitable metal brackets." This rule was passed by the Board of Supervising Inspectors in 1912 after having carefully considered a more stringent rule which would have prohibited the use of glass lamps altogether. Of course glass lamps have presented no serious problems for many years now, but this rule has been faithfully reprinted year after year. At the public hearings held last July no one rose to object to its deletion, and so this overaged and underworked requirement has been retired.

The work of preparing the new regulations has now been completed and the only major problem which remains is the task of getting these regulations into operation. The application to new vessels will be relatively simple. The effective date is

Continued on page 245

TEXTBOOK NOVICE VS. EXPERIENCED SAILOR

A man can learn only so much from a textbook. Then, what he has learned must be put into practice. Even then he is still a novice, whether he be an engineer, a salesman, writer, or licensed merchant marine officer, for there are many things to learn that textbooks do not cover, things which can be learned only by open-eyed experience. And, a novice he remains until he has perfected his book knowledge by his hard earned wisdom.

Licensed personnel are like members of other professions. On occasion they must refresh their memories. They must continuously add to their store of knowledge. They must take pains to ensure that five, ten, or more years of experience do not result in five, ten, or more years of blindly repeated inexperience.

Let us consider the everyday tasks facing the licensed officer, bearing in mind this fact—what we have learned yesterday, we may have forgotten today. Let us do this not only to help the novice, but to refresh the memories of the more experienced as well. All of us are susceptible to "cutting corners." In performing perfunctory tasks, it is so easy to forget their ultimate importance.

Suppose we start with the officer who secures a new berth shortly before the vessel is scheduled to sail.

What should this officer do?

Shouldn't he start to find out all he can about *his* ship? Of course. Putting aside his inclinations to "get settled," his logical and necessary course is to find out where all the gear is kept and how the ship's equipment works. This especially includes the emergency equipment, breakdown lights, fire and lifesaving apparatus, life lines, pilot gear, anchor lights, clusters, the alarm system, limit switches, topside connection boxes, the anchor windlass, and sounding gear. It also includes making a tour of the ship to determine the location of the bilge and tank soundings, filling line, wrenches for sideports, et cetera. Moreover, it includes the realization this is the time to ask questions—not when time becomes of the utmost importance.

Needless to say, any neglect during this familiarization to locate the fire alarm on the pier or the shore connection for the fire line would be a bland invitation to disaster.

Depending on the particular berth secured, there are several things to be done prior to sailing and while at sea—some of which textbooks do not relate—many which should not await the captain's command.

During the preparation for getting underway, the experienced officer will check the shore lines and connections and see that the water about the propellers is clear of logs and floating objects before notifying the engineers to turn the engines over. Then, to finish the job properly, he will stand by while the engines are turning, to be on hand to notify the engineers to stop in time should the need arise.

It is easy to bypass the routine comparison of the gyro compass with the repeaters, still this particular routine check might prove the difference between the ship's getting where it's going and back again. Similarly, the same is true when the rudder, tiller, telltale and midship spoke on the wheel cannot be seen in the same straight line. Nor can there be anything more embarrassing than to neglect the steering gear and then find the ship out of control when clear of the slip. Even little things like cleaning binoculars, wiping the bridge rail, or having a megaphone handy can save a ship or a life—and, the life saved may be your own.

To be sure, the business of getting underway is more or less routine, still on occasion the madman-like swinging of the engineroom telegraph handle results in an embarrassing (costly, too) Full, Ahead, instead of a Full, Astern. Even if nothing breaks and the final order is correct, the last order is being executed while the engineers feverishly await the ringing of the bell to cease. Here, too, is the possibility of a Full, Ahead instead of the necessary Full, Astern—with appropriate results. (There appears to be no need to mention the possible consequence of adjusting the cap for the benefit of some lady passenger or the waving of a kiss to a senorita on the pier while docking or undocking.)

Once the ship is underway the Rules of the Road take on new meaning. Now, more than just "words," they become important rules of conduct. They are unlike driving signals in that the watch officer does not stick out an arm here or there, but they in effect serve the same purpose. Try driving a car without obeying the "rules of the road" and sooner or later there will be an accident. Try sailing a ship without obeying "The Rules of The Road" and sooner or later there will be a collision. The disregard of any rule on the basis of convenience or other such reason is not only a complete disregard of "sea manners" but also a silly gamble.

Considering the complexity of the present state of the Rules, it is especially important to note and picture the differences and to practice extreme care in the vicinity of lines of demarcation. For example, in the meeting situation the blowing of a short blast on Inland Waters is unlike the blowing of a short blast on International Waters. One indicates a port to port passage, the other a rudder change to starboard. In the former, an exchange is mandatory. In the latter, the change in course is at one's own wish. Safety lies in keeping wide-awake every moment—keeping constantly in mind the applicable Rules and the maneuverability of the respective vessels. There is nothing to gain in crowding another vessel or stealing the right of way—except disaster. No precaution can be too great to prevent collision and loss of life.

If fog is setting, there should be no doubt as to what to do. You put the telegraph on *Stand BY*, note the time, call the master, put a man on lookout, blow the applicable fog signal *and* reduce speed before becoming fog bound. If another vessel's fog signals are heard forward of the beam, you *stop* the engines, *then* call the old man. And, above all, you *hold* course until the other vessel's position is definite. The old man can always go ahead again if he wishes—you will have done the proper thing—and unless he's far different from the average master he'll respect your judgment and gain confidence in you for it.

Closely allied to the question of whistle signals is the matter of lights. Lights and distances can be confusing at night. It would not do to try to pass inside a 15 second flashing white light when the course is laid out to pass inside a 15 second occulting white light. Nor would it do to see another vessel's lights off in the distance and then return to the pleasurable pastime of leaning over the chart in a trance or continuing some frivolous levity with the man at the wheel until all that remains is to look up and say, "My God!"

It is sad—but true—that edging a position or line of position next to the Old Man's or the navigator's is very tempting. But, that is like saying those two gentlemen are perfect and never make mistakes—don't even have the sense to put down a false position to test the ability of others.

It is also sad—but true—it's very easy to perfect one's ability in deep-sea navigation, while neglecting the question of tides, currents, and piloting in general, because when coming into port, the captain or pilot will then be responsible. However, this is

where danger really exists. When the ship has left the high seas to enter inland waters, the spreading expanse of the ocean which provides maneuvering space becomes comparatively constricted. The time will come when the burden of piloting will fall upon the very person who has failed to get ready for the occasion. The result—touch and go at best—most likely a sweating, cursing prelude to a stranding, collision, or the dropping of an anchor on a cable.

Other situations which often prove testing grounds consist of anchoring and docking.

Regardless of the manner of taking soundings the careful reading and relaying of the depth is important. This is not the time for a sing-song drawl; rather a clear concise tone of voice. Similarly, the order to let go the anchor should be given loudly and clearly so no mistake will be made.

Even when the anchor is down and the bearings have been taken, the task is far from complete. Weather conditions may change. The ship may swing. Other ships may come too close for comfort, especially in fog. If there is no bearing watch, if the other anchor is not ready to let go, if there is no power on the windlass, or if no lookout has been posted, the ship is truly a "sitting duck" at the mercy of other ships and the weather.

In docking, a ready anchor may prove to be the necessary ounce of preventive insurance. Something may go wrong in the last movement of the engines. A line may carry away. A surge of current may throw the ship out of control.

When going alongside, the temptation to throw heaving lines when there is not a chance of their reaching shore is ever present. Then, when the ship is close enough to shore, everyone is hauling their line from the water. A mad churning of engines may or may not save the situation, whereas two heaving lines could have been bent together and led forward or aft to the point where there was a direct line from the ship to the pier.

As in undocking, in docking the chief concern should be to see that nothing fouls the propeller. Heaving lines thrown short or the practice of slacking a line a few inches on an order to slack a line the first time, followed by the throwing off of the line on the second command, must be guarded against.

More than one ship has found itself athwart the slip from the above and from the failure to use a short breast line in singling up. The same can happen from a failure to stop the engines while singling up.

Once the mooring lines are doubled and secured, there is the usual routine of seeing cargo properly stowed or discharged. The longshoremen will, of course, take care of that, but there are quite a few things within the province of the ship's officers. When longshoremen knock off, open hatches should be checked and guarded so that no one will find themselves stumbling through space to land with a resounding thud on the 'tween deck. Other hatches should be covered with wooden hatch boards, not tarpaulin, for the same reason. Mooring lines should not be left in the windlass or winches. The gangway should be rigged with a lifeline to keep those who are a bit unsteady on their feet from falling between the ship and the pier. There should be plenty of light on the gangway and about the decks. For extra fire protection a fire warp can be lead out.

Briefly, what text books don't make clear is that the licensed officer must look after things without being told; that book knowledge is basic; that experience perfects the application of this basic knowledge and teaches a watch officer to think of the safety of others on board and the safety of his ship in performing each and every act. This is what marks the difference between the novice sailor and one who has benefited from experience.

General Summary of Aids to Navigation Operated and Maintained by the U. S. Coast Guard

June 30, 1952

Type	Established	Discontinued	Increase	Decrease	Total 1951	June 30, 1952
MANNED AIDS TO NAVIGATION UNITS						
Lightships—On station					27	27
Lightships—Relief					9	9
Light stations		12		12	416 (76)	404 (71)
Fog signal stations					3 (1)	3 (1)
Radiobeacon stations					4 (1)	4 (1)
Loran transmitter stations	4	1	3		33 (1)	36 (2)
Light attendant stations	5	4	1		83 (21)	84 (24)
Total	9	17		8	575 (100)	567 (99)
ELECTRONIC AIDS—MANNED AND UNMANNED						
Loran transmitters	4	1	3		33	36
Radiobeacons	2	2			189	189
Radarbeacons	2		2		17	19
Total	8	3	5		239	244
VISUAL AID—MANNED AND UNMANNED						
Lights	311	229	82		9,930	10,012
Daybeacons	102	160		58	4,944	4,886
Buoys, lighted (including sound)	175	115	60		2,926	2,986
Buoys, unlighted sound	4	4			361	361
Buoys, unlighted metal	260	237	23		12,738	12,761
Buoys, Mississippi River type	38	97		59	4,497	4,438
Buoys, spar	12	18		6	1,570	1,564
Total	902	860	42		36,966	37,008
SOUND AID—MANNED AND UNMANNED						
Fog signals (except sound buoys)	19	19			586	586
Total all aids to navigation	929	882	47		37,791	37,838

Number in parentheses indicates number of stations which are subunits of other units. Number not in parentheses indicates total number of units including such subunits.

THESE ARE THE FACTS

Facts and Figures For Fiscal Year 1952

In the August 1952 issue of the Proceedings we quoted a poem by Mr. R. Caygill. We would like to requote a few lines from that poem before going into the main discussion as it is very much to the point. Carelessness is certainly *The World's Greatest Menace.* If it were not for some form of carelessness, the statistics we have compiled and are about to present would undoubtedly be appreciably decreased. Moreover, our job would be much simpler.

I've killed more men than all the wars, though frightful they have been,
I've ruined more lives, and wrecked more homes than drink or plague has seen.
I've spared no one, the rich, the poor, they're all alike to me,
The young, the old, the weak, the strong, whatever they may be . . . . . .
Millions of cripples have I made, to ALL I bring distress,
This is my daily work in life—my name is CARELESSNESS!

Just stop and think a moment how true and how horrible this is. Of course, bona fide accidents do happen. That is not in dispute. The point is that so many casualties are preventable, and that for each casualty prevented someone would be spared death, permanent injury, temporary incapacitation, or at least some form of suffering. Nobody can escape the consequences of carelessness, yet this menace remains free to prey in every nook and corner for its victims.

"Curb Indicator! . . . Her old man is really getting fussy!"

Our casualty records show that during the last fiscal year (July 1, 1951, to June 30, 1952), there was a seven percent increase in all merchant vessel casualties, with a 72 percent increase in serious merchant marine personnel injuries—meaning by serious personnel injuries cases involving incapacitation for more than 72 hours. Just about the only encouraging fact is that there was a three percent decrease in the over-all loss of life due to vessel casualties.

By investigating casualties, by determining their cause, and by compiling statistics we can determine the greatest sources of danger. For instance, we know that in the fiscal year commencing July 1, 1951, and ending June 30, 1952, the greatest single source of deaths due to vessel casualties occurred in the small boat field. We also know that the greatest single cause of personnel injuries was falls. Yes! Simple, ordinary falls which in most cases could have been prevented. But, is that enough? No, it isn't. At least we don't think so. That's why dangerous practices are warned against and continuously stressed in the Proceedings. That's why there is a continuous effort in numerous other ways to awaken and enlist the future victims of carelessness in a war against carelessness.

It is one thing to investigate a casualty after it has happened and then to explain why it happened. But, what is more important is to detect unsafe practices which will lead to casualties and correct them before the casualties have occurred. This is not an easy task. Nor will it be a successful task until each and every man manning a ship takes part in a war against carelessness 24 hours a day—every day. Actually, determining what causes casualties is but one step in preventing them.

In addition to regular inspection and investigation duties Coast Guard Inspectors carry out a daily campaign to detect and correct unsafe practices before casualties happen. These are reported to Headquarters as well as casualties and casualty investigations.

Suppose we take time to look at the number of unsafe practices (which may be more aptly termed "death traps") that were detected and corrected when pointed out to the respective vessels during the last quarter of the fiscal year ending June 30, 1952. Leading the list of reported unsafe practices was the failure of ship's officers to supervise crew members working under various hazardous conditions. In all, 56 instances were reported in just this single three month period. Other reported *and* corrected unsafe practices consisted of:

1. Access to Vessel.
   (a) Gangway not adequate in length, width and strength, improperly rigged, or not fitted with suitable life lines or rails; 10 instances reported and corrected.
   (b) Ring life buoy with lanyard not provided near gangway; 3 instances reported and corrected.
   (c) Gangway not properly secured; one instance reported and corrected.
2. Hold Access.
   (a) Use of temporary ladders of insufficient strength in improper locations; eight instances reported and corrected.
   (b) Missing ladder rungs or loose ladders; 21 instances reported and corrected.
   (c) Shaft tunnel without proper or clear access; three instances reported and corrected.
   (d) Tanker cargo holds open but not gas free; four instances reported and corrected.
3. Protection of Deck Openings.
   (a) Inadequate life lines or no life lines; 18 instances reported and corrected.
   (b) No provisions for portable rails where required; 16 instances reported and corrected.
   (c) Ullage holes on tank vessels open and not screened; 17 instances reported and corrected.
4. Lighting.
   (a) Insufficient light in cargo holds, around platforms at gangways, etc.; two instances reported and corrected.
5. Hatch Beams.
   (a) Locking lugs not working or missing; four instances reported and corrected.
6. Cargo Handling Gear.
   (a) Used in an unsafe condition; five instances reported and corrected.
   (b) Moving parts of machinery without proper guards; four instances reported and corrected.
   (c) Steam pipes to deck machinery in a dangerous condition; one instance reported and corrected.
7. Ventilation.
   (a) Improper ventilation of holds, double bottoms, boilers, peak tanks, and other confined spaces which may be gaseous or lack oxygen; eight instances reported and corrected.

8. Electrical Equipment.
   (a) In unsafe working condition, especially about deck machinery or in exposed places; 32 instances reported and corrected.
   (b) No guard rails around switchboard or no rubber mat on steel deck; 14 instances reported and corrected.
   (c) Exposed wiring or overlong extension cords in quarters; four instances reported and corrected.
9. Welding and Other Hot Work.
   (a) Safety precautions not carried out in this hazardous work; 10 instances reported and corrected.
10. Lifesaving Equipment.
   (a) Faulty limit and disconnect switches; seven instances reported and corrected.
11. Engine Room.
   (a) Loose or oily floor plates; six instances reported and corrected.
   (b) No guards on dangerous machinery; 16 instances reported and corrected.
   (c) Water gage glasses not shielded; seven instances reported and corrected.
   (d) Steam lines not properly supported; five instances reported and corrected.

Aren't these typical? How many ships could you go on without finding one or more of these unsafe practices in existence? Considering the fact there are only about 400 people actively engaged in inspection work, what minute percentage of the existing unsafe practices does this represent? Just think how many casualties could be prevented if everyone were to go out of their way to tighten loose screws, cover bare wires, provide that extra ounce of effort to destroy unsafe practices on all vessels, large or small.

The accompanying table of facts speaks for itself. It represents what happened in one year. Won't you join the day-by-day, minute-by-minute, second-by-second campaign against careless unsafe practices?

Continued from page 241

November 19, 1952, and all vessels contracted for, or whose keel is laid on or after that date will be constructed in accordance with the new regulations. For existing vessels, some changes will be required after November 19th, but of course, it will not be possible to make these changes on all of the ships on November 18th and then provide each ship with 1948 Convention Certificates the following day. As a practicable means of making this transition it is proposed to let each ship make the necessary changes at the time of her regular annual inspection, so that the change-over can be made in an orderly manner during the year from November 19, 1952, to November 19, 1953.

The Coast Guard deeply appreciates the assistance which the country's shipowners, naval architects, and shipbuilders have given in the development of the new regulations, and we hope that after using the new book for a few months they will feel that their time has been well spent.

CASUALTIES TO VESSELS—FISCAL YEAR 1952

(1 July, 1951—30 June, 1952)

	Groundings and founderings	Collisions with other vessels	Collisions with miscellaneous objects	Fires and explosions	Heavy weather and matériel damage	Damage to lifesaving equipment	Totals
Number of casualties	574	342	239	181	314	36	1,686
Number of vessels involved	574	699	239	181	314	36	2,043
Gross tonnage of United States merchant vessels involved	2,431,456	2,105,641	1,160,605	230,771	2,322,231	274,997	8,525,701
Number of inspected vessels involved	382	349	199	50	310	35	1,325
Number of uninspected vessels involved	192	350	40	131	4	1	718
Type of vessels involved:							
Passenger	13	7	9	4	11	2	46
Freight	279	219	142	31	228	27	926
Tank vessels	102	136	40	17	63	4	362
Public vessels	0	20	3	0	0	0	23
Ferry	6	9	9	0	5	2	31
Towing	33	104	15	20	6	0	178
Fishing	84	40	11	61	1	1	198
Foreign flag	0	96	0	0	0	0	96
Miscellaneous	57	68	10	48	0	0	183
Persons on board:							
Passengers	2,229	501	2,153	123	1,903	278	7,187
Crew	13,622	10,720	6,847	1,396	13,225	1,308	46,991
Shore workers	38	9	16	223	174	0	460
Value of property lost or damaged:							
Vessels	19,746,677	10,521,741	2,555,121	7,029,870	4,273,340	123,364	44,250,113
Cargoes	4,061,542	1,333,480	143,650	411,240	333,895	0	6,283,807
Vessels with damage unreported	32	93	6	11	11	0	153
Cargoes with damage unreported	20	75	2	12	6	0	115
Vessels totally lost:							
Inspected	13	2	0	3	0	0	18
Gross tonnage	48,675	1,622	0	8,436	0	0	587,733
Uninspected	85	15	12	85	0	0	197
Gross tonnage	6,706	1,050	349	5,063	0	0	13,168
Number of casualties due to personnel fault:							
Employed under license or certificate	41	59	22	0	14	1	137
Others	50	98	21	15	7	0	191
Lives lost in casualties:							
Passengers—							
Off inspected vessels	1	1	0	0	0	0	2
Off uninspected vessels	90	5	2	3	0	0	100
Crew—							
Off inspected vessels	78	18	0	9	0	3	108
Off uninspected vessels	68	35	0	9	0	0	112
Shore workers—							
Off inspected vessels	0	0	0	4	1	0	5
Off uninspected vessels	1	0	0	2	0	0	3
Assistance rendered by U. S. Coast Guard	74	13	4	33	5	0	132

Deaths not involving casualty to vessel:

Passengers	54
Crew	340
Shore workers	24

NOTE.—Injuries to personnel not involving casualty to vessel: Number of personnel incapacitated for more than 72 hours: 590

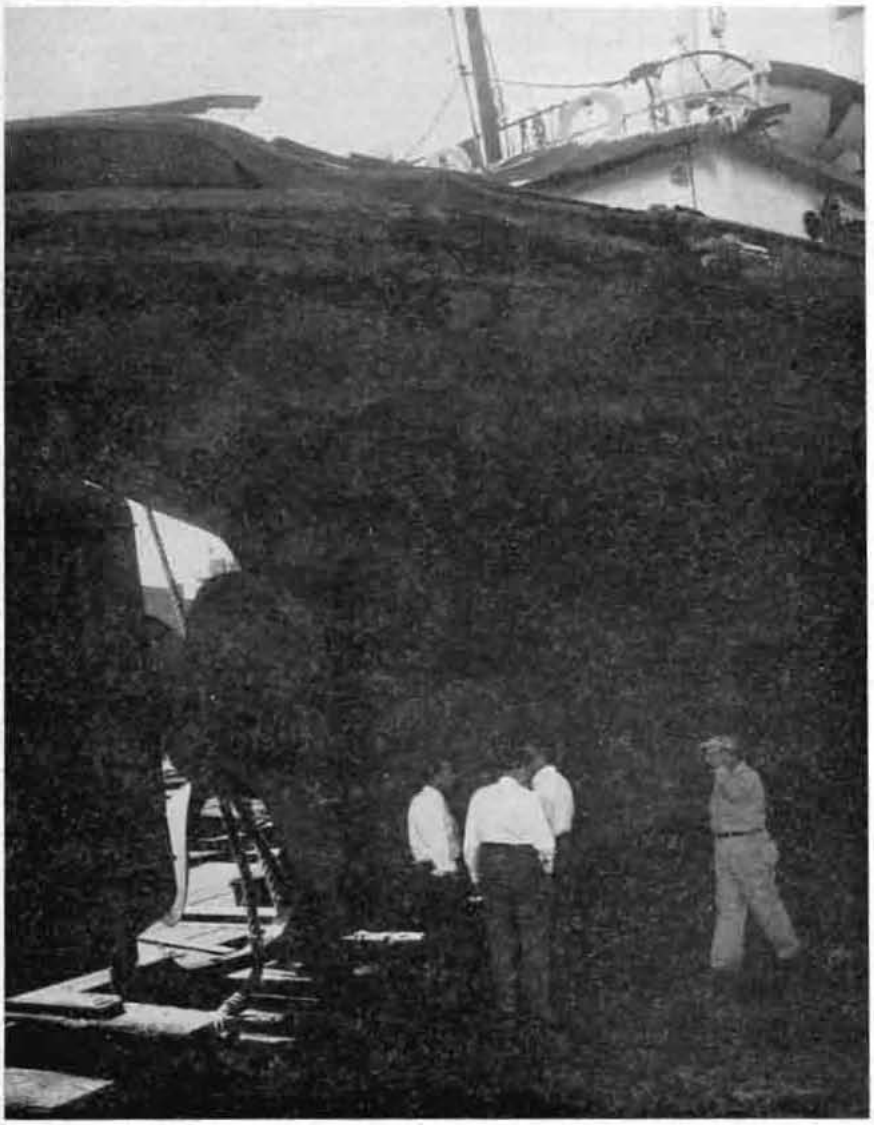
NOTE.—Tabulation made on basis of casualty cases closed as of Sept. 5, 1952.

LESSONS FROM CASUALTIES

MARINER'S NOTICES NOT HEEDED

Notices to Mariners are disseminated in order to advise everyone in any way associated with small craft and deep draft vessels of reports of channel conditions, obstructions, menaces to navigation, danger areas, etc. These Notices to Mariners are essential to all navigators for the purpose of keeping their Light Lists, nautical charts, Coast Pilots and other nautical publications currently corrected. Mariners who navigate without having the latest Notices to Mariners on board assume all risk of casualty resulting from such neglect.

Read, for example, the facts in the following case. Late one evening during this past June, a tug with a light astern tow ran into a submarine net that had been stretched from one harbor point to another and was marked by a flashing green light. The master of the tug was not able to identify the flashing green light and attempted to pass with it on his starboard hand. The tug hit the net and stopped, remaining on the seaward side of the net. The light tow passed over the net, but its rudder was hung up. Consequently, the towing hawser became fouled with the propeller of the tug which accordingly became disabled. And, because of the action of the rough seas, the stern of the tow pounded the starboard quarter of the tug causing minor damage.



Various local Notices to Mariners dating back over the previous three months had advised all concerned that the net was being installed and that the buoys marking the net would be moved as the work progressed.

Local Notices to Mariners are issued by each CG District Commander. They include changes and deficiencies in Aids to Navigation within the area of each respective district. These notices are published as required, which in most districts is daily. They may be obtained, *free of charge*, by making application to the local district Coast Guard Commander. Had the master of the tug involved here carried these Notices to Mariners on board, he would have been cognizant of the fact that the submarine net was being moved.—This casualty most assuredly could have been avoided.

LEARNING THE HARD WAY

Aboard a dock boat of a small boat company, two men were removing new hand extinguishers, 10-pound, CO_2 type, from shipping cartons. One man removed an extinguisher and rolled it over a couple of times to look at it, apparently unfamiliar with its operating principles. For some unknown reason, perhaps thinking it needed charging, he fitted a 15-inch crescent wrench to the screw cap on the charging side of the cylinder. As he loosened the cap a hissing noise was heard. "It's leaking gas," shouted his helper, as he came over to look on. The screw cap was turned back and this man began reading a tag (instructions for filling).

While he was reading the instructions, the helper removed the cap from the discharge line and started again to loosen the plug on the charging side. Suddenly, there was a loud "pop" and the interior of the dock boat became dense with CO_2 fumes. One man was killed instantly and the other critically injured.

In commenting upon the case, the investigating officer concluded "it is evident that the plug on the charging side was loosened until the number of threads holding were not sufficient to withstand the pressure within the cylinder. When the threads let go, the escaping gas also fractured the rupture disk on the discharge side. This allowed the gas to pass out through the two openings, thus setting the cylinder in a whirling motion."

Don't tamper with the extinguisher cap on the valves.

Reliable And Dependable Are the RULES

The editor of *THE LOG* has suggested that the term "target", in speaking of radar images, be avoided, as all too often a radar observed object unfortunately becomes a target. Call them what you will, radar images, with a frequency that belies the present degree of perfection of radar installations, continue to become tangible objects impeding the movement of ships (at full speed) in fog.

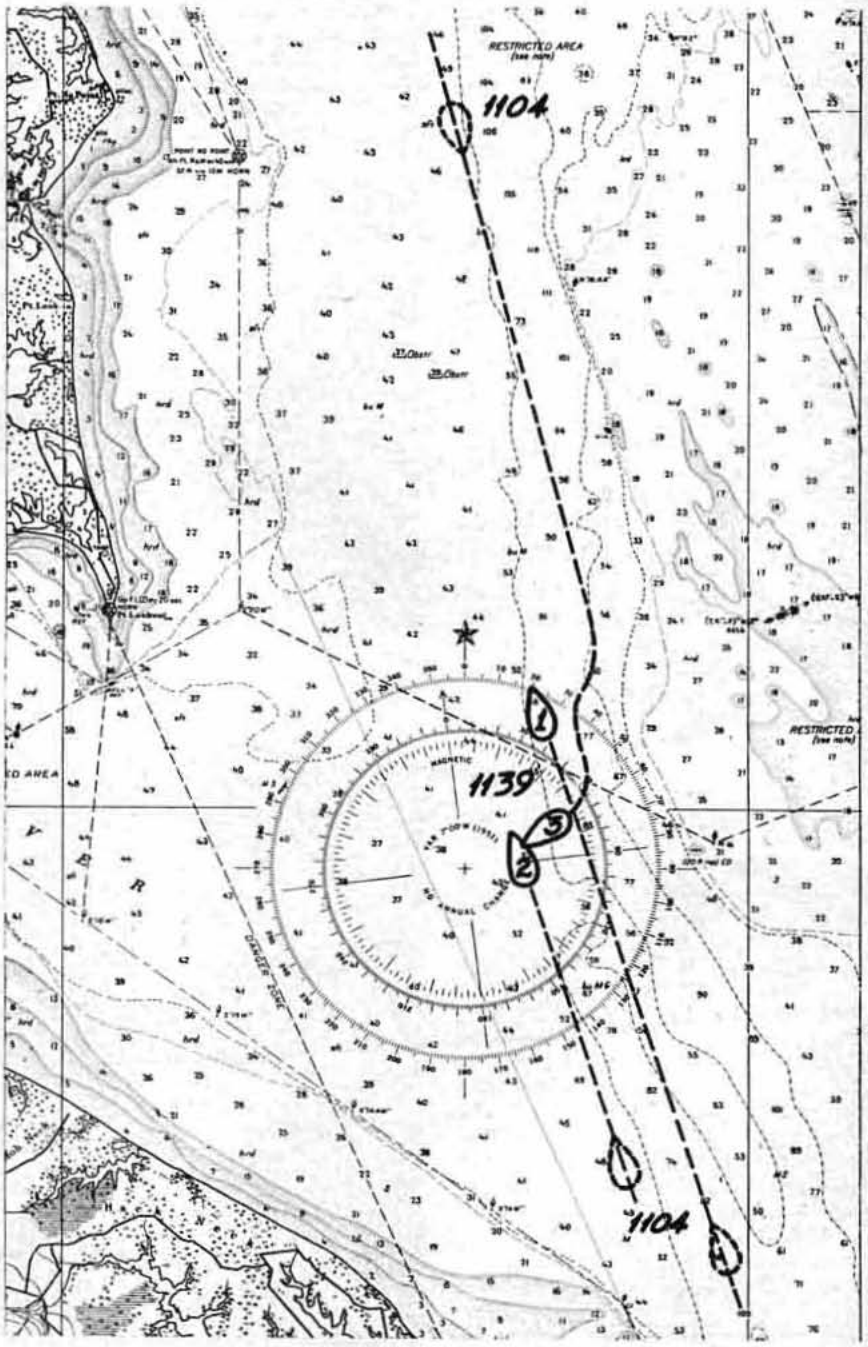
The fault lies not in the design, construction, or operation of the radar installation, but in the attitude of those who con the ships so equipped. This fact has been presented many times in many publications, including radar manufacturers' instruction books, textbooks, trade magazines and other maritime media. Radar was designed to give the operator an instantaneous range and bearing of an object; nothing more.

If the object be another vessel, a rock or point of land, a buoy, an iceberg or rain squall, all that can be expected of the radar set is a reasonably accurate range and bearing. An experienced operator may be able to identify the various objects sighted, particularly if the operator is familiar with the land masses and aids to navigation in the vicinity of his vessel. Radar then becomes invaluable in piloting in poor visibility. One range and bearing of a known fixed object provides the information necessary to set a proper course.

However, collision-avoiding action requires more information than a range and bearing. Knowing a vessel's position with respect to yours at a particular instant does not preclude the possibility of collision. The other vessel may be approaching, going away, or crossing. It may be going around in circles or drifting. It may alter course and speed radically; who knows? You need several ranges and bearings to determine what the other vessel is doing, but even this information is no guarantee as to what the other vessel will eventually do.

At this point, let us leave the general discussion and proceed to a spot on the western shore of Chesapeake Bay at Point Lookout where we may assume our radar set is in operation during an actual casualty. A scene from real life is taking place. If we keep our eyes and ears open, we may pick up a few pointers in connection with the use of radar.

In addition to the contour of the bay and the mouth of the Potomac River, we can spot quite clearly Smith Point Lighthouse at a distance of approximately 12 miles, bearing SE x S (146° T), and Pt. No Point Lighthouse at a distance of 5½ miles, bearing roughly N x E (015° T). Note that the time is 1040 when we sight an object—no, two objects—on the scope in the vicinity of Smith Point Lighthouse. Watching the two objects from our fixed position and in relation to Smith Point Lighthouse, without actually making a plot, we can determine that they are vessels underway, heading up the bay probably towards Baltimore. The after vessel is slowly overtaking the forward vessel.



For the purpose of future reference let us tag the overtaking vessel No. 1 and the vessel about to be overtaken, No. 2.

Now at 1104 a third object appears, coming in strong, heading down the bay opposite Pt. No Point Lighthouse. We almost overlooked a fourth object, downbound, apparently a small vessel keeping well to the westward. Anyway, No. 3 is really making time. Perhaps it isn't as thick out there as it is at our vantage point. The situation as it now stands consists of two elements: one, an overtaking situation, and the other, a meeting situation. Nothing unusual, except that one or more of the ships will have to alter course before the passing can be executed.

The situation is developing fast now. It's a shame there isn't some way we could warn No. 3 of the presence of the two oncoming ships, or vice versa. At 1135 No. 1 has completely overhauled No. 2, having passed close aboard to starboard. But, No. 3 is bearing down and won't clear No. 1 by very far. Look! No. 3 is coming right, right into the path of No. 1. The two radar images are merging into a great blob.

Evidently it was just a close call for, although No. 1 appears to be dead in the water or nearly so, No. 3 is continuing her swing to the right. It looks like No. 3, having missed the first vessel, is trying for the second, and it looks like she'll make it.

1139. She did! The blob is back on the scope, this time consisting of Nos. 2 and 3. No. 1 is maneuvering, cautiously approaching the scene undoubtedly to render assistance.

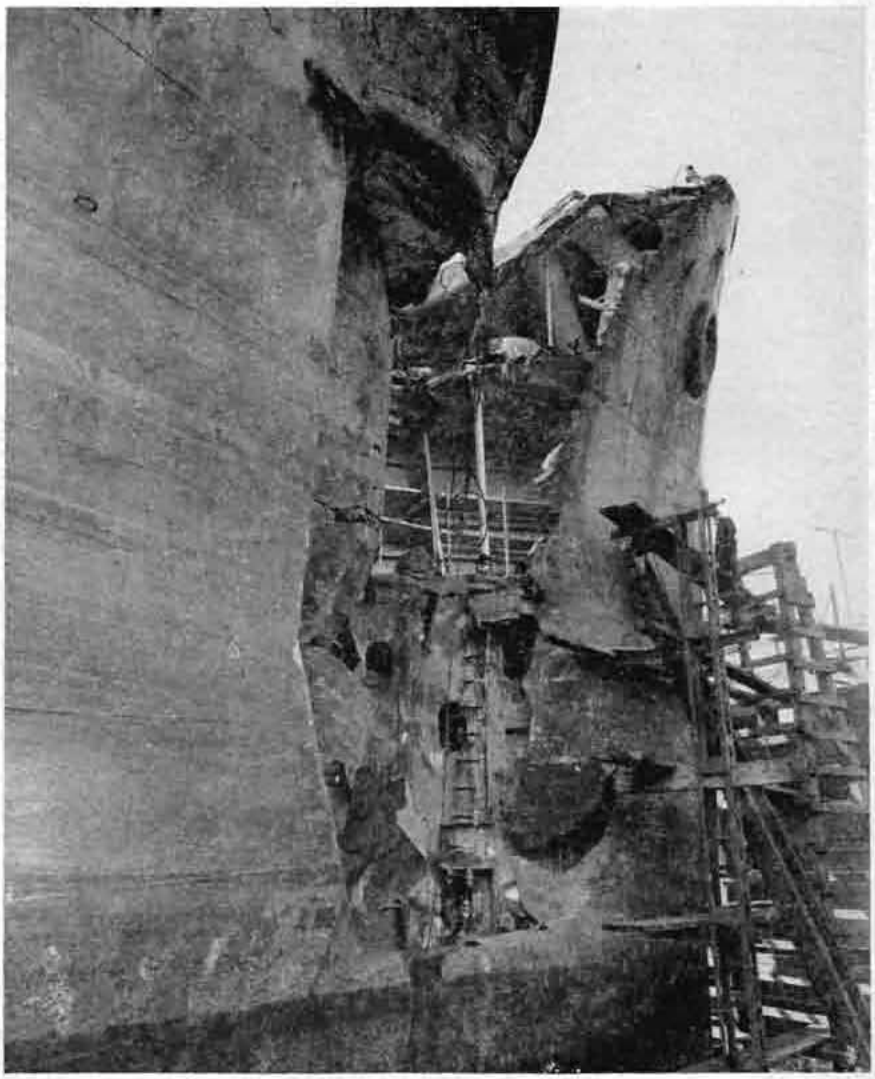
What really happened? What would an investigation of this collision disclose? Departing our vantage point, let us consider the facts, amplifying what we have seen and already know.

To begin with, vessel No. 3 was equipped with radar which was in good condition and in operation. It was being used for piloting and for detecting other vessels. Vessel No. 1 was also radar equipped and its radar was in operation. Vessel No. 2 was not radar equipped.

Vessel No. 1 was proceeding up Chesapeake Bay in the fog on reduced speed of 12 knots sounding regulation fog signals. (If you care to call 12 knots reduced speed when the visibility is about a ship's length.) Vessel No. 1 correctly and quickly appraised the first object presented in her radar scope as a vessel underway on approximately a parallel course—an overtaking situation. This vessel, vessel No. 2, was overtaken properly. The other object, vessel No. 3, appeared to be approaching in such a manner as to pass safely down the starboard side, but the radar did not indicate that No. 3 would come right, practically into the jaws of collision. Timely evasive action by both vessels prevented a disaster at this time.

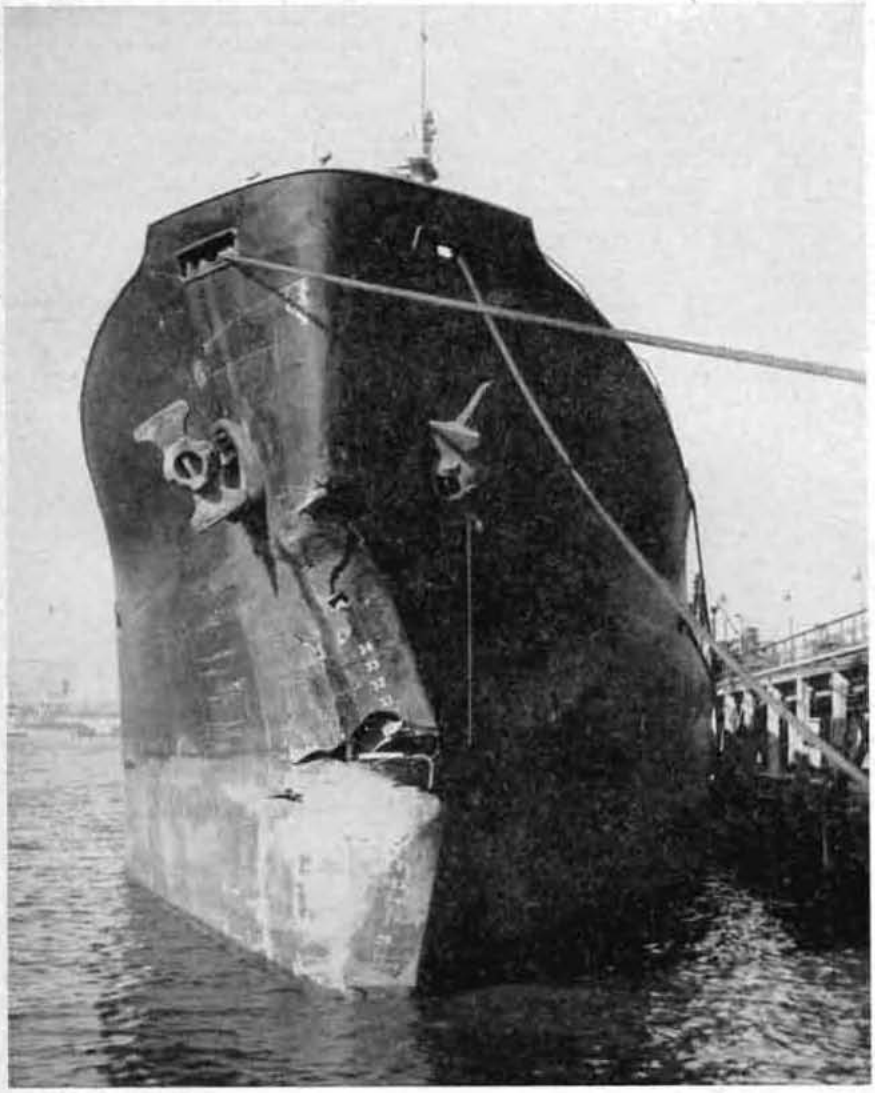
Vessel No. 2, also heading for Baltimore, was proceeding at a speed slightly less than eight knots, sounding regulation fog signals. Fog signals from a vessel astern indicated that an overtaking situation was progressing nicely. Later, the overtaking vessel could be seen through the fog, distant about 300 ft. After this vessel had gone on ahead, her fog signals still being heard, signals from another vessel ahead, apparently approaching, were picked up. Vessel No. 2 immediately stopped her engines as required by Article 16, Pilot Rules for Inland Waters. When the second fog signal from the approaching vessel was heard, the engines of vessel No. 2 were put full speed astern. And, when this unseen vessel finally broke through the fog at a distance estimated to be about 1,000 yds., about four points on the starboard bow, she was seen to be swinging right and pushing a high bow wave. Two emergency full astern signals were given on No. 2, and at the moment of impact she was actually making sternway.

Vessel No. 3 departed Baltimore early in the morning, and after passing Fort Carroll at 0620, her engine revolutions were increased to full speed. The weather at this time: overcast, light northerly winds, visibility about 2 miles. She pursued the normal bay course at full speed passing Cove Point one mile off at 1000. From Cove Point she made good her course and at 1104 passed Pt. No



Point one mile off. Due to fog, these distances were established by radar. She then overhauled a small vessel, seen only by radar, about a half mile to westward of the course line. Following the course change at Pt. No Point, two objects were picked up on the three mile range of the radar scope. These targets were ahead, one favoring the starboard bow. After determining that they were inbound vessels, it was decided to put the "targets" on the port bow and a course change to the right was ordered. Also, it was decided to be a *good idea* to commence fog signals, the visibility now being somewhat less than one mile. Change of course to the right was ordered in 5° increments when fog signals off the port bow were heard. As the approaching vessel's fog signal appeared to be closing in, hard right rudder was ordered.

While vessel No. 3 was swinging to the right, a deeply-laden vessel (vessel No. 1) broke through the fog about a shiplength off the port bow. In order to clear this vessel, hard left rudder was ordered followed by hard right as the approaching vessel passed the bow of No. 3. Shortly after clearing this vessel, the fog signal of the second target was heard. This signal was answered by vessel No. 3 continuing her swing to the right with no reduction in speed. At about 1138½, when the second target broke through the fog bearing three to four points off the port bow, distant a half mile, the engine of vessel No. 3 was put full astern. This maneuver was neither timely nor sufficient under the circumstances to prevent collision. The vessels collided at 1139, with the bow of No. 3 slicing through the forecastle deck, forepeak, boatswain's stores and chain locker of the other vessel, from starboard to port, in a knifelike fashion. The illustrations attest to the damage sustained and to the force of impact.



So end the facts. What was originally said has been borne out. Moreover, the following is obvious:

(1) That the vessel tagged "No. 3" was navigated at an uncontrollable speed of 14½–15 knots during a period of visibility ranging from 500 feet to a half mile.

(2) That after hearing apparently forward of the beam the fog signal of an approaching vessel the position of which was not ascertained, the person in charge of the con of vessel No. 3 failed to stop the engines and navigate with caution until danger of collision was over.

(3) That the person in charge of the con of vessel No. 3, with full knowledge of the presence of an approaching vessel, actually altered course in the direction of the course line of the approaching vessel without definitely establishing her position.

(4) That, although vessel No. 3 had the advantage of radar, the information elicited therefrom was misinterpreted.

(5) That the Rules to Prevent Collisions of Vessels continue to be the most reliable rules to follow in fog, and that these Rules when properly used in conjunction with further information obtainable from the radar scope may become virtually infallible.

FERRY TROUBLES

A 1½ ton truck approached a ferry and was motioned to an outside lane where cars were already parked. Instead of following instructions, the truck operator chose the clear, inside lane, and without any appreciable reduction in speed continued overboard at the river end of the ferry.

A deckhand immediately threw a life ring and retrieved the driver, sole occupant of the truck.

The driver explained later that on board the ferry he found himself without brakes and rather than jeopardize the other cars directed his vehicle onto an open lane.

Subsequent investigation showed that the restraining cable was of sufficient strength, but the steel U to which it was attached was not and had broken from the stanchion.

Keep dirty dishes and silverware cleared from tables.
Make sure you have plenty of hot water and soap or cleaner at all times.
Scrape everything but the enamel off the dirty dishes.
Then wash off ALL of the dirt and grease.
Never forget to sterilize.

Amendments to Regulations

Navigation and Vessel Inspection Circular No. 8–52

UNITED STATES COAST GUARD,
Washington 25, D. C.,
July 1, 1952.

Subj: Limit switches and emergency disconnect switches in control circuits of lifeboat winches; list of manufacturers.

1. *Purpose.*—The purpose of this circular is to list the names of manufacturers of limit switches and emergency disconnect switches in control circuits of lifeboat winches with descriptions of their equipment which has been found satisfactory for marine use and will accomplish the intent of the revised regulations in 46 CFR 59.3a (b), 60.21a (b), 76.15a (b), 94.14a (b), and 160.015–3 (k).

2. *Circular canceled.*—Navigation and Vessel Inspection Circular No. 4–52, dated March 12, 1952, is hereby canceled.

3. *Objective.*—In order to promote safety of life at sea the requirements regarding limit switches and emergency disconnect switches in control circuits of lifeboat winches on existing vessels and new vessels were revised. In Navigation and Vessel Inspection Circular No. 8–51, dated August 22, 1951, the description regarding new requirements applicable to existing vessels fitted with gravity davits and power operated winches was set forth in detail. In addition, sketches showing various arrangements were enclosed. At the time this circular was distributed various manufacturers were requested to submit samples and drawings of emergency disconnect switches and limit switches suitable for use with lifeboat winches, which would accomplish the intent of the revised regulations in 46 CFR 59.3a (b), 60.21a (b), 76.15a (b), 94.14a (b), and 160.015–3 (k) which were published in the Federal Register on June 8, 1951. Since that time various manufacturers have submitted samples and drawings of equipment which will accomplish the intent of the revised regulations.

4. *List of equipment and names of manufacturers.*—The following lifeboat winch auxiliary electrical equipment has been approved for use in making the alterations required by the revised regulations, as further explained by Navigation and Vessel Inspection Circular No. 8–51, on certain existing vessels, and on new vessels. Units not furnished with a drain plug or valve shall be fitted with same at the lowest point thereof at the time of installation.

Main Line Emergency Disconnect Switches:

Russell & Stoll Co., Inc., New York, N. Y.

Dwg. No. X–8120, Alt. 9; Cat. No. X–8120–A, 2-pole, 115 volts DC, 12 HP; Cat. No. X–8120–B, 2-pole, 115 volts DC, 12 HP; 240 volts DC, 25 HP; Cat. No. X–8120–C, 3-pole, 220 volts AC, 32 HP; 240 volts AC, 35 HP; 440 volts AC, 65 HP; 600 volts AC, 89 HP.

Piezo Manufacturing Corp., New York, N. Y.

Dwg. No. P–953, Alt. D; Type LBSS–AC, 3-pole, 600 volts AC maximum, 30 HP maximum; Type LBSS–DC, 2-pole, 250 volts DC maximum, 25 HP maximum.

Dwg. No. P–998 Alt. O: Type LBSS–2–AC, 3-pole, 600 volts AC maximum, 30 HP maximum; Type LBSS–2–DC, 2-pole, 250 volts DC maximum, 25 HP maximum.

Andersen & MacKenzie, New York, N. Y.

Dwg. No. 76, 2-pole, 250 volts maximum; 15 HP, 230 volts DC; 15 HP, 230 volts AC.

Westinghouse Electric Corp., Pittsburgh, Pa.

Dwg. No. 39–A–5843, Sub. 2, 3-pole, 100 amperes maximum; 20 HP, 120 volts 3-phase; 40 HP, 208/240 volts 3-phase; 50 HP, 380/600 volts, 3-phase; 25 HP, 250 volts DC; S–1632989 (cast iron) and S–1632990 (cast bronze).

Marine Electric Co., Portland, Oreg.

Dwg. No. D–2102 Rev. C, 3-pole, 30 HP, 450 volts 3-phase AC, 2-pole, 25 HP, 240 volts DC, Cat. No. 2121.

Electro-Mechanical Co., Portland Oreg.

Dwg. No. D–52–1 Alt. 2, 2-pole and 3-pole, 100 amperes, 25 HP, 250 volts DC, or 600 volts, 3-phase AC.

Cutler-Hammer, Inc., Milwaukee, Wis.

Dwg. No. C95-358 Rev. B, Cat. No. 4101H4001, 2-pole, 30 amperes, 5 HP, 250 volts DC; Cat. No. 4101H4011, 3-pole, 30 amperes, 10 HP, 440 volts 3-phase AC; Cat. No. 4101H4002, 2-pole, 60 amperes, 10 HP, 250 volts DC; Cat. No. 4101H4012, 3-pole, 60 amperes, 25 HP, 440 volts 3-phase AC.

Dwg. No. C95–359 Rev. B, Cat. No. 4101H4003, 2-pole, 100 amperes, 20 HP, 250 volts DC.

Dwg. No. C95–360 Rev. B, Cat. No. 4101H4004, 2-pole, 200 amperes, 40 HP, 250 volts DC.

Welin Davit & Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J.

Dwg. No. 3243–22 Alt. O, 100 amperes; Type A, 2-pole, 12½ HP, 125 volts DC, 25 HP, 250 volts DC; Type B, 3-pole, 20 HP, 120 volts 3-phase AC, 40 HP, 208/240 volts, 3-phase AC, 50 HP, 380/600 volts 3-phase AC.

Limit Switches, Control Circuit Type Double–Pole:

General Electric Co., Schenectady, N. Y.

Dwg. No. CR–9440 LS–442–AA, 550 volts, AC or DC, with rolled lever.

Piezo Manufacturing Corp., New York, N. Y.

Dwg. No. P–981, Alt. C, Type MLS, 600 volts, AC or DC, 5 amperes.

Abell Elevator Co., Louisville, Ky.

Dwg. No. 4332–2, Rev. 2 Type AL–30V, 550 volts AC, 10 amperes, 500 volts DC, 5 amperes.

Dwg. No. 4332–2 Rev. 4, Type AL–30V, 2-pole, 10 amperes, 550 volts AC, 5 amperes, 500 volts DC.

C. C. Galbraith & Son Electric Corp., New York, N. Y.

Dwg. No. LS–1 Alt. 0, 450 volts AC and 250 volts DC maximum.

Westinghouse Electric Corp., Pittsburgh, Pa.

Dwg. No. 40–A–3098 Sub. 2, Type HNS, 1 ampere, 250 volts DC, 5 amperes, 575 volts AC, Style No. 1625633.

Cutler-Hammer, Inc., Milwaukee, Wis.

Dwg. No. B86–1313, Rev. A, Cat. No. 6884 H1A, 10 amperes, 440 volts AC, & 1.25 amperes, 250 volts DC.

Marine Electric Co., Portland, Oreg.

Dwg. No. D–2104 Rev. A; 5 amperes, 115 volts DC; 1.5 amperes, 230 DC; 0.5 amperes, 550 volts DC; 50 amperes, 110 volts AC; 20

amperes, 220 volts AC; 8 amperes, 440 volts AC; 6 amperes, 550 volts AC; Cat. No. 2202.

Master Switches:

General Electric Co., Schenectady, N. Y.

Dwg. No. CR 5850–B1G (when arranged for lifeboat winch service) 440 volts maximum.

Westinghouse Electric Corp., Pittsburgh, Pa.

Dwg. No. 25–B–4672, Sub. 2, Special HDN pushbutton station with starwheel handle (in phenolic enclosure) 440 volts maximum.

Dwg. No. 36–A–4572, Sub. 5—Type HD watertight and dusttight pushbutton station with star handle, 440 volts max., Style 1720397 (in cast iron enclosure, outline Dwg. No. 26–D–5917, Sub. 1) and Style 1720398 (in cast bronze enclosure, outline Dwg. No. 26–D–5917, Sub. 2).

Cutler-Hammer, Inc., Milwaukee, Wis.

Dwg. No. BM86–1273, Rev. A, heavy-duty, spraytight, single element control station, Cat. No. 6981 ED91–44, 440 volts maximum.

C. C. Galbraith & Son Electric Corp., New York, N. Y.

Dwg. No. MS–1, Alt. 0, Master Switch for lifeboat winch controller, 440 volts maximum.

Piezo Manufacturing Corp., New York, N. Y.

Dwg. No. P–1000 Alt. 0—Type MCS, 1 ampere, 115 volts DC, 0.5 amperes, 230 volts DC, 15 amperes, 600 volts AC.

Electro-Mechanical Co., Portland, Oreg.

Dwg. No. D–52–2, Alt. 2—450 volts AC and 250 volts DC maximum.

5. *Action requirements.*—It is essential for safety of life at sea that the required alterations on existing vessels fitted with gravity davits and power operated winches be accomplished as soon as possible. The cooperation of shipowners and operators is requested in order that these changes can be accomplished by July 1, 1952, when the revised regulations in 46 CFR 59.3a (b), 60.21a (b), 76.15a (b), 94.14a (b), and 160.015–3 (k) become effective.

BY DIRECTION OF THE COMMANDANT

H. C. SHEPHEARD
Rear Admiral, United States Coast Guard, Chief, Office of Merchant Marine Safety.

Navigation and Vessel Inspection Circular No. 9–52

UNITED STATES COAST GUARD,
Washington 25, D. C.
August 12, 1952.

Subj: Waivers of navigation and vessel inspection laws and regulations; authority and procedures for.

Part I. *General Information*

(a) Navigation and Vessel Inspection Circular No. 3–51 dated February 26, 1951, is superseded and canceled by this circular, effective September 1, 1952.

(b) Public Law 891, 81st Congress, 2d Session, approved December 27, 1950, authorized the Secretary of the Treasury to waive compliance with the navigation and vessel inspection laws to such extent and in such manner and upon such terms as he may prescribe whenever he deems that such action is necessary in the interest of national defense. This same Public Law 891 repealed Public Law 27, 80th Congress, as amended, which authorized the Commandant of the United States Coast Guard to waive compliance with the navigation and vessel inspection laws administered by the Coast Guard. By an order published in the Federal Register on January 26, 1951 (16 F. R. 731), the Secretary of the Treasury conferred and imposed upon the Commandant of the Coast Guard, with respect to the navigation and vessel inspection laws administered by the Coast Guard, all the rights, privileges, powers, or duties to waive compliance of the navigation and vessel inspection laws in the interest of national defense which were vested in the Secretary of the Treasury by virtue of Public Law 891, 81st Congress, 2d Session. A copy of Public Law 891 and a copy of the notice appearing in the Federal Register January 26, 1951, are enclosed with this circular.

(c) The procedure for effecting waivers, which are applicable to only one vessel in any one waiver order, is set forth in Part II of this circular. These *individual waivers* are subject to stated terms and conditions. Under this procedure and when conditions so warrant, relaxations may be made in the manning scales and other requirements with the following specific exceptions and limitations:

(1) Waivers to permit the substitution of unlicensed personnel to fill billets of licensed deck or engineer officers will not be granted without the prior approval of the Commandant. The application for this waiver will be filed with the representative of the District Commander at the port and referred by him to Coast Guard Headquarters with his recommendation.

(2) No waivers will be permitted to allow an alien to serve as a watch officer, radio officer or staff officer on United States vessels.

(3) No waivers will be permitted authorizing the shipment of licensed or certificated personnel not in possession of valid licenses or certificates, or temporary documents in lieu thereof.

(4) No waivers will be permitted allowing the employment of aliens as unlicensed crew members on subsidized vessels in excess of fifteen percent of the total of the unlicensed crew. The request for a waiver to employ aliens on subsidized vessels must specify the number of aliens it is desired to employ and the request shall be accompanied by a certification regarding the non-availability of United States citizen seamen. This certification must be signed by a responsible official of a maritime labor union or other recognized manning agency from whom the operator normally obtains his crews.

(5) Any waiver issued permitting other certificated personnel to be substituted for able seamen shall be limited to one-half the number of able seamen required to be employed on the vessel. Application for this waiver should be made only in cases where it is not possible to comply with the provisions of the general waivers contained in 46 CFR 154.08 (Able seamen employed on Great Lakes merchant cargo and tank vessels) and 46 CFR 154.10 (Able seamen employed on merchant vessels other than Great Lakes vessels).

(d) The following *general waivers* of manning requirements are in effect at this time:

(1) Waiver to allow certificated ordinary seamen who have served a minimum of eight months on deck at sea or on the Great Lakes to compose not more than one-half the number of able seamen required to be employed on Great Lakes cargo and tank vessels when properly qualified able seamen are not available (46 CFR 154.08);

(2) Waiver to allow seamen certificated for other engine room ratings who have served a minimum of three months in the fireroom of coal burning Great Lakes vessels to serve as qualified members of the engine department in the rating of firemen on such vessels when seamen certificated in the rating of fireman are not available (46 CFR 154.09);

(3) Waiver to allow seamen examined and rated able seamen after 12 months at sea or on the Great Lakes to compose not more than one-half the number of able seamen required to be employed on vessels other than those navigating the Great Lakes when properly qualified able seamen are not available (46 CFR 154.10);

(4) Waiver reducing the percentage of citizens required in the crews of nonsubsidized vessels to the extent necessary to permit one-half the number of able seamen and one-half the number of qualified members of the engine department required on such vessels to be alien seamen who hold currently valid United States certification as able seamen and qualified members of the engine department when properly certificated able seamen and qualified members of the engine deparment who are citizens of the United States are not available (46 CFR 154.11); and

(5) Waiver of the requirement that the working hours of licensed officers or seamen in the deck or engine department of any tug navigating the Great Lakes or tributary waters thereof may not exceed eight hours in any one day (46 CFR 154.19). No formal application is required in connection with these *general waivers* but the terms and conditions applicable to each waiver must be complied with fully.

(e) Representatives of the Commandant of the Coast Guard have no authority to grant waivers which have application to more than one vessel in any one waiver. All *individual waivers* issued in accordance with the procedure set forth in Circular 3–51 which were approved on or before August 31, 1952, will continue to be valid for the period stated in the waiver form or until the completion of the particular voyage for which issued.

(f) It is the policy of the Coast Guard, in the current administration of the laws and regulations relating to navigation and vessel inspection, to further the interests of national defense by simplifying the procedure involved therein, eliminating all causes of delay in the sailing of vessels, and by bringing about a proper balance between the factors of safety at sea and the national defense effort. While it is not the policy of the Coast Guard to countenance wilful violations of the laws and regulations or negligence in meeting the requirements thereof, neither is it contemplated that masters who exercise all reasonable efforts to comply with the requirements in effect be cited for violations on technical grounds.

Part II. *Procedure for effecting individual waivers of navigation and inspection laws.*

(a) Enclosure (1) (also see enclosures 2 and 3) issued pursuant to Public Law 891, 81st Congress, 2d Session, is an order of the Commandant in which he finds it necessary in the interest of national defense to make effective certain waivers to the extent and in the manner set forth therein. This order outlines the procedures under which the requirments of the laws in question may in urgent situations be relaxed by Coast Guard District Commanders and their designated representatives in ports located within their respective districts, and by designated representatives of the Commandant in other than domestic ports at which Coast Guard officers are assigned to duty. The objective of this order is to make possible a flexible means of maintaining a proper balance between safety at sea and the interest of national defense.

(b) Each Coast Guard District Commander may designate, in writing, qualified commissioned or civilian officers of appropriate rank or position to act as his representatives in the carrying out of the provisions of enclosure (1). In his order of designation the District Commander may impose such restrictions and conditions upon the authority of such representatives as he may deem proper. Copies of such designations shall be forwarded to Headquarters. The ports at which such representatives are designated shall be determined by the respective District Commanders.

(c) It is to be noted that under this procedure, application may be made by any person interested in the vessel involved, including representatives of any interested Government agency. It should also be noted that applications are to be forwarded to Headquarters for action by the Commandant in all cases in which it appears to the Coast Guard officer concerned that the delay involved in Headquarters action will not prevent the vessel from sailing on time or otherwise be contrary to the national defense effort. In other words, it is intended that waivers be made effective in the field only in those cases in which time will not permit action by Headquarters. However, the Coast Guard officer concerned is the sole judge of whether time will permit reference of the application to Headquarters. While it is contemplated that applications will be made in writing except in unusual circumstances, no oral application which is made with representations of urgency and which is otherwise merited should be denied on the ground that it could have been made in writing but for the neglect of the person making the same. However, full particulars of cases in which it appears that the oral application privilege has been abused shall be reported to Headquarters for appropriate action. This action in proper cases may be either by way of proceedings for suspension or revocation in the case of licensed officers or by report to the agency involved in cases involving representatives of the Government. Headquarters should also be advised of the particulars of all cases in which the waiver is made effective upon oral application and the application is not reduced to writing and filed within the period specified in the waiver order as required by enclosure (1). In such cases Headquarters will advise the appropriate District Commanders whether the penalties provided by law for failure to comply with the requirements conditionally waived should be invoked.

(d) Enclosure (1) does not authorize general waivers. Only the Commandant is authorized to issue general waivers which affect more than one vessel in one order.

(e) Although the certification of the person making an application should always be given due consideration, it is not contemplated that the Coast Guard officers authorized to make the waiver effective will be guided solely by the representations contained in applications. Each application should be considered in the light of such factors as the time at which the vessel is scheduled to depart, the mission of the vessel, the requirements of law proposed to be relaxed, the effect of relaxation upon the safety of the vessel and the persons on board, the consequences of failure to relax such requirements insofar as the national defense effort is concerned, and all other relevant factors. If after full consideration of the application it is the judgment of the Coast Guard officer concerned that the national defense effort justifies the risk so calculated then the waiver should be made effective to the extent deemed justified. On the other hand, if the Coast Guard officer concerned after having given such consideration to the application is of the opinion that the waiver is not justified he shall refuse to issue the waiver order regardless of the representations contained in the application.

(f) Of the factors listed above which should be given consideration in connection with each application for waiver, perhaps the most important is the effect of relaxation upon the safety of the vessel and the persons on board. This is particularly true in cases involving the laws and regulations governing the handling and stowage of ammunition, explosives, gasoline, and other dangerous cargo. Consequently, it is expected

that provisions of these laws and regulations will be made inoperative only in cases of extreme necessity and that in each such case, unless the application has been sent to Headquarters, the Coast Guard officer concerned will, if time permits, consult the head of the appropriate division at Headquarters by telephone prior to making the waiver effective. It is also expected that in important cases involving other laws or regulations Headquarters will likewise be consulted by telephone if time permits.

(g) Applications for waiver under enclosure (1) and the waiver order will continue to be made on Coast Guard Form CG–2633. The information "3–51, Part II" appearing in the title of the application and order should be changed in "—52 Part II." This form will be revised but the old form may be used after these corrections have been made until the supply is exhausted.

(h) One copy of every application filed and acted upon in the field shall be forwarded to Coast Guard Headquarters regardless of whether the application is granted or denied. In cases where the application is denied a notation to that effect, signed by the Coast Guard officer concerned, shall be made on the face of the copy of the application sent to Headquarters.

By direction of the Commandant.

H. C. SHEPHEARD,
Rear Admiral, United States Coast Guard, Chief, Office of Merchant Marine Safety.

ENCLOSURE 1

DEPARTMENT OF THE TREASURY
UNITED STATES COAST GUARD
WASHINGTON

(CGFR 51–10)

TITLE 46—SHIPPING

CHAPTER I—COAST GUARD, DEPARTMENT OF THE TREASURY

SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS DURING EMERGENCY

PART 154—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS [1]

Procedures for Effecting Individual Waivers

The purpose for the following waiver order is to provide procedures for effecting individual waivers of navigation and vessel inspection laws and regulations administered by the Coast Guard to the extent and in the manner and upon such terms and conditions as considered necessary in the interest of national defense. This waiver order is designated as 46 CFR 154.01, as well as 33 CFR 19.01. Because of the urgency of providing waiver authority in the interest of national defense, it is found that compliance with the notice of proposed rule making, public rule making procedure thereon, and effective date requirements of the Administrative Procedure Act is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by the Acting Secretary of the Treasury in his Order CGFR 51–1, dated January 23, 1951, and published in the Federal Register dated January 26, 1951 (16 F. R. 731), the following general waiver order is prescribed and shall become effective on and after the date of publication of this document in the Federal Register:

Part 154 is amended by adding a new section 154.01, reading as follows:

154.01 *Procedures for effecting individual waivers of navigation and vessel inspection laws and regulations.*

(a) It is hereby found necessary in the interest of national defense to waive compliance with the navigation and vessel inspection laws administered by the Coast Guard, as well as the regulations issued thereunder and published in 33 CFR Chapter I or in this chapter, to the extent and in the manner and upon the terms and conditions as set forth in this section.

(b) An application requesting that a waiver be made effective with respect to a particular vessel may be made by any authorized representative of an agency of the United States Government or any other interested person (including the master, agent, or owner of the vessel involved. Except as provided in paragraph (d) of this section, the application shall be in writing. The application shall be delivered to the Coast Guard District Commander or to his designated representative at the port or place where the vessel is located. In the case of a vessel in any port or place of the Canal Zone or in any foreign port or place, the application shall be made to the designated representative of the Commandant at such port or place, or if the Coast Guard has not established facilities in such port or place, to the nearest designated representative of the Commandant at a port or place where such facilities have been established. Every application shall contain a statement of the particular provisions of law with respect to which waiver of compliance is requested, a certification that the waiver of compliance with such laws with respect to the vessel involved is necessary in the interest of national defense and, an outline of the facts upon which such certification is based. The Coast Guard District Commander (or his designated representative or the designated representative of the Commandant, as the case may be) shall promptly examine every application for the purpose of determining whether the necessity for prompt action is such as to require that the waiver be made effective by him without reference to the Commandant. In any case in which it appears to the Coast Guard officer concerned that reference of the application to the Commandant for action would not delay the sailing of the vessel or otherwise be contrary to the interest of national defense, the application shall be so referred. In all other cases such Coast Guard officer shall give immediate consideration to the application and if he reaches the conclusion that the urgency of the situation outweighs the marine hazard involved, then such waiver shall be made effective in regard to such vessel to the extent and under the circumstances specified by him.

(c) The Coast Guard officer making such a waiver effective pursuant to paragraph (b) of this section, shall immediately prepare, in triplicate, an order setting forth the name of the vessel involved, the laws (also regulations, if any) with respect to which the waiver is effective, the extent to which compliance with such laws (also regulations, if any) is waived, and the period for which the waiver shall be effective. If practicable, one copy of this order shall be delivered to the master of the vessel involved before such vessel sails. In any case where the order is not delivered to the master, it shall be delivered to the owner, operator, or agent of the vessel without delay. One copy of the order shall be transmitted to the Commandant and the remaining copy kept on file.

(d) In any case of extreme urgency the application for a waiver may be made orally and if the Coast Guard District Commander (or his designated representative or the designated representative of the Commandant, as the case may be) reaches the conclusion referred to in paragraph (b) of this section, the waiver shall be made effective without further delay, subject to the condition that the application be reduced to writing and delivered within such period after the date of the oral request as the Coast Guard officer making the waiver effective shall specify in the order.

(e) No penalty shall be imposed because of failure to comply with any provision of law (or regulation, if any), the waiver of which has been made effective pursuant to the requirements in this section.

(Order CGFR 51–1, dated January 23, 1951, of Acting Secretary of the Treasury; 16 F. R. 731; interpret or

[1] This is also codified in 33 CFR Part 19.

apply Public Law 891, 81st Congress, 2d Session, approved December 27, 1951.)

Dated: February 21, 1951.

[S] MERLIN O'NEILL
Vice Admiral, U. S. Coast Guard
Commandant.

ENCLOSURE 2

(PUBLIC LAW 891—81st CONGRESS)

(CHAPTER 1155—2d SESSION)

(H. R. 9681)

AN ACT

To authorize the waiver of the navigation and vessel-inspection laws

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, 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. The head of such department or agency is authorized to waive compliance with such laws to such extent and in such manner and upon such terms as he may prescribe, either upon his own initiative or upon the written recommendation of the head of any other Government agency, whenever he deems that such action is necessary in the interest of national defense.

Sec. 2. The authority granted by this Act shall terminate at such time as the Congress by concurrent resolution or the President may designate.

Sec. 3. The joint resolution entitled "Joint resolution authorizing the Commandant of the United States Coast Guard to waive compliance with the navigation and vessel-inspection laws administered by the Coast Guard", approved March 31, 1947 (61 Stat. 33), as amended, is repealed.

Approved December 27, 1958.

ENCLOSURE 3

DEPARTMENT OF THE TREASURY

OFFICE OF THE SECRETARY

(CGFR 51-1)

COMMANDANT, U. S. COAST GUARD, AND COMMISSIONER OF CUSTOMS

Delegation of waiver authority with respect to navigation and vessel-inspection laws.

By virtue of the authority vested in me by the provisions of section 2, Reorganization Plan No. 26, 1950, 15 F. R. 4935, I hereby confer and impose upon the Commandant, United States Coast Guard, with respect to the navigation and vessel-inspection laws administered by the Coast Guard, and the Commissioner of Customs, with respect to the navigation laws administered by the Bureau of Customs, all the rights, privileges, powers, or duties to waive compliance with the provisions of the navigation and vessel-inspection laws *in the interest of national defense*, which were vested in me by virtue of the act of December 27, 1950 (Public Law 891, 81st Cong., 2d Sess.).

Dated: January 23, 1951

(Seal) E. H. FOLEY
Acting Secretary of the Treasury

(F. R. Doc. 51-1274; Filed, Jan. 25, 1951, 8:52 a. m.)

(16 F. R. 731)

Equipment Approved by the Commandant

ELECTRICAL APPLIANCES

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

Manufacturer and description of equipment	Location apparatus may be used				Date of action
	Passenger and crew quarters and public spaces	Machinery, cargo, and work spaces	Open decks	Pump rooms of tank vessels	
Murlin Mfg. Co., Philadelphia, Pa.					
Desk light, n. w. t., one 60-watt lamp max. Dwg. nos. 619 and 619-1, Alt. 3	x				4/24/52
Fluorescent ceiling light, n. w. t., two, T-12, 20-watt lamps, Dwg. no. 1501, Alt. 0	x				6/4/52
Fluorescent ceiling light, n. w. t., one, T-12, 20-watt lamp, Dwg. no. 1502, Alt. 0	x				6/4/52
Fluorescent bulkhead light, n. w. t., one, T-12, 14-watt lamp, Dwg. no. 1504, Alt. 1	x				6/24/52
Fluorescent corner ceiling light, n. w. t., one, T-12, 14-watt lamp, Dwg. no. 1511, Alt. 1	x				6/24/52
Fluorescent chart table light, n. w. t., one T-5, 8-watt lamp, Dwg. no. 1514, Alt. 1	x				6/24/52
Fluorescent desk light, bulkhead mounting, n. w. t., one, T-5, 8-watt lamp, Dwg. no. 1515, Alt. 1	x				6/24/52
Piezo Mfg. Co., New York, N. Y.					
Emergency disconnect switch for lifeboat winch control, type LBSS-2, 100 a., 25 h. p., 250 v. d. c. and 100 a., 30 h. p., 600 v. a. c., Dwg. no. P-998, Alt. 0 (Drain opening and plug or valve to be provided at installation)	x	x	x		5/8/52
Master switch for use with lifeboat winches, w. t., type MCS, 1 a., 115 v., 0.5 a., 230 v. d. c. and 15 a., 600 v. a. c., Dwg. no. P-1000, Alt. 0 (Drain opening and plug or valve to be provided at installation)	x	x	x		6/18/52
Pilot Marine Corp., New York, N. Y.					
Salinity indicator panel, 5-cell, type 5C51, Dwg. no. PM-3501, Rev. 0	x	x			4/15/52
Salinity indicator panel, 3-cell, type 3C51, Dwg. no. PM-3301, Rev. 0	x	x			6/20/52
Salinity indicator panel, 5-cell, type 5C51, Dwg. no. 3501-1, Rev. 0	x	x			7/29/52
The Portable Light Co., New York, N. Y.					
Searchlight, no. 1600, deck mounting, direct manual control, 500 watts, 115 or 32 v., Dwg. no. 1600, Alt. 1	x	x	x		5/14/52
Searchlight, no. 1633-L, pilothouse control, 500 watts, 115 or 32 v., Dwg. no. 1633-L, Alt. 1	x	x	x		5/14/52
The Simes Co., Inc., College Point, N. Y.					
Table lamp, type D, n. w. t., Dwg. no. 44568, Alt. II	x				5/7/52
Table lamp, type E, n. w. t., Dwg. no. 44569, Alt. II	x				5/7/52
Table lamp, type Fl, n. w. t., Dwg. no. 44570, Alt. III	x				5/7/52
Louvered Ceiling light, n. w. t., six 25-watt, T-10 lamps max., Dwg. no. 44558-R, Alt. 1	x				6/24/52
Indirect bracket light, n. w. t., one 75-watt lamp max., Dwg. no. 44567-R, Alt. 1	x				6/24/52
Desk light, n. w. t., one 40-watt, T-10 lamp max. (wall mounted), Dwg. no. 43173-R, Alt. 1	x				6/24/52
Viking Instruments, Inc. East Haddam, Conn.					
Indicator unit for steering gear motor overload and power failure alarm system Dwg. no. E-129, Alt. O	x	x			5/13/52
Westinghouse Electric Corp., Pittsburgh, Pa.					
Limit switch for use with lifeboat winches, control circuit type, 2-pole, watertight, type HNS, 1 a., 250 v. d. c., 5 a., 575 v. a. c. Style no. 1625633, Dwg. no. 40-A-3098, Sub. 2. (Drain opening and plug or valve to be provided at installation)	x	x	x		5/16/52
Master switch for use with lifeboat winches, type HD, watertight, 230 v. d. c., 450 v. a. c., Style 1720397, cast-iron enclosure, and Style 1720398, bronze enclosure, Dwg. No. 36-A-4572, Sub. 5. (Drain opening and plug or valve to be provided at installation)	x	x	x		6/10/52

sidered until the item is examined and listed by Coast Guard Headquarters. Before listings of electrical appliances are made it is necessary for the manufacturer to submit to the Commandant (MMT), United States Coast Guard Headquarters, Washington 25, D. C., duplicate copies of a detailed assembly drawing, including a material list with finishes of each corrosive part of each item.

AFFIDAVIT

The following affidavits were accepted during the period from August 15 to September 15, 1952:

Thornhill–Craver Co., Inc., P. O. Box 1184, Houston 1, Tex. Fittings.

American Air Filter Co., Inc., Louisville 8, Ky. Fittings.

Mr. William H. MacKenzie, 2061 Broadway, New York 23, N. Y. Fittings.

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated and recertificated from July 28 to September 25, 1952, inclusive, for use on board vessels in accordance with the provisions of Part 147 of the regulations governing "Explosives or Other Dangerous Articles on Board Vessels" are as follows:

CERTIFIED

Pall Mall Mfg. Co., 12–19 Jackson Ave., Long Island City 1, New York, N. Y. Certificate No. 353, dated August 5, 1952. "Pall Mall Non-Abrasive Metal Polish."

West Disinfecting Co., 42–16 West St., Long Island City 1, New York, N. Y. Certificate No. 354, dated August 5, 1952. "West Rid-All" (Insecticide).

Dearborn Chemical Co., Merchandise Mart Plaza, Chicago 54, Ill. Certificate No. 355, dated August 5, 1952. "Dearsol."

Frank J. Edwards Co., Inc., 15 William St., New York 5, N. Y. Certificate No. 356, dated August 5, 1952, "Save-Oil-Aid."

The Penetone Co., Manufacturing Chemists, Tenafly, N. J. Certificates numbered 357, dated September 16, 1952, "Economy Wax," and 358, dated September 16, 1952, "Duraglo."

RECERTIFIED WITH ORIGINAL NUMBERS IN ACCORDANCE WITH SECTION 147.03–7

The Enequist Chemical Co., Inc., 100 Varick Ave., Brooklyn, N. Y. Certificate No. 311, dated September 23, 1952. "Ultrex #725."

Merchant Marine Personnel Statistics

MERCHANT MARINE OFFICER LICENSES ISSUED

July 1952

DECK

Grade	Original	Renewal
Master:		
Ocean	25	176
Coastwise	3	24
Great Lakes		5
B. S. & L.	4	58
Rivers	7	23
Radio officer's licenses issued	54	
Chief mate:		
Ocean	37	41
Coastwise		1
Mate:		
Great Lakes		
B. S. & L.	3	8
Rivers	2	4
Second mate:		
Ocean	48	51
Coastwise		
Third mate:		
Ocean	145	48
Coastwise		
Pilots:		
Great Lakes	4	8
B. S. & L.	66	155
Rivers	44	56
Master: Uninspected vessels	2	5
Mate: Uninspected vessels	4	2
Total	448	665
Grand total	1,113	

ENGINEER

Grade	Original	Renewal
STEAM		
Chief engineer:		
Unlimited	24	192
Limited	7	70
First assistant engineer:		
Unlimited	34	44
Limited	1	12
Second assistant engineer:		
Unlimited	34	70
Limited		1
Third assistant engineer:		
Unlimited	143	58
Limited		
MOTOR		
Chief engineer:		
Unlimited	1	33
Limited	15	70
First assistant engineer:		
Unlimited	5	6
Limited	2	8
Second assistant engineer:		
Unlimited	1	10
Limited	1	1
Third assistant engineer:		
Unlimited	129	43
Limited		
Chief engineer: Uninspected vessels	5	5
Assistant engineer: Uninspected vessels	4	1
Total	406	624
Grand total	1,030	

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 796 cases during the month of July, 1952. From this number, hearings before Examiners resulted involving 18 officers and 65 unlicensed men. In the case of officers, one license was revoked, seven were suspended without probation, seven were suspended with probation granted, no license was voluntarily surrendered, four cases were dismissed after hearing, and one hearing was closed with admonition. Of the unlicensed personnel 15 certificates were revoked, 12 were suspended without probation, 23 were suspended with probation granted, nine certificates were voluntarily surrendered, three hearings were closed with admonitions and nine cases were dismissed after hearing.

ORIGINAL SEAMEN'S DOCUMENTS ISSUED

July 1952

Type of document	Canal Zone	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Total
Staff officer	----	32	11	12	4	59
Continuous discharge book	----	104	25	----	----	129
Merchant mariner's documents	----	926	290	491	684	2,391
AB any waters unlisted	----	90	21	53	14	178
AB any waters, 12 months	----	66	8	29	40	143
AB Great Lakes, 18 months	----	2	1	----	22	25
AB tugs and towboats, any waters	----	1	----	----	----	1
AB bays and sounds [1]	----	3	----	----	----	3
AB seagoing barges	----	----	----	----	----	----
Lifeboatman	----	245	19	110	47	421
Q. M. E. D.	----	124	47	86	66	323
Certificate of service	----	935	290	439	603	2,267
Tankerman	----	8	28	6	41	83

[1] 12 months, vessels 500 gross tons or under, not carrying passengers.

NOTE.—The last 10 categories indicate number of endorsements made on United States merchant mariner's documents.

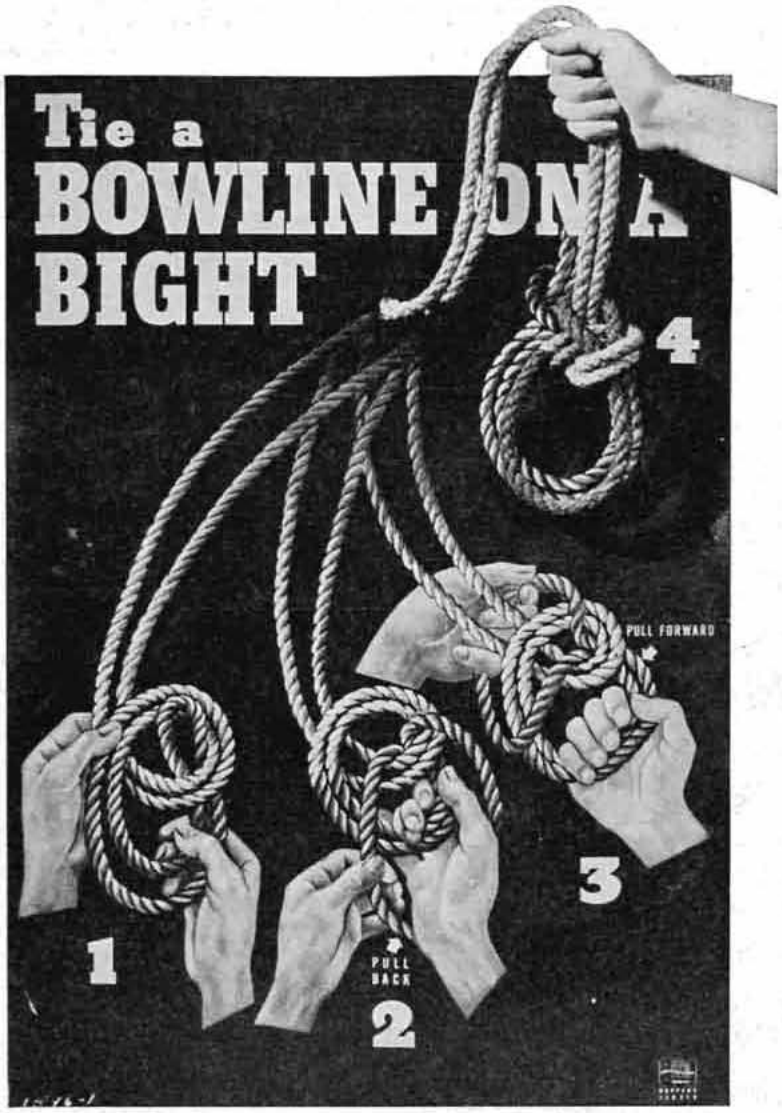
WAIVER OF MANNING REQUIREMENTS

July 1952

Waivers	Atlantic coast	Gulf coast	Pacific coast	Great Lakes	Total
Deck officers substituted for higher ratings	1	----	3	1	5
Engineer officers substituted for higher ratings	5	2	6	1	14
O. S. for A. B	29	18	9	11	67
Wiper or coalpassers for Q. M. E. D	11	10	20	11	52
Total waivers	46	30	38	24	138
Number of vessels	29	22	26	20	97

NOTE.—In addition, individual waivers were granted to permit the employment of 32 able seamen holding certificates for "any waters—12 months" in excess of the 25 percent authorized by statute.

U. S. GOVERNMENT PRINTING OFFICE: 1952


Tie a
BOWLINE ON A
BIGHT
4
PULL FORWARD
3
1
PULL
BACK
2