PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL
UNITED STATES COAST GUARD

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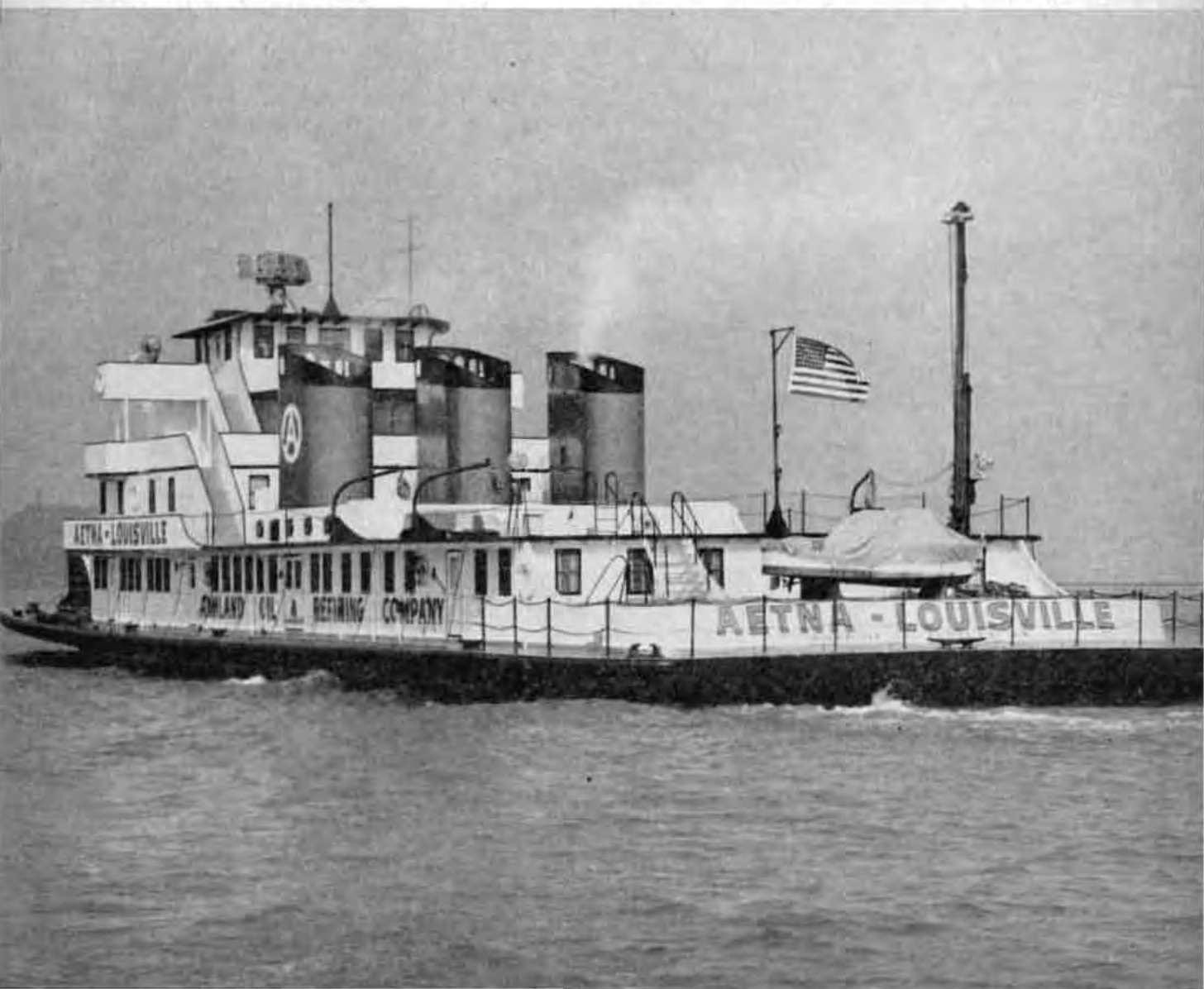

Proceedings of the

MERCHANT MARINE COUNCIL

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The Merchant Marine Council of the United States Coast Guard

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COVER PICTURE

The Aetna-Louisville is one of the new 4,800-horsepower triple-screw towboats. This powerful and completely equipped towboat pushes eight large integrated barges which can carry more than 200,000 barrels of crude oil. The three main Diesel engines develop their rated horsepower at 750 r. p. m., and drive three propellers through reduction gears at about 225 r. p. m. Each propeller has a diameter of 8 feet and a pitch of 7 feet 3½ inches. Forward of the main engine room, there is space for auxiliary equipment, such as fire pumps, heat exchangers, air-conditioning unit, water-settling and sanitary water tanks.

Courtesy Calumet Studio, Chicago, Ill.

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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: All (1).
E: mo (1).
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SHIPBOARD SAFETY

Safety measures too often fall in the category of "too little too late." Numerous cases on record prove this. Though some cases result in humorous incidents, such as the one where a young officer, stepping on a temporary ladder in descending, found himself bouncing through space much to the dismay of his posterior, there are far too many which prove to be fatal. Neglecting a life line may lead to a few laughs at a shipmate's discomfort, but, on the other hand * * *.

It is, therefore, of paramount importance that general safety of life on board vessels be kept in mind at all times, so that when hazardous conditions are noticed, immediate steps will be taken to remove them. Needless to say, working conditions should be as safe as circumstances reasonably permit. In this respect, the attention of vessel owners and merchant marine officers is invited to the congressional enactments for the "better security of life aboard vessels," "the better protection of life," and "to promote safety at sea." The various marine safety statutes were enacted for the purpose of safety of life and limb on board vessels and these laws apply at all times when the vessel is in commission, whether alongside the dock, lying in the stream, or underway in various conditions of operation.

By these statutes the Coast Guard is charged with certain responsibilities which ultimately and naturally fall upon those operating the individual vessel. Consequently, though a statute may impose certain responsibilities upon the Coast Guard for enforcement of shipboard safety, it should be borne in mind that the specific responsibility is more often dual in nature and is one to be shared by the owner and master.

To bear this out it might be worth while to consider a few specific statutes.

The basic responsibility of the Coast Guard for safety is imposed by R. S. 4417 and 4418, as amended (46 U. S. C. 391, 392), which by reference in other statutes are also applicable to other than steam vessels. These sections read in part as follows:

"The Coast Guard shall, once in every year, at least, carefully inspect * * * each steam vessel * * * and shall satisfy themselves that every such vessel * * * is of a structure suitable for the service in which she is to be employed * * * and is in a condition to warrant the belief that she may be used in navigation as a steamer with safety to life * * *." (R. S. 4417, as amended, 46 U. S. C. 391.)

"The Coast Guard shall also inspect, before the same shall be used and once at least in every year thereafter, the boilers, unfired pressure vessels, and appurtenances thereof, also the propelling and auxiliary machinery, electrical apparatus and equipment, of all vessels subject to inspection; and the Coast Guard shall satisfy itself by thorough examination that the same * * * may be safely employed in the service proposed. * * *" (R. S. 4418, as amended, 46 U. S. C. 392.)

This responsibility is further defined by the many statutory provisions set forth in Title 52 of the Revised Statutes, as amended, which were primarily promulgated to promote safety of life *at sea* in vessel operation. The following provisions of R. S. 4453, as amended (46 U. S. C. 435), are a case in point:

"* * * And whenever any Coast Guard official ascertains to his satisfaction that any vessel, subject to the provisions of this Title, has been or is being navigated or operated without complying with the terms of the vessel's certificate of inspection * * *, *or that for any other reason cannot be operated with safety to life, the said Coast Guard official shall order the owner or master of said vessel to correct such unlawful conditions*, and may require that the vessel at once cease navigating and be submitted to reinspection; * * *." (R. S. 4453, as amended, 46 U. S. C. 435, italics added.)

Then, among the multitude of statutes prescribing the safe manning of vessels there is R. S. 4463, as amended (46 U. S. C. 222), which provides as follows:

"No vessel of the United States subject to the provisions of this title (52) shall be navigated unless she shall have in her service and on board such complement of licensed officers and crew including certificated lifeboatmen, separately stated, as may in the judgment of the Coast Guard inspectors who inspect the vessel, be necessary for her safe navigation." (R. S. 4463, as amended, 46 U. S. C. 222.)

CAPTAIN HENRIK KURT CARLSEN

BEYOND THE CALL . . . .

Captain Henrik Kurt Carlsen's saga-like heroic endeavors as master of the foundering steamship FLYING ENTERPRISE received official recognition as well as public acclaim.

The Senate, on January 21, 1952, in a resolution introduced jointly by Senators Robert C. Hendrickson and H. Alexander Smith of New Jersey, acclaimed Captain Carlsen as one who, "* * * at a time of international peril emphasizing the need for a strong merchant marine, has exemplified the finest traditions and highest leadership expected of those who man our ships." Subsequently, the House of Representatives, acting on a joint resolution introduced by Congressman Edward T. Hart of New Jersey, provided for the presentation of the Merchant Marine Distinguished Service Medal to the heroic master * * * "in recognition of his heroic conduct and valor beyond the call of duty while attempting without regard to his personal safety to bring his ship and its cargo to port."

The master of the former FLYING ENTERPRISE received further honors at a testimonial luncheon in New York City, on January 23, 1952, which was sponsored by The Propeller Club of the United States, the Maritime Association of the Port of New York, the New York Board of Trade, Inc., and the Robert L. Hague Industries Post of the American Legion when Rear Admiral H. C. Shepheard, USCG, presented him the Commandant's U. S. Coast Guard Citation as follows:

CITATION:

"For courageous and meritorious performance of duty occasioned by the casualty suffered by the FLYING ENTERPRISE in a North Atlantic gale on December 28, 1951. With your vessel in heavy seas, without power and with a 60° to 80° list you directed the removal of passengers and crew and then at great peril to yourself elected to remain on board your disabled vessel and attempt to bring her into port. Toward this objective you remained on board, while assisting vessels operating in continuing rough weather endeavored to tow your vessel to port, until finally you were compelled to abandon ship immediately prior to the time she sank on January 10, 1952. Your devotion to duty under such trying and dangerous circumstances is in keeping with the best traditions of the sea."

Obviously, while the provisions of R. S. 4417, 4418, 4453, and 4463, as amended, authorize the Coast Guard to inspect and reinspect vessels and insure that vessels are sufficiently and efficiently manned for the services for which they are employed, it is additionally the responsibility of the master, and under him, of the licensed officers to insure that the vessel is in all respects safely maintained and operated. Traditionally it is the duty of the master and, under him, the licensed officers to see that dangerous conditions are corrected immediately. General safety requirements may not always be spelled out in the laws or regulations because to do so would be impossible, but failure to exercise the practices of good seamanship and good housekeeping is inexcusable.

To digress further, regulation or law can never be entirely substituted for common sense. In every instance, whether it be safeguarding the man working from a staging over the side of a vessel, coming across a gangway or accommodation ladder, working around deck- and cargo-handling machinery, in the shaft alley, or in any other part of the vessel while at sea, at anchor, or berth alongside the dock, it is the duty of every master to see that unsafe practices are corrected. Ship's officers have definite responsibilities concerning maintenance of safety on board the ship, for when negligence of a ship's officer is involved, such as lack of equipment or supplies, permitting hazardous conditions to exist endangering life or limb, or failure to take such measures as are necessary to protect the safety of the crew, stevedores, harbor workmen, proceedings against the officer's license may be instituted.

The following list, although not complete, points out specifically some of the unsafe practices observed by

marine inspectors during the inspection or reinspection of a vessel:

A. *Lack of effective supervision in safety precautions by ship's officers.*
   (1) Failure to supervise crews working under hazardous conditions; working over the side on stages; entering holds, etc.

B. *Access to vessel.*
   (1) Gangway not adequate in length, width, and strength, improperly rigged; or not fitted with suitable rails or life lines.
   (2) Gangway improperly located so that it blocks adequate passage in case of fire. Insufficient number of gangways available.
   (3) Ring life buoy with lanyard not available near gangway.

C. *Hold access.*
   (1) Use of temporary ladders of insufficient strength and improperly located.
   (2) Shaft tunnels without proper access.

D. *Protection at deck openings.*
   (1) Inadequate life lines or none at all.
   (2) No provisions for portable rails when necessary.

E. *Lighting.*
   (1) Insufficient lighting in cargo holds, around platforms, at gangways, and other places where needed.
   (2) Unsafe portable light units.

F. *Hatch covers.*
   (1) Improperly maintained or dangerously piled.

G. *Hatch beams.*
   (1) Locking lugs not working or missing.

H. *Cargo handling gear.*
   (1) Using in unsafe condition.
   (2) Moving parts of machinery without proper guards.
   (3) Safe working loads not properly worked or posted.
   (4) Steam pipes to deck machinery in unsafe condition.
   (5) Preventer guys inadequate or improperly rigged.

I. *First-aid equipment.*
   (1) Ship's medicine chests not fully equipped and not conveniently accessible.
   (2) Wire stretchers for injured not provided.

J. *Ventilation.*
   (1) Improper ventilation of holds, double bottoms, boiler peak tanks and other confined spaces which may be gassy or lack oxygen.
   (2) Gas masks, oxygen breathing apparatus, etc., not properly maintained or inaccessible.
   (3) Flame safety lamp not used.

K. *Electrical equipment.*
   (1) Unsafe working conditions, especially around deck machinery or in exposed places.

L. *Welding and other "hot work."*
   (1) Safety precautions not carried out in this hazardous work.

These unsafe practices have been the cause of many marine casualties involving the loss of life. To correct these conditions many vessel inspection regulations have been promulgated. In addition, numerous articles have been written and published in "Lessons from Casualties" and various Navigation and Vessel Inspection Circulars have been issued, in order to bring the attention of all concerned to the need for corrective action to be taken. However good a law or regulation requiring certain safety practices may be, the active support and cooperation of all those affected is necessary to accomplish its intended purpose. All persons employed on board have a mutual responsibility to carry out the established safety procedures for the protection of their co-workers and themselves.

WATCH OFFICERS—TAKE CARE

There recently was a rare case of near collision between two United States vessels approximately one hundred miles off the eastern seaboard which presents a pointed lesson to be borne in mind by every watch officer entrusted with a vessel.

The case referred to occurred when the mate on watch aboard a large passenger ship negligently failed to act with prudence to safeguard his vessel, its cargo, and the lives of trusting passengers on board. For that matter, he failed to take the standard precautions expected of watch officers on vessels underway when he found himself in a crossing situation where his vessel was the burdened vessel and the other vessel was a United States naval vessel privileged under the International Rules of the Road.

Shortly after midnight on a dark, clear, night when the passenger ship was proceeding through the calm, ocean waters on an easterly course at a speed of 22 knots, its radar picked up a target bearing 176° True at a distance of 30,000 yards, which later proved to be the privileged naval vessel heading in a northeasterly direction at a speed of 27 knots. This was at 0047. Just about the same time, the naval vessel made radar contact with the burdened vessel and found her to be 34,200 yards distant on a true bearing of 356°.

Subsequent bearings taken by the respective watch officers showed the two ships were on converging courses approaching each other on a constant bearing at a closing range rate of 18 knots. That this was a crossing situation within the International Rules of the Road and that the naval vessel was privileged must have been apparent to the watch officers on the crossing vessels as the passenger ship had the other vessel on her starboard hand and the two were steering converging courses which were closing them on a constant bearing. Yet, strangely enough, the burdened vessel inexplainably maintained course and speed in careless violation of a definite duty to act until the danger of collision was imminent. The fact that the privileged vessel was a unit of the United States Navy and the burdened vessel was a part of the United States Merchant Marine did not, in any way, disturb their respective obligations.

Investigation showed visual contact was established when the vessels were approximately 9 miles apart and that, at this time, the navigational situation with respect to "burdened" and "privileged" was fixed. If the passenger vessel's mate perchance assumed the man-of-war would "speak them" and then shear off, it was an unreasonable assumption under the circumstances. The vessels did exchange routine greetings by blinker when they were about 5 miles apart, but ceased doing so when the distance between them had closed to about 3.5 miles. In closing this exchange the watch officer on the naval ship had replied, "Negative. We have you on a collision course," to the passenger vessel's inquiry as to whether or not her course and speed were satisfactory.

It was some 5 minutes after this, at 0131, when there were but 2 or 3 minutes remaining to act, the range having closed to a mere 900 yards, that the passenger ship's watch officer had his helmsman put the wheel over to left, full rudder, turning the ship in a complete circle to the left. In the meantime, the watch officer aboard the naval vessel, apparently conscious time to act was growing short and in doubt as to whether the other vessel would act in time, or then act correctly, when informed the

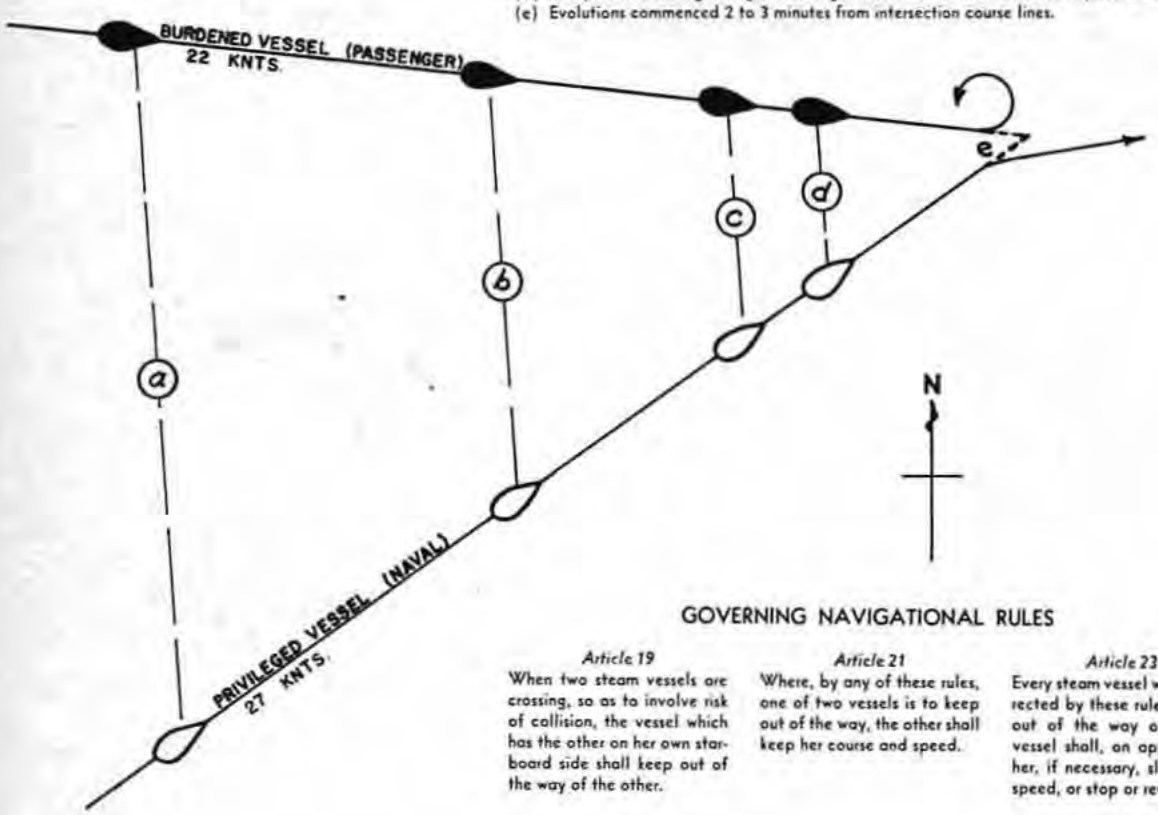
range had closed to 900 yards, prudently altered his course appreciably to starboard in order to open the range between the two ships and to put the other vessel astern of him. Thus, the nearly concurrent action of both watch officers avoided a disastrous collision, giving us a rare case of violation without casualty.

It is difficult to understand the continued lack of action on the part of the mate on watch, especially since the situation was clear cut, remaining substantially the same from 0047 to 0131, and there being unlimited sea room to starboard and to port. The mate should have realized that he was duty-bound to act reasonably when the risk of collision was determined to exist. Generally, risk of collision is deemed to exist when two vessels are on converging courses and constant bearing, while danger of collision is deemed to exist when the vessels have approached so near each other and upon such courses that by departure from the rules of navigation, whether from want of good seamanship, accident, mistake, misapprehension, or otherwise, a collision might occur. In this case there was continued inaction on the mate's part for a period of about 45 minutes which was followed by a desperate maneuver to avoid collision some 3 minutes in time from the calculated intersection of the course lines when danger of collision was imminent.

But for the timely action on the part of the naval officer aboard the privileged vessel, there might well have been a disastrous collision. In correctly and prudently evaluating the situation as one whose resolution required action on the part of the privileged vessel in order to insure success, the naval officer displayed a fine example of seamanship, for which he is to be commended. By altering his course to starboard when danger of collision became imminent he executed a perfect maneuver. No other maneuver could have been more appropriate, since no move, or failure to move, on the part of the privileged vessel could negate its effect of opening the range. Needless to say, his was an unenviable position. Bound by the Rules to hold course and speed until danger of collision became imminent, having warned the other vessel her course and speed were unsatisfactory, there was little left for him to do but helplessly hope that the other watch officer would awaken to his responsibilities in time. Quite possibly he visualized the gasping, burning hulks of the no longer speeding vessels slid-

ILLUSTRATIVE SKETCH OF NEAR COLLISION

(a) Radar contact when vessels were approximately 15 miles apart.
(b) Visual contact with vessels about 9 miles apart.
(c) Commenced blinker exchange.
(d) Completed routine greetings. Passenger vessel warned her course and speed unsatisfactory.
(e) Evolutions commenced 2 to 3 minutes from intersection course lines.



GOVERNING NAVIGATIONAL RULES

Article 19
When two steam vessels are crossing, so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way of the other.

Article 21
Where, by any of these rules, one of two vessels is to keep out of the way, the other shall keep her course and speed.

Article 23
Every steam vessel which is directed by these rules to keep out of the way of another vessel shall, on approaching her, if necessary, slacken her speed, or stop or reverse.

ing to the ocean depths amid the tortured cries of desperate people leaping into the hungry waters to thrash out their final moments.

There can be only condemnation of the passenger vessel's watch officer's careless violation of the Rules of the Road whereby he unnecessarily endangered those relying upon him.

Though there may be a tendency toward laxity on the part of watch officers having sailed numerous uneventful trips, it cannot be overemphasized that when on duty a watch officer is in effect the "eyes of the ship" and, as such, is responsible to the Captain for the safe operation of the vessel. Moreover, it must be just as apparent that in order to live up to this responsibility there is a specific duty to carry out standing orders, to faithfully observe the Rules of the Road, *and* to keep the Captain informed at all times of situations which may lead to a disastrous casualty.

OPERATION VAGABOND

The Voice of America unveiled its first seagoing radio broadcasting station, Friday, February 15, 1952, with the commissioning of the U. S. Coast Guard Cutter COURIER (WAGR–410 at the Bethlehem Steel Co., Hoboken (N. J.) Shipyard.

The COURIER, a former Navy cargo vessel depicted on the back cover, was owned by the Maritime Commission, was originally built in 1945, christened the DOLDRIGE, and operated by the Navy. She later saw service as the COASTAL MESSENGER. An A1-type cargo vessel of 5,926 tons dead weight, the 338-foot, Diesel-powered vessel will carry a crew of 9 officers and 80 men, in addition to several Voice of America engineers to supervise operation of the transmitting equipment. Brought out of mothballs and transferred to the State Department she was in turn transferred to the Coast Guard upon recommissioning.

Although capable of broadcasting from the open sea, the COURIER is scheduled to operate while anchored at undisclosed locations as a booster transmitter for the Voice broadcasts to be directed to the people living behind the Iron Curtain, in order to offset the Soviet jamming of other Voice transmissions.

The transmitting equipment aboard the COURIER is the most powerful of its kind ever installed on a ship. Developed under a project known as "Operation Vagabond" which was approved by the President and the Joint Chiefs of Staff, it consists of one 150-kw. medium wave transmitter having three times the power of the largest American broadcasting station and two 35-kw. shortwave transmitters.

It may use either a land-based antenna or one supported by a captive barrage balloon filled with helium, and if necessary initiate original broadcasts.

Though no certain future plans have been formulated by the State Department for Operation Vagabond, it is expected additional floating units of this nature will be manned by the Coast Guard in the not too distant future.

U. S. C. G. MARINE BROADCASTS REVISED

New instructions governing the broadcast of marine information by the Coast Guard became effective on February 1, 1952. Henceforth, the Coast Guard will make scheduled and emergency marine-information broadcasts by radio stations listed in the table following. In general these broadcasts will include only information vital to the maritime industry operating in or approaching the coastal waters of the United States, the Territory of Alaska, the Territory of Hawaii, and the Caribbean.

The scheduled marine information broadcasts may include important notice to mariners, hydrographic information, storm warnings, advisories and other urgent marine information, or emergency data remaining unchanged from its initial broadcast. However, routine weather broadcasts by Coast Guard facilities shall be made only as tabulated below. In the event information is so important to the safety of navigation that a delay in its dissemination until the next scheduled broadcast would definitely create a shipping hazard, such information shall be transmitted by radiotelegraph or radiotelephone in an emergency marine-information broadcast on the stations broadcasting frequency. Emergency radiotelegraph transmissions will be preceded by the preliminary safety signal and announcement on 500 kcs. in the last fifteen (15) seconds of the first silent period after receipt; emergency radiotelephone transmissions by preliminary call and announcement on 2670 kcs. Should the first emergency broadcast be made outside of regular watch hours for single-radio-operator merchant ships, the information will be repeated at the end of the first silent period which occurs during the working hours of these ships, unless the original warning has been canceled or superseded by a later warning message.

All radiotelegraph broadcasts will be made on the station's broadcasting frequency after the preliminary call and announcement on 500 kcs. All radiotelephone broadcasts will be made on 2698 kcs. after the preliminary call and announcement on 2670 kcs. This applies to both scheduled and emergency marine information broadcasts.

U. S. COAST GUARD MARINE INFORMATION BROADCAST

Station Location	Call	Type Emission	Frequency (kcs.)	Time and type of broadcast (GCT Daily)
Boston, Mass.	NMF	CW	425	Schedules: 0350 and 1550*. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0420 and 1620. Emergency: upon receipt.
New York, N. Y.	NMY	CW	480	Schedules: 0100 and 1600. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0450 and 1650. Emergency: upon receipt.
Cape May, N. J.	NMK	Voice	2698	Schedules: 0550 and 1750*. Emergency: upon receipt.
Baltimore, Md.	NMN7	Voice	2698	Schedules: 1630*. Emergency: upon receipt.
Norfolk, Va.	NMN	CW	410	Schedules: 0120 and 1620. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0520 and 1720. Emergency: upon receipt.
Fort Macon, N. C.	NMN37	Voice	2698	Schedules: 1700*. Emergency: upon receipt.
Charleston, S. C.	NMB	Voice	2698	Schedules: 0420 and 1620. Emergency: upon receipt.
Jacksonville Beach, Fla.	NMV	CW	464	Schedules: 0125 and 1625. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0620 and 1820*. Emergency: upon receipt.
Miami, Fla.	NMA	CW	425	Schedules: 0100 and 1600. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0450 and 1650. Emergency: upon receipt.
St. Petersburg, Fla.	NOF	Voice	2698	Schedules: 0420 and 1620. Emergency: upon receipt.
San Juan, P. R.	NMR	CW	127	Schedules: 0330 and 1530*.
			4795	Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0300 and 1500*. Emergency: upon receipt.
New Orleans, La.	NMG	CW	425	Schedules: 0520 and 1720*. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0550 and 1750*. Emergency: upon receipt.
Galveston, Tex.	NOY	CW	425	Schedules: None. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0520 and 1720*. Emergency: upon receipt.
Long Beach, Calif.	NMQ	CW	425	Schedules: 0420 and 1720. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0500 and 1700*. Emergency: upon receipt.
San Francisco, Calif.	NMC	CW	425	Schedules: 0400 and 1600*. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0430 and 1630. Emergency: upon receipt.
Seattle, Wash.	NMW	CW	425	Schedules: 0500 and 1700*. Emergency: upon receipt.
		Voice	2698	Schedules: 0530 and 1730*. Emergency: upon receipt.
Ketchikan, Alaska	NMJ	CW	410	Schedules: 0530 and 1730*. Emergency: upon receipt.
		Voice	2698	Schedules: 0600 and 1800*. Emergency: upon receipt.
Honolulu, T. H.	NMO	CW	425	Schedules: 0520 and 2020. Emergency: 1st silent period after receipt.
		Voice	2698	Schedules: 0930 and 2130. Emergency: upon receipt.

*Indicates routine weather broadcasts.

Creating "safety consciousness" is like building character. This is not done by laws, decrees, and commands but by quiet influence, unconscious suggestion, and personal guidance.

ACETIC ACID

Acetic acid is a corrosive organic acid. Because of this inherent property, particularly in its dilute forms, it is important that the following points be stressed in order to safeguard personnel:

Use only preferred containers for storing and shipping acetic acid. Aluminum or stainless steel drums and glass carboys are usually specified. Tank cars are of stainless steel or of aluminum.

Whenever applicable, prescribed regulations for container labeling and placarding should be followed.

Correct storage is important, since leakage can result in serious corrosion of equipment and building facilities.

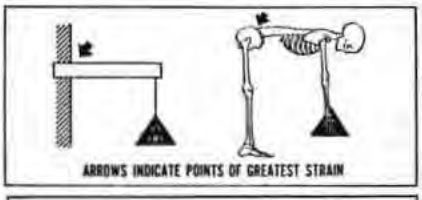
Strong and glacial acetic acid when in contact with the skin or clothing can cause severe burns. The use of personal protective measures should be followed diligently.

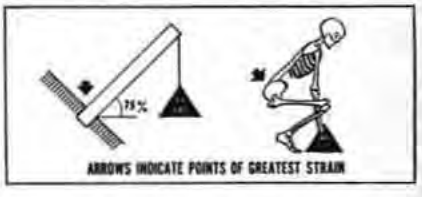
Inhalation of concentrated vapors or acetic acid can be harmful; swallowing may cause severe injury to the mouth, throat, esophagus and stomach.

LIFTING

If lifting is done in the position illustrated in figure 1, the maximum strain is placed on the back. For example: a beam, of approximately the same cross-sectional area and length as a man's spine, when placed in this position as illustrated, develops a maximum strain of 500 pounds per square inch at the point of support.

If the position illustrated in figure 2 is used while lifting, more of the weight is placed on the strong leg muscles and less strain is put on the relatively weak back muscles. The same beam and the same weight used in figure 1 is illustrated in figure 2. However, in the second illustration, because the weight tends to compress the beam rather than bend it, the the stress developed is only 129 pounds per square inch; a reduction of 75 percent.





WHAT YOU SHOULD KNOW ABOUT BURNS

You should know something about burns, because burns are something that could happen to you or the man next to you. Knowing what to do when someone near you is burned may save a life. Such knowledge will become even more important if what everyone hopes won't happen, nevertheless does—and an atomic attack occurs. In that tragic event, burns will claim far more victims than radioactivity. Of every five casualties at Hiroshima, four were by burns.

Fortunately, if prompt and proper treatment is given, a bad burn is no longer as grim a killer as it used to be.

The burned child still fears the fire, all right * * * more than ever. The reason is, he lives to fear it. The same goes for papa and mama.

Only a few years ago, a burn injury covering half the body surface, often less, was always fatal. This fatal margin varied with age and area of the body. Children are more susceptible than grownups. The most dangerous burns are those on the face and, strange to say, on the seat.

Today, thanks to medicine's amazing progress, patients who were burned over as much as 80 percent of their bodies are walking around with a healthy respect for fire. For this there are two reasons:

1. They were hurried to a hospital where treatment, based on the latest medical research, was set in motion at once.
2. The first aid they received before getting there helped, rather than hindered, the physician.

The best way to treat burns, of course, is to avoid them. Here are the eight most common causes of burns: (1) Catching fire from stoves and grates, or being trapped in a burning building; (2) lighting fires with kerosene; (3) cleaning clothes with flammable liquids; (4) using matches and cigarettes in bed; (5) fireworks and bonfires; (6) hot fats and metals; (7) chemicals; (8) electricity. A spark, a flash, a hot surface can cause a burn. So can too much sun.

The second line of defense, if caution fails or the enemy breaks through, is preparedness. Personnel, by the millions, in industry and civil defense, will soon be seeing the new film, "Target, U. S. A.," and hearing the message of plant-wide defense and first-aid stations.

"Modern air power makes us as vulnerable today as London was in World War II," says Military Analyst Hanson W. Baldwin in the film commentary. "The need is for intelligent basic planning on which to build a civil defense program at the industrial plant level."

Peace or war, it's important to know about burns * * * and just as important to know what not to do as to know what to do.

Remember, a bad burn is an open wound. It is liable to infection. It is a point of leakage for vital body fluids. It is a trigger mechanism that may send the patient into a dangerous state of "shock."

You have heard about degrees of burns. A first-degree burn reddens the skin. A second-degree burn raises blisters. A third-degree burn chars the flesh. Even a first-degree burn over a large skin area can be serious.

The patient should be rushed to the hospital, if there is any question at all about the seriousness of the injury. It is better to be overcautious than sorry.

Except for first aid, the treatment of burns should be left to the physician at the hospital, where he has supplies, equipment, and a team of skilled assistants at his elbow, to say nothing of a lot of highly technical knowledge in his head.

The essential purpose of first aid is to seal off the burned area promptly. It should not be touched, breathed on, or left exposed to the air—for in these ways germ infection may be introduced.

If the burn occurs with no trained personnel on hand, the doctor will prefer that you use only a dry, sterile, fine-meshed gauze bandage. Cover the damaged surface and an area 2 inches beyond, applying the bandage securely but not tightly. A first-degree burn that is not extensive may be covered with sterile petrolatum gauze.

The covering relieves the pain, safeguards the wound against infection,

and discourages tampering until the physician can make an examination and determine the treatment he prefers.

Usually the doctor will apply a complete "pressure dressing," using sterile petrolatum gauze for contact with the burned surface. This form of dressing has come into general use since it was developed during World War II at the request of the Surgeon General of the Army.

"Ideal treatment," says the atomic bomb procedure recommended, for example, by the Commission on Emergency Disaster Medical Service of the Medical Society of the State of Pennsylvania in the Pennsylvania Medical Journal, May 1951, "is the pressure dressing of a thin inner layer of 'Vaseline' gauze, a thick outer layer of surgical waste covered with elastic bandages—applied with light pressure and reinforced with splints where necessary to immobilize joints included in the burned area."

HEADACHE...

. . . is a sign that the body is not functioning as it should.

A primary purpose of the pressure dressing is to reduce the seepage of body fluids through the wound. Usually it is left in place six to fourteen days, as the attending doctor decides, unless infection develops. The contact film of bland petrolatum eases the pain and keeps the bandage from sticking—a factor of no small importance, as anyone who has had the hide ripped off him can testify. Being chemically inactive, the petrolatum is not absorbed into the system.

Don't try to help the burn victim by applying medicated ointments, sprays, cold tea, or some "home remedy" that may once have been in vogue. The chemicals they contain may be absorbed into the system with harmful results. Neither should you open blisters or remove damaged blisters. Don't even try to cleanse the wound, for you are more apt to do harm than good. The best service you can render is to see that the burned area is properly covered.

When a patient is burned over a large part of the body, for instance because his clothing caught fire, it is not feasible to try to dress his wounds. Don't remove clothing, either. Just throw a clean bed sheet or freshly laundered towels over him and get him to the hospital. The same applies to wounds of the face. They are difficult to dress and particularly apt to involve the danger of shock.

After this initial protection, it's up to the doctor. A severe burn demands "total body treatment." The patient must be kept from passing into shock, or pulled out of it if he does. He will need blood plasma and massive transfusions of whole blood, besides sodium salts, to restore the circulating volume and the body's fluid balance. He may need three times as much protein in his diet as he would normally eat, to make up for what is lost, and part of this may have to be given by vein instead of by mouth.

These needs are measured by careful and constant laboratory tests. All this while the doctor has his eye peeled for any signs of the onset of infection, so that he may combat it with penicillin or other antibiotics. His final task is to see that the wound is properly closed, perhaps making use of skin grafts to prevent or reduce disfigurement.

Clearly the job is a big one. Many hospitals are organizing "burn teams" of medical and nursing personnel, so that the physician in charge can keep every detail under control around the clock. Boston's 1942 Cocoanut Grove fire was one of the most tragic in history. But out of this experience, "Total Body Treatment" or burns hit its stride—and now medical science is chalking up another victory.

Every year, Uncle Sam's figures show some 8,000 Americans perish from accidental burns and conflagrations. Five or ten times that many are severely burned and live. Some of these are under hospital care for weeks and months. For all the miracles of skin grafting and plastic surgery, disfigurement cannot always be entirely avoided.

With variations depending on the area, an adult with 15 percent of his body burned, or a child with 8 percent, may go into shock. Some of these are under hospital care for a serious burn. More serious burns, if untreated or improperly treated, can end in death. And here is a worthwhile parting thought: Repeated blood transfusions, sometimes a score or more, are a major element in the burned patient's recovery. It is of prime importance that the American Red Cross receive plenty of blood donations to meet these heavy demands. By being a regular blood donor yourself, you are taking out insurance against the time when your own life may depend on an unfailing supply of this precious fluid.

Courtesy United States Coast Guard Magazine, December 1951

"They Said It..."

I present to the Congress the question of whether or not the United States should have an adequate merchant marine. To me there are three reasons for answering this question in the affirmative. The first is that in time of peace, subsidies granted by other nations, shipping combines, and other restrictive or rebating methods may well be used to the detriment of American shippers. The maintenance of fair competition alone calls for American flagships of sufficient tonnage to carry a reasonable portion of our foreign commerce. Second, in the event of a major war in which the United States is not involved, our commerce, in the absence of an adequate American merchant marine, might find itself seriously crippled because of its inability to secure bottoms for neutral peaceful foreign trade. Third, in the event of a war in which the United States itself might be engaged, American flagships are obviously needed not only for naval auxiliaries, but also for the maintenance of reasonable and necessary commercial intercourse with other nations. We should remember lessons learned in the last war.

Observations of the Old Mariner

The use of sea water in the preparation of food, washing up of dishes, cleaning of galley equipment or in installations such as potato peelers, should where possible be avoided. Where its use is unavoidable there should always be a final rinse through with fresh water. Under no circumstances should sea water be used for these purposes when the vessel is in, or in the vicinity of, port or coastal areas.

Drinking water tanks should be opened up, cleaned out, cement washed (or, if coated with a bituminous, plastic, or other proprietory composition, recoated where necessary) and aired at intervals not exceeding 12 months. In addition, it is recommended that tanks should be thoroughly pumped out and, where necessary, hosed prior to refilling at approximately 6-month intervals. During the cleaning process scrupulous attention should be paid to the hygiene and personal cleanliness of those engaged in the work.

LESSONS FROM CASUALTIES

INADVERTENCE AND/OR STUPIDITY

Inadvertence and/or stupidity on the part of a presently unknown person was the cause of another serious tragedy! How? By someone prematurely operating the manual lifeboat releasing gear when the lifeboat was swung over the side during a presailing lifeboat drill. The results: One crew member was killed, while eight others aboard were seriously injured when the lifeboat dropped 40 feet into the water.

This particular tragedy occurred during the presailing lifeboat drill held on board a large passenger vessel at a port in the United States. When the time came for the hand-propelled lifeboat to be lowered into the water, 10 members of the 20-man lifeboat crew were present. The boatswain in charge left the embarkation deck to round up the stragglers, most of them in the steward's department. The other 9 men, 7 from the steward's department and 3 of whom were qualified as lifeboatmen, and 2 from the engine department, entered the lifeboat to prepare it for drill. Before the boatswain and the stragglers from the steward's department returned, the lifeboat suddenly dropped 40 feet from the embarkation deck to the water, seriously injuring the 9 men aboard and crushing the bottom of the lifeboat. The lifeboat immediately filled with water, but remained afloat due to its buoyancy tanks. Crews of other lifeboats water-borne at the time removed the injured, who were in a severe state of shock, and they were immediately rushed to the hospital where one of them later died.

An examination of the damaged lifeboat immediately after the accident and while it was still in the water revealed that the releasing gear lever and mechanism were in the open position and that the mechanism was in good operating condition. The hooks of the lifeboat falls were hanging adjacent to the embarkation deck which indicated that the lifeboat had been released from that position. It was necessary to overhaul the lifeboat falls by hand to lower them to the water. The damaged boat was then hooked on and hoisted to a position at the embarkation deck, where it was again thoroughly examined.

The handle of the releasing gear was found to be painted red, and when secured, was housed in a channel-shaped bracket which protected it from accidental release by a keeper pin, which had to be removed before the handle could be released to operate the releasing gear. On the side bench under the releasing handle when in closed position there was also stenciled in conspicuous red letters "Danger—Releasing Gear." To release the falls holding the lifeboat, the releasing lever had to be manually operated through 180° arc. Therefore, it would require several deliberate actions on the part of someone to operate the releasing gear.

The eight members of the lifeboat crew that survived the accident were questioned concerning the accident. Each one was asked what duty he was performing in the lifeboat, also whether or not he operated or saw anyone else operate the lifeboat releasing gear. Each man denied he operated the releasing gear. Each man also stated that he did not see anyone else operate the releasing gear. No other witnesses on board the passenger vessel, who were questioned, could testify as to who operated the lifeboat releasing gear.

This fatal accident was apparently caused by reason of the inadvertence and/or stupidity on the part of one man, presently unknown, who operated the releasing gear without orders, thus releasing the gear and dropping the lifeboat. In summarizing this accident the following is pointed out:

(1) Certificated lifeboatmen must always be on the alert to prevent accidents.

(2) All members of a lifeboat crew must report immediately to their stations.

(3) "Know-how" and common sense are necessary and must be used to avoid accidents.

This tragedy points out the necessity for all crew members to know how to conduct themselves during abandon ship drill. The Coast Guard has published a "Manual for Lifeboatmen and Able Seamen, Qualified Members of Engine Department, and Tankermen" (CG-175), which may be obtained from any local Coast Guard marine inspection office or from the Commandant, United States Coast Guard Headquarters, Washington 25, D. C. In this manual are set forth the requirements and examination for certificate of efficiency as lifeboatman, as well as emergency procedures to be followed in lifeboat drills. There are also many commercial publications available on the same subject.

MIGHTY LUCKY!

By Lt. Comdr. Stanley G. Perrett, USCG

A 45-foot, 13-ton, open-cockpit, fishing boat recently exploded and was completely destroyed by fire. Flaming gasoline from the exploded tank covered the water and burned the hull.

At 0700, an operator of 33 years' experience boarded the boat alone, opened the pilot house for ventilation, checked the vessel in general, and departed. Visibility, clear; temperature, 35°; humidity, very high; with a flat glass calm.

Returning at 0800, the operator started the uncovered open gasoline engine. At 0810 the vessel was completely demolished by a terrific explosion which hurled the aft reel about 80 feet, severely damaging another boat. The operator, who had been standing in the starboard pilot house doorway (on the waterside) was thrown into the water unconscious. Apparently he struck the door overhead. In the cold slip water he revived in time to swim clear of the spreading gasoline flames.

There were no witnesses present to render aid, but a shopkeeper two blocks away, hearing the blast ran to the scene of the casualty and dove into the water to rescue the operator.

Result: One man yet alive. By luck the man chanced to stand in the pilothouse doorway on the waterside of the boat. He was thrown into the water instead of being hurled toward the rubble-strewn dock. Hospitalized, he suffered from shock, multiple abrasions, a broken foot, and most probably the loss of an eye which was porcupined by wood splinters. The boat and equipment were a total loss.

Immediate investigation revealed the original aft area decked over about 2½ feet over the bilge, and a 100-gallon gasoline tank (which was about one-third full at the time of the explosion) located in the stern and beneath cover. In compliance with the barest minimum requirement the boat was fitted with two ventilators near the tank. There were no known leaks, and no unusual amount of fumes were noted the morning of the explosion. However, due to an absence of exhaust blowers, the only movement of gaseous vapors would have been from a breeze, which on this morning was nonexistent. Because it was calm most of the night and morning, all vapors must have surrounded the boat and slip like an explosive awaiting the detonator. Either an exhaust spark or a hot exhaust pipe set off the chain of va-

pors as the wiring and all switches were forward, untouched, and no fire was noted beforehand. The engine was equipped with an efficient flame arrestor.

No novice, this operator. Yet the combination of circumstances preceding this explosion resulted in the complete disintegration of the boat and the extremely serious, almost fatal, injury of the operator.

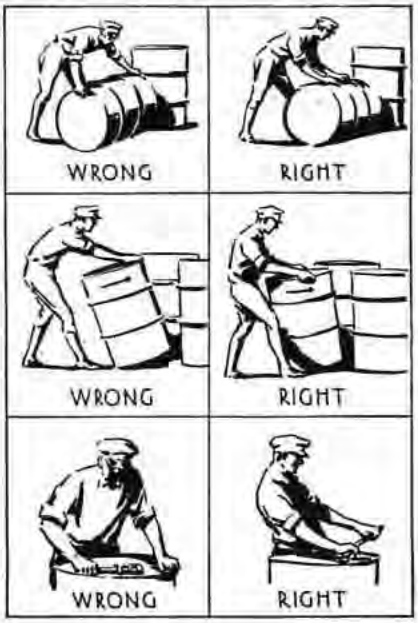
Moral: Partially filled gasoline tanks still make effective bombs. Ventilators have no effect without wind. No one is completely exempted from the laws of physics. A timely installation of an induced exhaust blower as in "Recommended Practices for the Care and Safe Operation of Motorcraft" would have prevented this casualty.

SMOKING ON TANKERS

With the exception that smoking is prohibited by regulation on weather decks of tank vessels when they are not gas-free or are alongside docks, the responsibility for designating when and where smoking may be permitted on board tank vessels rests with the senior deck officer on duty. Serious consideration must be given this responsibility for vapor explosions on tank vessels due to the striking of a match or the indiscreet disposal of a butt can result in casualties of serious proportions.

The second officer of a tanker and an agent of the company may consider themselves very fortunate in looking back on the events of an early morning last November. The agent had been busy copying data from the ship's log which he found lying on a table in the recreation room of the T-2 tanker. This room is located on the second deck above the main deck in the midships house. As the agent was working, the second mate entered, seated himself at the table, remarked that the ship seemed "gassy," took out a cigarette, struck a match and inhaled—not the finest, imported Turkish tobacco, but the products of combustion of gasoline vapors. The explosion caused severe burns to the vessel's agent and the mate, both of whom required hospitalization for many days. The vessel suffered scorched paint in the passageways and recreation room and an indented bulkhead. It could have been much worse involving, perhaps, loss of life, or the vessel.

HANDLING DRUMS
Avoiding Crushed Fingers



It was disclosed that the recreation room was designated by the master as a place to smoke while loading and discharging cargo. This is a general designation covering most ordinary situations but does not preclude the exercise of common sense in the interest of safety. In this case, for example, the mate had remarked, prior to the explosion, that the ship seemed gassy. Although ordinarily there must have been the smell of gasoline about the vessel during the discharge operation which would have been carried by an individual from the weather deck into a compartment, it must have been an unusual atmosphere which prompted the mate's statement. It does not seem likely that a prudent man would strike a match after making such an observation.

The discharge of cargo had actually been completed and water ballast was being taken in No. 5 center. Vapor in the tank was forced out and found its way into the recreation room. This may not be a common occurrence on this type of vessel, but in view of what can and did transpire, it would seem pertinent for masters to prohibit smoking in the recreation room and lower quarters of T-2 tank vessels while loading, discharging, or taking on ballast.

"Sanitation is a way of life. It is the quality of living that is expressed in the clean home, the clean farm, the clean business and industry, the clean neighborhood, the clean community. Being a way of life it must come from within the people; it is nourished by knowledge and grows as an obligation and an ideal in human relations."

Courtesy Farrell Lines Safety News.

APPENDIX

Amendments to Regulations

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

Subchapter O—Regulations Applicable to Certain Vessels During Emergency

[CGFR 52-7]

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

TERRITORY OF GUAM

The purpose for the following waiver order designated 46 CFR 154.30, as well as 33 CFR 19.30, is to waive the application of the navigation and vessel inspection laws and regulations issued pursuant thereto which are administered by the Commandant, United States Coast Guard, for the Territory of Guam so that vessels certificated by the Government of the Territory of Guam may operate in and around the Territory of Guam and the Trust Territory of the Pacific Islands subject to the requirements of the Government of the Territory of Guam for the inspection of vessels which are to be applicable in lieu of the navigation and vessel inspection laws of the United States. This waiver order shall not apply to vessels navigating between the Territory of Guam and the United States and its territories or any foreign country. This waiver order is a temporary measure granted purely in the interest of national defense and will cease to be in effect on July 1, 1952. It is hereby 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.

The waiver order dated July 5, 1951, and contained in a letter to the Governor of Guam, Territory of Guam, is superseded and canceled by this

[1] Also codified as 33 CFR Part 19.

waiver order on the date this document is published in the FEDERAL REGISTER.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by an order of the Acting Secretary of the Treasury, dated January 23, 1951, identified as CGFR 51-1 and published in the FEDERAL REGISTER dated January 26, 1951 (16 F. R. 731), the following waiver order is promulgated and shall be in effect on and after the date of publication in the FEDERAL REGISTER until July 1, 1952:

§ 154.30 *Territory of Guam*—(a) *Waiver.* I hereby waive in the interest of national defense the application of the navigation and vessel inspection laws, and regulations issued pursuant thereto over which the Commandant, United States Coast Guard, has administrative jurisdiction, insofar as such laws or regulations apply to vessels which are owned in Guam and operate in and around the Territory of Guam and the Trust Territory of the Pacific Islands or which are owned in the Trust Territory of the Pacific Islands and operate in whole or in part in or around the Territory of Guam: *Provided,* That this section shall not apply to vessels operating between the Territory of Guam and the United States, Puerto Rico, the Virgin Islands, the Canal Zone, and its other territories, or any foreign country: *And provided further,* That vessels subject to this section shall comply with the terms and conditions set forth in paragraph (b) of this section.

(b) *Terms and conditions.* The vessels subject to this section shall comply with the requirements the Government of the Territory of Guam, shall prescribe for the safety of life on board vessels and shall carry on board certificates or other documents evidencing compliance with such requirements, which shall serve in lieu of any inspection certificate required by the navigation and vessel inspection laws and normally issued by the United States Coast Guard.

(c) *Termination date.* This section shall remain in effect until and including June 30, 1952, unless sooner terminated by proper authority.

Dated: February 19, 1952.

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

[F. R. Doc. 52-2202; Filed, Feb. 25, 1952; 8:49 a. m., 17 F. R. 1687—2/26/52.]

NOW IS THE TIME FOR ALL GOOD BOATMEN TO COME TO THE AID OF THEIR SHIPMATES

[CGFR 52-16]

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

S. S. "ARCTIC" (GUAM)

The purpose for the following waiver order designated 46 CFR 154.31, as well as 33 CFR 19.31, is to waive the application of the navigation and vessel inspection laws, and regulations issued pursuant thereto which are administered by the Commandant, United States Coast Guard, to the extent necessary to permit the S. S. *Arctic* to be operated between the Territory of Guam, the Trust Territory of the Pacific Islands, and the Commonwealth of Australia under a certificate of the Government of the Territory of Guam, which certificate shall also evidence that the vessel complies with all the applicable requirements for the inspection of vessels in the Territory of Guam. This waiver order is a temporary measure granted purely in the interest of national defense and will cease to be in effect on July 1, 1952. It is hereby 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 an order of the Acting Secretary of the Treasury, dated January 23, 1951, identified as CGFR 51-1 and published in the FEDERAL REGISTER dated January 26, 1951 (16 F. R. 731), the following waiver order is promulgated and shall be in effect until and including June 30, 1952:

§ 154.31 *S. S. "Arctic" (Guam)*—(a) *Waiver.* I hereby waive in the interest of national defense the application of the navigation and vessel inspection laws, and regulations issued pursuant thereto over which the Commandant, United States Coast Guard, has administrative jurisdiction, insofar as such laws or regulations apply to the S. S. *"Arctic"*: *Provided,* That this section shall apply to voyages between the Territory of Guam, the Trust Territory of the Pacific Islands, and the Commonwealth of Australia; *And provided further,* That such vessel shall be subject to the terms and conditions set forth in paragraph (b) of this section.

(b) *Terms and conditions.* The S. S. "Arctic" shall comply with all the applicable requirements of the Government of the Territory of Guam and shall carry on board a certificate or other document evidencing compliance with such requirements, which certificate or document shall serve in lieu of any inspection certificate required by the navigation and vessel inspection laws and normally issued by the United States Coast Guard. The S. S. *"Arctic"* shall have American citizens as master, chief engineer, and radio officer.

(c) *Termination date.* This section shall remain in effect until and including June 30, 1952, unless sooner terminated by proper authority.

Dated: February 19, 1952.

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

[F. R. Doc. 52-2203; Filed, Feb. 25, 1952; 8:49 a. m. 17 F. R. 1687—2/26/52.]

[1] Also codified as 33 CFR Part 19.

Equipment Approved by the Commandant

[CGFR 52-4]

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and in compliance with the authorities cited below, the following approvals of equipment are prescribed and shall be effective for a period of five years from date of publication in the FEDERAL REGISTER unless sooner canceled or suspended by proper authority:

LIFE PRESERVERS, FIBROUS GLASS, ADULT AND CHILD (JACKET TYPE)

Approval No. 160.005/1/0, Model 51 adult fibrous glass life preserver, U. S. C. G. Specification Subpart 160.005, manufactured by The American Pad & Textile Co., Greenfield, Ohio.

Approval No. 160.005/2/0, Model 55 child fibrous glass life preserver, U. S. C. G. Specification Subpart 160.005, manufactured by The American Pad & Textile Co., Greenfield, Ohio.

(R. S. 4405, 4417a, 4426, 4481, 4482, 4488, 4491, 4492, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 164, 166, 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 375, 391a, 404, 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. 1275; 46 CFR 160.005)

BUOYANT CUSHIONS, KAPOK, STANDARD

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

Approval No. 160.007/112/0, Standard kapok buoyant cushion, U. S. C. G. Specification Subpart 160.007, manu-

factured by Elton A. Johnson Sailmakers, Inc., 1642 Northwest Seventeenth Avenue, Miami 35, Fla.

(R. S. 4405, 4491, 54 Stat. 164, 166, as amended; 56 U. S. C. 375, 489, 526e, 526p; 46 CFR 25.4–1, 160.007)

BUOYANT CUSHIONS, NON-STANDARD

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

Approval No. 160.008/499/0, 14½" x 16" x 2" rectangular buoyant cushion, 22 oz. kapok, dwg. No. BC–1, dated Oct. 31, 1951, manufactured by Farber Brothers, Inc., 821–841 Linden Avenue, Memphis, Tenn.

Approval No. 160.008/500/0, 14" x 18¼" x 2" rectangular buoyant cushion, 24 oz. kapok, dwg. No. BC–2, dated Oct. 31, 1951, manufactured by Farber Brothers, Inc., 821–841 Linden Avenue, Memphis, Tenn.

Approval No. 160.008/502/0, 12" x 48" x 2" rectangular buoyant cushion, 51 oz. kapok, dwg. dated Nov. 8, 1951, manufactured by The Safegard Corp., Box 66, Station B, Cincinnati 22, Ohio.

Approval No. 160.008/503/0, 15" x 48" x 2" rectangular buoyant cushion, 64 oz. kapok, dwg. dated Nov. 8, 1951, manufactured by The Safegard Corp., Box 66, Station B, Cincinnati 22, Ohio.

Approval No. 160.008/504/0, 18" x 18" x 2¼" rectangular buoyant cushion, 38 oz. kapok, dwg. No. SK 9784, dated Nov. 29, 1951, manufactured by the Chris-Craft Corp., Algonac, Mich.

(R. S. 4405, 4491, 54 Stat. 164, 166, as amended; 46 U .S. C. 375, 489, 526e, 526p; 46 CFR 25.4–1, 160.008)

WINCHES, LIFEBOAT

Approval No. 160.015/60/0, Type MP–31 lifeboat winch for use with mechanical davits, fitted with wire rope not more than 7/16 inch in diameter and with not more than 2 wraps of the falls on the drums. Approval is limited to mechanical components and for a maximum working load of 4,000 pounds pull at the drums (2,000 pounds per fall). Identified by arrangement dwg. No. 1495–1 dated Jan. 8, 1951, and revised Sept. 19, 1951, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York, N. Y.

(R. S. 4405, 4417a, 4426, 4488, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 481, 489, 1333, 50 U. S. C. 1275; 46 CFR 33.10–5, 59.3a, 60–21, 76.15a, 94.14a, 160.–015)

CONTAINERS, EMERGENCY PROVISIONS AND WATER

Approval No. 160.026/18/0, Container for emergency drinking water, dwg. No. A–104, dated Sept. 11, 1951, manufactured by H & M Packing Corp., 913 Ruberta Avenue, Glendale 1, Calif.

(R. S. 4405, 4417a, 4426, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 489, 1333, 50 U. S. C. 1275; 46 CFR 33.15–1, 59.11)

LIFEBOATS

Approval No. 160.035/12/1, 18.0' x 5.7' x 2.5' steel, oar-propelled lifeboat, 15-person capacity, identified by general arrangement dwg. No. G–1815, dated July 25, 1951, revised Aug. 28, 1951, manufactured by C. C. Galbraith & Son, Inc., 99 Park Place, New York, N. Y. (Supersedes Approval No. 160.035/12/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 160.035/85/1, 12.0' x 4.4' x 1.9' steel, oar-propelled lifeboat, 6-person capacity, identified by general arrangement and construction dwg. No. 49R–1213 dated Aug. 16, 1951, manufactured by Lane Lifeboat and Davit Corp., 8920 Twenty-sixth Avenue, Brooklyn 14, N. Y. (Supersedes Approval No. 160.035/85/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 160.035/90/1, 18.0' x 6.0' x 2.4' steel, oar-propelled lifeboat, 15-person capacity, identified by general arrangement and construction dwg. No. 49R–1812, dated Oct. 17, 1950, and revised Nov. 8, 1950, manufactured by Lane Lifeboat & Davit Corp., 8920 Twenty-sixth Avenue, Brooklyn 14, N. Y. (Supersedes Approval No. 160.035/90/0 published in the FEDERAL REGISTER July 31, 1947.)

(R. S. 4405, 4417a, 4426, 4481, 4488, 4491, 4492, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 396, 404, 474, 481, 489, 490, 1333, 50 U. S. C. 1275; 46 CFR 33.01–5, 59.13, 76.16, 94.15, 113.10, 160.035)

BOILERS, HEATING

Approval No. 162.003/125/0, Crane 30 cast iron sectional steam or hot water heating boiler, dwg. No. DR–26746, Revision B dated Dec. 12, 1951, maximum design pressure 15 p. s. i., approval limited to bare boiler, manufactured by Crane Co., 836 South Michigan Avenue, Chicago 5, Ill.

Approval No. 162.003/126/0, Crane 40 cast iron sectional steam or hot water heating boiler, dwg. No. DR–26747, Revision B dated Dec. 12, 1951, maximum design pressure 15 p. s. i., approval limited to bare boiler, manufactured by Crane Co., 836 South Michigan Avenue, Chicago 5, Ill.

Approval No. 162.003/127/0, Type Eco-Scotch, horizontal fire tube steam heating boiler, welded steel plate construction, dwg. Nos. 88529, Revisison B dated Nov. 28, 1951, and 88541, Revision A dated Nov. 28, 1951, maximum design pressure 30 p. s. i., approval limited to bare boiler, manufactured by Erie City Iron Works, Erie, Pa.

(R. S. 4405, 4417a, 4418, 4426, 4433, 4434, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended, 46 U. S. C. 367, 375, 391a, 392, 404, 411, 412, 489, 1333, 50 U. S. C. 1275; 46 CFR Part 52)

FIRE EXTINGUISHERS, PORTABLE, HAND, DRY CHEMICAL TYPE

Approval No. 162.010/3/1, Ansul M4 dry chemical type hand portable fire extinguisher, assembly dwg. No. DS–1785 dated Sept. 27, 1950, no revision, name plate dwg. No. DS–1780 dated Sept. 26, 1950, no revision, and Parts List Index revised June 27, 1951, manufactured by Ansul Chemical Co., Marinette, Wis. (Supersedes Approval No. 162.010/3/0 published in the FEDERAL REGISTER Mar. 21, 1951.)

Approval No. 162.010/13/0, Ansul M–4–B dry chemical type hand portable fire extinguisher, assembly dwg. No. DS–2218 dated June 21, 1951, no revision, name plate dwg. No. DS–2217 dated June 21, 1951, no revision, and Parts List Index dated June 27, 1951, manufactured by Ansul Chemical Co., Marinette, Wis.

(R. S. 4405, 4417a, 4426, 4479, 4491, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 391a, 404, 463a, 472, 489, 490, 526g, 526p, 1333, 50 U. S. C. 1275, 46 CFR 25.5–1, 26.3–1, 27.3–1, 28.3–5, 34.25–1, 61.13, 77.13, 95.13, 114.15)

VALVES, SAFETY (FOR STEAM HEATING BOILERS)

Approval No. 162.012/2/0. No. 2568 cast iron body brass base, pop safety valves for steam heating boilers, dwg. No. A–25718, Revision C dated Nov. 2, 1950, approved in the following sizes for a maximum pressure of 15 p. s. i., manufactured by Crane Co., 836 South Michigan Avenue, Chicago 5, Ill.:

Size (inches):	*Capacity, pounds/hour*
¾	360
1	580
1¼	870
1½	1,125
2	2,140
2½	3,485
3	4,865

(R. S. 4405, 4417a, 4418, 4426, 4433, 4491, 49 Stat. 1544, 54 Stat. 346, and sec 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 375, 391a, 392, 404, 411, 489, 367, 1333, 50 U. S. C. 1275; 46 CFR 52.65)

VALVES, SAFETY RELIEF LIQUEFIED COMPRESSED GAS

Approval No. 162.018/18/1, Consolidated Type 1610W, spring-loaded nozzle type safety relief valve, for liquefied petroleum gas service, metal-to-metal valve seat; dwg. No. W–9–B6, dated Apr. 4, 1947, Revision 1, 300

p. s. i. primary service pressure rating; flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Size (nominal inlet x outlet) and nozzle area (sq. in.)					
	3" x 4"—1.986		4" x 6"—3.079		6" x 8"—11.95	
	Air	LP-gas	Air	LP-gas	Air	LP-gas
100	3,850	3,260	5,970	5,060	23,170	19,640
150	5,550	4,860	8,600	7,530	33,390	29,240
200	7,250	6,720	11,230	10,420	43,610	40,460
250	8,950	8,860	13,870	13,730	53,830	53,300

(Supersedes Approval No. 162.018/18/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 162.018/19/1, Consolidated Type 1611W, spring-loaded nozzle type safety relief valve, for liquefied petroleum gas service, metal-to-metal valve seat; dwg. No. W-9-B6, dated Apr. 4, 1947, Revision 1, 600 p. s. i. primary service pressure rating for sizes 3" and 4", 300 p. s. i. for 6" diameter; flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured at 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Size (nominal inlet x outlet) and nozzle area (sq. in.)					
	3" x 4"—1.986		4" x 6"—3.079		6" x 8"—11.95	
	Air	LP-gas	Air	LP-gas	Air	LP-gas
100	3,850	3,260	5,970	5,060	23,170	19,640
150	5,550	4,860	8,600	7,530	33,390	29,240
200	7,250	6,720	11,230	10,420	43,610	40,460
250	8,950	8,860	13,870	13,730	53,830	53,300

(Supersedes Approval No. 162.018/19/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 162.018/20/1, Consolidated Type 1612W, spring-loaded nozzle type safety relief valve, for liquefied petroleum gas service, metal-to-metal valve seat; dwg. No. W-9-B6, dated Apr. 4, 1947, Revision 1, 300 p. s. i. or 600 p. s. i. primary service pressure rating for sizes 3" and 4", 300 p. s. i. for 6" diameter; flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured at 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Size (nominal inlet x outlet) and nozzle area (sq. in.)					
	3" x 4"—1.986		4" x 6"—3.079		6" x 8"—11.95	
	Air	LP-gas	Air	LP-gas	Air	LP-gas
100	3,850	3,260	5,970	5,060	23,170	19,640
150	5,550	4,860	8,600	7,530	33,390	29,240
200	7,250	6,720	11,230	10,420	43,610	40,460
250	8,950	8,860	13,870	13,730	53,830	53,300

(Supersedes Approval No. 162.018/20/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 162.018/21/1, Consolidated Type 1613AW, spring-loaded nozzle type safety relief valve, for liquefied petroleum gas service, metal-to-metal valve seat; dwg. No. W-9-B6, dated Apr. 4, 1947, Revision 1, 300 p. s. i. primary service pressure rating; flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured at 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Size (nominal inlet x outlet) and nozzle area (sq. in.), 4" x 6"—4.695	
	Air	LP-gas
100	9,100	7,710
150	13,120	11,490
200	17,130	15,890
250	21,150	20,940

(Supersedes Approval No. 162.018/21/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 162.018/22/1, Consolidated Type 1613BW, spring-loaded nozzle type safety relief valve, for liquefied petroleum gas service, metal-to-metal valve seat; dwg. No. W-9-B6, dated Apr. 4, 1947, revision 1, 300 p. s. i. primary service pressure rating; flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured at 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Size (nominal inlet x outlet) and nozzle area (sq. in.), 4" x 6"—4.695	
	Air	LP-gas
100	9,100	7,710
150	13,120	11,490
200	17,130	15,890
250	21,150	20,940

(Supersedes Approval No. 162.018/22/0 published in the FEDERAL REGISTER July 31, 1947.)

Approval No. 162.018/24/1, Consolidated 4" Type 1661, spring-loaded, internal type safety relief valve, for liquefied compressed gas service, valve disc seat fitted with "O" ring gasket; dwg. No. CM-4-1661, approved for a maximum set pressure of 250 p. s. i., flow rated at 110 percent of the following set pressures (discharge in cubic feet per minute measured at 60° F. and 14.7 p. s. i. a.), manufactured by Manning, Maxwell & Moore, Inc., 2415 East Thirteenth Place, Tulsa 4, Okla.:

Set pressures	Air	LP-gas
100	5,490	4,650
150	7,780	6,810
200	9,890	9,180
250	11,950	11,830

(Supersedes Approval No. 162.018/24/0 published in the FEDERAL REGISTER May 17, 1949.)

(R. S. 4405, 4417a, 4491, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 375, 391a, 489, 50 U. S. C. 1275; 46 CFR Part 38)

Dated: January 30, 1952.

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

[F. R. Doc. 52-1485; Filed, Feb. 5, 1952; 8:49 a. m., 17 F. R. 1156—2/6/52.]

[CGFR 52-5]

TERMINATION OF APPROVAL OF EQUIPMENT

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and in compliance with the authorities cited below, the following approvals of equipment are terminated because the items of equipment covered are no longer being manufactured for marine service:

BUOYS, LIFE, RING, CORK OR BALSA WOOD

Termination of Approval No. 160.-009/34/0, 30-inch cork ring life buoy, U. S. C. G. Specification Subpart 160.009, manufactured by Western Canvas Products Co., 417 East Pine Street, Seattle 22, Wash. (Approved FEDERAL REGISTER dated June 1, 1951.)

Termination of Approval No. 160.-009/35/0, 30-inch balsa wool ring life buoy, U. S. C. G. Specification Subpart 160.009, manufactured by West-

THE PORTION OF THE PIER DECK WHICH LIES BETWEEN THE OUTER END OF THE PIER SHED AND THE EXTREME OUTER OR WATER FRONT FACE OF THE PIER IS KNOWN AS THE APRON

ern Canvas Products Co., 417 East Pine Street, Seattle 22, Wash. (Approved FEDERAL REGISTER dated June 1, 1951.)

CONDITIONS OF TERMINATION OF APPROVALS

The termination of approvals of equipment made by this document shall be made effective upon the thirty-first day after the date of publication of this document in the FEDERAL REGISTER. Notwithstanding this termination of approval on any item of equipment, such equipment manufactured before the effective date of termination of approval may be used on merchant vessels so long as it is in good and serviceable condition.

Dated: January 30, 1952.

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

[F. R. Doc. 52-1486; Filed, Feb. 5, 1952; 8:49 a. m., 17 F. R. 1156—2/6/52.]

AFFIDAVITS

The following affidavit was accepted during the period from January 15 to February 15, 1952:

Accurate Foundry Co., 25240 Dequindre, Box 94, Hazel Park, Mich. Castings.

CERTIFICATION OF ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from January 26 to February 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."

Virginia Smelting Co., West Norfolk, Va., Certificate No. 342, dated February 7, 1952, "Lethalaire Aero Deodorant Formula."

Bromm Chemical Co., Inc., Goodsell and Ohio Sts., Evansville 10, Ill., Certificate No. 343, dated February 21, 1952, "Yellow Label Special 444 Formula Aerosol Insecticide."

Merchant Marine Personnel Statistics

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 686 cases during the month of December 1951. From this number, hearings before Examiners resulted involving 14 officers and 50 unlicensed men. In the case of officers, no license was revoked, 3 were suspended without probation, 6 were suspended with probation granted, no licenses were voluntarily surrendered, 1 was dismissed after hearing, and one hearing was closed with an admonition. Of the unlicensed personnel 12 certificates were revoked, 10 were suspended without probation, 25 were suspended with probation granted, 4 were voluntarily surrendered, 2 hearings were closed with admonitions and 1 case was dismissed after hearing.

ORIGINAL SEAMEN'S DOCUMENTS ISSUED

DECEMBER 1951

Type of document	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Total
Staff officer	27	9	24	----	60
Continuous discharge book	----	12	----	----	12
Merchant mariner's documents	1,253	416	627	542	2,838
AB any waters unlimited	93	25	63	12	193
AB any waters, 12 months	35	10	35	10	90
AB Great Lakes, 18 months	1	3	----	3	7
AB tugs and towboats, any waters	----	----	1	----	1
AB bays and sounds [1]	----	----	----	----	----
AB seagoing barges	----	----	----	----	----
Lifeboatman	86	18	51	14	169
Q. M. E. D.	127	33	53	21	234
Radio operators	5	1	1	----	7
Certificate of service	1,221	388	608	499	2,716
Tankerman	2	5	1	34	42

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

NOTE.—The last 11 categories indicate number of endorsements made on United States merchant mariner's documents.

WAIVER OF MANNING REQUIREMENTS

DECEMBER 1951

Waivers	Atlantic coast	Gulf coast	Pacific coast	Great Lakes	Total
Deck officers substituted for higher ratings	7	1	----	----	8
Engineer officers substituted for higher ratings	41	3	7	----	51
O. S. for AB	470	136	66	1	673
Wiper or coal passers for Q. M. E. D.	243	57	60	1	361
Total waivers	761	197	133	2	1,093
Number of vessels	364	119	65	1	549

NOTE.—In addition, individual waivers were granted to permit the employment of 30 able seamen holding certificates for "any waters—12 months" in excess of the 25 percent authorized by statute.

MERCHANT MARINE OFFICER LICENSES ISSUED

DECEMBER 1951

DECK

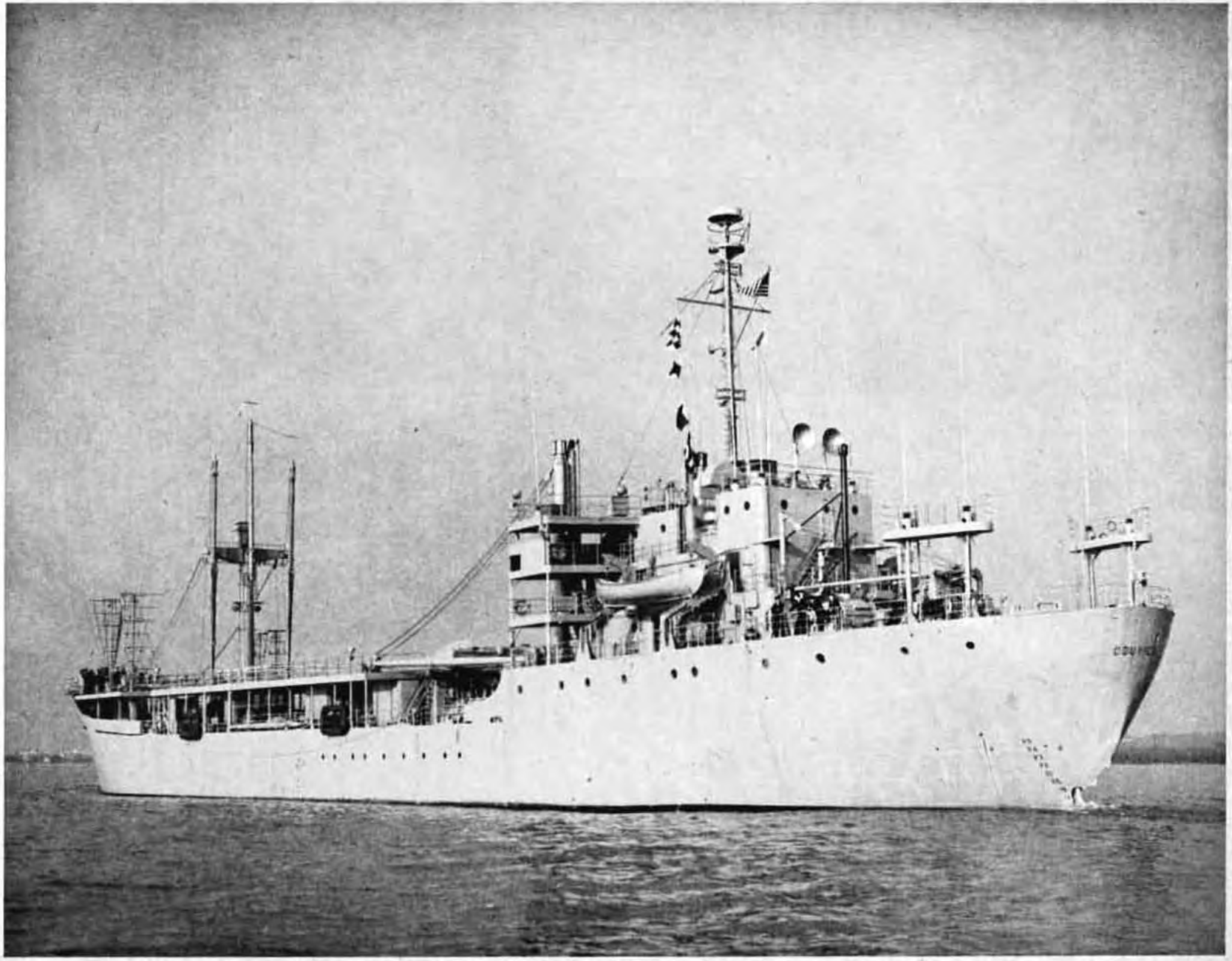
Grade	Original	Renewal
Master:		
Ocean	32	163
Coastwise	3	25
Great Lakes	4	34
B. S. & L.	5	14
Rivers	5	12
Radio Officers Licenses issued	52	----
Chief Mate:		
Ocean	46	50
Coastwise	1	4
Mate:		
Great Lakes	----	1
B. S. & L.	6	5
Rivers	3	5
Second Mate:		
Ocean	27	60
Coastwise	1	4
Third Mate:		
Ocean	90	53
Coastwise	----	----
Pilots:		
Great Lakes	8	20
B. S. & L.	62	164
Rivers	12	20
Master: Uninspected Vessels	1	6
Mate: Uninspected Vessels	3	2
Total	361	642
Grand total	1,003	

ENGINEER

Grade	Original	Renewal
STEAM		
Chief Engineer:		
Unlimited	26	162
Limited	6	81
First Assistant Engineer:		
Unlimited	30	47
Limited	----	9
Second Assistant Engineer:		
Unlimited	26	87
Limited	1	3
Third Assistant Engineer:		
Unlimited	100	92
Limited	----	----
MOTOR		
Chief Engineer:		
Unlimited	7	56
Limited	8	69
First Assistant Engineer:		
Unlimited	2	5
Limited	----	----
Second Assistant Engineer:		
Unlimited	4	7
Limited	2	----
Third Assistant Engineer:		
Unlimited	93	100
Limited	----	----
Chief Engineer: Uninspected Vessels	2	6
Assistant Engineer: Uninspected Vessels	4	----
Total	311	724
Grand total	1,035	

The material things we want, have to be produced by somebody—*at a cost.*

DANGERS LURK ALONG THE WAY OF THOSE WHO NO ATTENTION PAY



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