PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL
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MERCHANT MARINE COUNCIL

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Cover Picture:
U. S. C. G. C. *Pontchartrain* is shown battling it out in the North Atlantic on Ocean Station Baker (Official Coast Guard Photo).

Distribution (SDL 40):
A: a, b, c, d (2 ea.); remainder (1 ea.).
B: e (35 ea.); c (14 ea.); g, l (5 ea.); f (4 ea.); h (3 ea.); d (2 ea.); remainder (1 ea.).
C: All (1 ea.).
D: All (1 ea.).
E: m (1 ea.).
List 141M.

COUNCIL ACTIVITIES

PUBLIC HEARING TO CONSIDER CHANGES IN INSPECTION AND NAVIGATION REGULATIONS

The Merchant Marine Council will hold a public hearing on March 28, 1950, commencing at 9:30 a. m., in Room 4120, Coast Guard Headquarters, Thirteenth and E Streets NW., Washington, D. C., to consider proposed changes in the inspection and navigation regulations, as well as the termination of approval of certain equipment.

The Council will consider all comments of persons having an interest in the revisions summarized below. Copies of the proposed changes in the regulations have been mailed to persons and organizations who had expressed an active interest in the subjects under consideration.

Comments on the proposed regulations are invited and may be submitted in writing for receipt prior to March 28 by the Commandant (CMC), Coast Guard Headquarters, Washington 25, D. C., or presented orally or in writing at the hearing. In order to insure thorough consideration and to facilitate checking and recording of comments, it is requested that each suggested rewording of a proposed regulation be submitted on a separate sheet of letter-size paper, showing the section number (if possible) and the subject with item number; the proposed change; the reason or basis (if any); and the name, business firm (if any), and address of submitter.

The proposed agenda will include the following:

1. Lifeboats for pilot vessels.
2. Posting placards containing instructions for use of breeches buoy.
3. Marking of fire and emergency equipment, etc.
4. Inspection of lifeboats when built.
5. Inspection of life rafts when built.
6. Construction and stowage of life rafts.
7. Termination of approval of power boilers.
8. Specifications for lifesaving equipment.

LIFEBOATS FOR PILOT VESSELS

In accordance with a petition received, it is proposed to amend sections 59.6 and 60.4 of the general rules and regulations for vessel inspection, ocean and coastwise, and add section 94.9a to the general rules and regulations for vessel inspection, bays, sounds, and lakes other than the Great Lakes to provide that vessels engaged exclusively in the business of furnishing pilots to vessels in need of their services may use their launches and/or yawls, when their total capacity is sufficient to accommodate all persons on board, in lieu of the standard lifeboats.

POSTING PLACARDS CONTAINING INSTRUCTIONS FOR USE OF BREECHES BUOY

It is proposed to amend section 79.17 and redesignate this section as section 78.15 in the general rules and regulations for vessel inspection, Great Lakes, and to add a new section 96.15 to the general rules and regulations for vessel inspection, bays, sounds, and lakes other than the Great Lakes, which will require the posting of inspections for use of breeches buoy on vessels of 150 gross tons or over subject to inspection by the Coast Guard. The proposed regulation will require the posting of these instructions in the pilothouse, in the engine room, and in the seamen's, firemen's, and stewards' departments. This placard shows the methods for attaching a line to a vessel and how the breeches buoy may be used in effectuating a transfer of persons from a stranded vessel. Because many Coast Guard lifeboat stations are located along the bays and sounds of the United States, it is felt that personnel on vessels that operate within the rescue areas of these lifeboat stations should be thoroughly familiar with the instructions and manner in which a breeches buoy may be used.

MARKING OF FIRE AND EMERGENCY EQUIPMENT, ETC.

The requirements and recommendations for the marking of fire and emergency equipment, etc., were issued in Navigation and Vessel Inspection Circular No. 5–47, dated June 12, 1947, which was revised and reissued in a Circular No. 8–49, dated August 12, 1949. While some of the markings and signs are presently required by specific regulations, it is felt desirable to have all requirements for marking of fire and emergency equipment, etc., placed in one group so that the operator or master of a vessel can easily keep track of the various requirements and provide for their maintenance or renewal after painting operations. It is therefore proposed to amend the tank vessel regulations and the general rules and regulations for vessel inspection for ocean and coastwise; Great Lakes; bays, sounds, and lakes other than the Great Lakes; and rivers, respectively, by adding new sections 35.7–1 to 35.7–9, inclusive, 62.40, 78.40, 96.40, and 115.40, regarding marking of fire and emergency equipment and apparatus, fire doors, watertight doors, lifeboat embarkation stations and direction signs, stateroom notices, instructions for changing steering gears, etc.

INSPECTION OF LIFEBOATS WHEN BUILT

When the specifications for lifeboats were revised and published in the Federal Register dated August 17, 1949, as a part of subchapter Q, specifications, the requirements for inspection of lifeboats when built were revised and included in the specifications as section 160.035–10. In order to eliminate duplications, it is proposed to delete sections 59.14, 60.11, 65.12, 76.17, 94.16, 102.7 and 113.9 from the general rules and regulations for vessel inspection for ocean and coastwise, Great Lakes, bays, sounds, and lakes other than the Great Lakes, and rivers, respectively.

INSPECTION OF LIFE RAFTS WHEN BUILT

When the specifications for life rafts for merchant vessels were revised and placed in subchapter Q, specifications, the requirement for inspection of life rafts when built were included therein as section 160.018–7. It is therefore proposed to delete sections 59.43, 60.30, 76.33, 94.33 and 113.30 in the general rules and regulations for vessel inspection for ocean and coastwise, Great Lakes, bays, sounds, and lakes other than the Great Lakes, and rivers, respectively. The revised requirements for inspection of life rafts when built were published in the Federal Register dated January 11, 1950, and were included in section 160.018–7 in the specifications for life rafts for merchant vessels.

CONSTRUCTION AND STOWAGE OF LIFE RAFTS

In the specifications for life rafts two types are provided. It is proposed to require that life rafts of the type A, required for vessels operating ocean and coastwise, shall be stowed on a life raft skid. This proposal applies only to new vessels and when life raft replacements are required on existing vessels. To accomplish this, it is proposed to amend sections 59.44 and 60.31 of the general rules and regulations for vessel inspection, ocean and coastwise.

TERMINATION OF APPROVAL OF POWER BOILERS

The termination of Approval No. 162.002/32/0, power boiler cyclotherm type MC–80, manufactured by the General Furnaces Corp., 90 Broad Street, New York 4, N. Y., will be considered because the manufacturer has failed to complete the required test, and the original approval is based on incomplete information. In the proposed termination of approval it is intended that any boilers now in use may be continued in service so long as they are in good and serviceable condition.

SPECIFICATIONS FOR LIFESAVING EQUIPMENT

It is proposed to publish in subchapter Q, specifications, new requirements for gas masks, self-contained breathing apparatus, and supplied-air respirators; flame safety lamps; first-aid kits; life raft skids; and jackknife (with can opener); as subparts 160.011, 160.016, 160.041, 160.042 and 160.043, respectively. These new specifications are for the manufacturing of equipment which will require approval of the Commandant before being used on merchant vessels. The present regulations relative to oxygen breathing apparatus, gas masks, and flame safety lamps require such equipment to be of an approved type. The specification covering life raft skids is to carry out the requirement in the proposed amendments to sections 59.44 and 60.31. The specifications for first-aid kits and jackknives (with can opener) are proposed at this time in order to give manufacturers an opportunity to have such items of equipment available when the 1948 International Convention for Safety of Life at Sea may become effective.

Development of the Ocean Station Program

General Background

The ocean station program has been a rather shifty fellow. The changes that have taken place during its development and particularly in the past year have confused many of us. The ocean stations have a long and varied history going back prior to World War II. There is on record a proposal made by Colonel Delcambre, Director of the Meteorological Service of France, in 1921 for establishing a stationary ship in the North Atlantic for purposes of weather observations and forecasting to benefit merchant shipping and trans-Atlantic air navigation (which he expected to develop in the near future). Following this there was set up in a sporadic way and by unilateral action various stations for both meteorological and/or plane guard uses.

North Atlantic Ocean Station

The origin of North Atlantic Ocean stations goes back to just prior to World War II when, in late 1939, at the request of the Secretary of Agriculture (for the Weather Bureau) the President directed the Coast Guard cutters performing neutrality patrol off the Grand Banks of Newfoundland to commence weather patrol activities. Two such stations were established early in 1940 with the Coast Guard providing ships and communication facilities and the Weather Bureau providing the meteorological personnel and equipment.

Following the United States entry into World War II the ocean station program was expanded and changed to meet the military need. Maximum number of ocean stations in the Atlantic was 22 (manned in 1945). The wartime program was primarily a bilateral affair between the United States and the United Kingdom, with the United States manning the majority of stations. Following the end of the war and the lowering of military need the number of stations dropped rapidly in the Atlantic.

Attendant with the drop in military need was the increase in commercial need for ocean stations in the North Atlantic. Looking to satisfy this commercial need the interested aeronautical nations of the North Atlantic region met at London September 17–25, 1946, and held the Picao Conference of North Atlantic States on Ocean Weather Observation Stations in the North Atlantic. The agreement reached there provided for 13 stations in the North Atlantic with cost proportioned among the nations that were members to the agreement. The United States was responsible for seven and one-half stations (one jointly with Canada).

The manning of the European share of the 1946 ocean stations in the North Atlantic was done by the Europeans in late 1947 and early 1948. The United States carried over the remnants of its wartime Atlantic weather patrol into the postwar program, but, due to lack of funds the implementing agency (USCG) was unable to fully man the United States commitment until 131200Z June 1949 when the C. G. Cutter *Humboldt* manned Station GEORGE in position 46 N., 29 W.

Although the manning of the North Atlantic Ocean stations was accomplished later than specified in the 1946 agreement (July 1, 1947), the 1946 agreement still provided for a second conference concerning ocean stations not later than April 1, 1949. This conference was again held in London (April–May 1949) and a reduction in number of stations from 13 to 10 was agreed upon. The United States share of this program being 5⅓ stations (4 stations full time, 2 stations shared on ⅔, ⅓ basis) and on August 9, 1949, the President, in behalf of the United States Government accepted this agreement. On September 3, 1949, the United States vessels (Coast Guard), on station, shifted to the positions as designated in the 1949 agreement.

The function of an ocean station can be broken down into two main topics, scientific and operational. In a scientific way, the ship on an ocean station makes both meteorological and oceanographic observations. The meteorological observations on United States ocean station vessels are made by United States Weather Bureau men on board the Coast Guard cutters. These observations consist of eight surface reports, four upper wind reports, and two upper air (RAOB) reports per day. The oceanographic observations are made by the Coast Guard personnel and consist of bathythermograph observations and sonic depth soundings.

To carry out the operational side of their function the ocean stations transmit the meteorological data to the weather offices ashore and also furnish it direct to aircraft in flight.

TABLE I.—ATLANTIC OCEAN STATIONS

Station	Location	Governments responsible	Remarks	International call	Radiobeacon	
					Basic identification	Frequency (kc.)
A	62°00′ N. 33°00′ W.	Netherlands, ¼; United States, ¾	U. S. C. G. manned. (Netherlands expected to assume their ¼ by fall 1950.).	NMMA	XA [1 2]	347
B	56°30′ N. 51°00′ W.	Canada, ¼; United States, ¾	R. C. N. and U. S. C. G. manned	NMMB	XB [1 2]	391
C	52°45′ N. 35°30′ W.	United States	U. S. C. G. manned	NMMC	XC [1 2]	385
D	44°00′ N. 41°00′ W.	do	do	NMMD	XD [1 2]	350
E	35°00′ N. 48°00′ W.	do	do	NMME	XE [1 2]	362
H	36°00′ N. 70°00′ W.	do	do	NMMH	XH [1 2]	326
I	59°00′ N. 19°00′ W.	United Kingdom	Currently (Jan. 1, 1950) manned by United Kingdom at 1946 position (I 60 N., 20 W., J 53°50′ N., 18°40′ W.).	MEA	QI [1 2]	406
J	52°30′ N. 20°00′ W.	do	do	MEB	QJ [1 2]	410
K	45°00′ N. 16°00′ W.	France	Manned	FMMK	FK [2]	357.5
M	66°00′ N. 02°00′ E.	Norway	do	4 XM	XM [2]	285

[1] Operates: H+05, 20, 35, 50 min.

[2] Operates on request.

TABLE II—PACIFIC OCEAN STATIONS

Station	Nationality	Assigned position		International call	Radiobeacon	
		Latitude	Longitude		Basic identification	Frequency (kc.)
N	United States	30°00′ N.	140°00′ W	NDLN	YN [1] [2]	385
O	do	40°00′ N.	142°00′ W	NDLO	YO [1] [2]	329
P	do	50°00′ N.	145°00′ W	NDLP	YP [1] [2]	391
X	Japan	39°00′ N.	153°00′ E	JNZZ	VC [1] [3]	370

[1] Operates: H+05, 20, 35, 50 min.
[2] Operates on request.
[3] Transmits NR "not reliable" directly after VC whenever ship is beyond 10 miles from assigned station.

Search and rescue facilities, radiobeacon service, and distress communications facilities are also furnished.

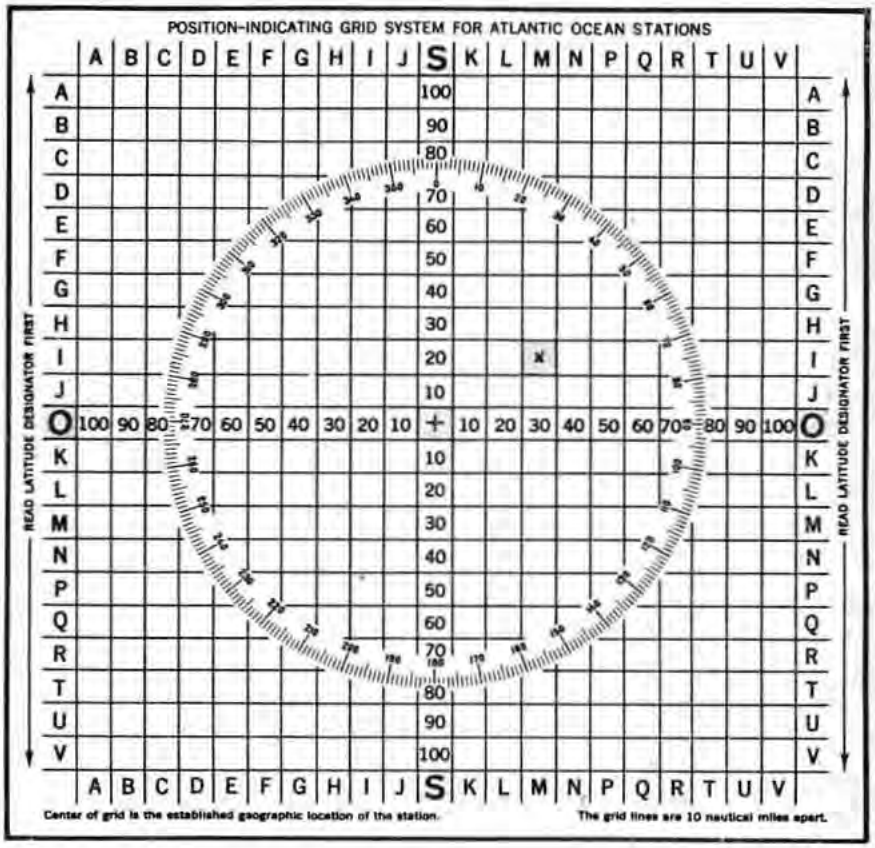
The ships on an ocean station normally maintain position within the 10-mile square centered on the geographical location of the station. These ships are generally underway and for this reason all ships passing nearby should take the necessary precautions to prevent collision (avoidance of constant bearing, etc.). Homing on the radiobeacon of these ships is particularly to be avoided.

The United States ocean station vessels in the North Atlantic guard 500 kc. (CW), 4220 kc. (voice), 140.58 (voice) and the appropriate ICAO route frequency (CW). Communications may be established with these ships on any of these frequencies.

The radiobeacons on United States ocean station vessels are normally operated on a scheduled basis and on request when the ship is on station, but only on request when the ship is off station or when position is unknown. Scheduled transmissions begin at 05, 20, 35, and 50 minutes past the hour and are for 5-minute periods. These transmissions are made 24 hours per day. The beacon signal (A–1) consists of a group of four letters, the first two being the beacon identification and the latter two letters representing the ship's position with reference to the center of the station. A position reporting grid (explained with figure below) is used to explain the meaning of the last two letters. The emission of the radiobeacon on United States ocean station vessels possesses a high degree of polarization which produces a very good direction finding signal. The radiobeacon signal is a continuous carrier wave superimposed with the combined identification signal, continually using a modulating signal of 1020 cycles.

It is expected that bearings can be obtained by a surface vessel at distances in excess of 100 miles. If the regular radiobeacon equipment becomes inoperative, the service (similar to that described above) will be made using the ship's communication transmitter. The ship's transmitter, however, emits an interrupted tone-modulated signal (A–1) in place of the continuous carrier wave, and in this case, the identifying signal is followed by a 20-second dash to provide for automatic direction finders.

The status of the North Atlantic Ocean station program as of January 1, 1950 is given in table I.



EXPLANATION

The center of the grid is the geographic position assigned to the station. If the ship is on station, i. e., within the 10-mile square at the center, the last two letters of the identification are "OS," the latitude and longitude designators, respectively. If the ship is *off* the station but on the grid, the latitude and longitude designators of whatever square the ship is in are transmitted as the last two letters of the identification signal. *The latitude designator is always given first.* The center of each grid square should be considered the location of the station vessel for all computations, thus giving a maximum error of 7½ miles and an average probable error of 2½ miles.

EXAMPLE.—Assuming we are dealing with Station "A," and the ship's actual location is at the point marked × on the grid above, the station's combined identification signal would be "XAIM." It is also evident that the station vessel bears 56°30′ true, 37 miles from its assigned position.

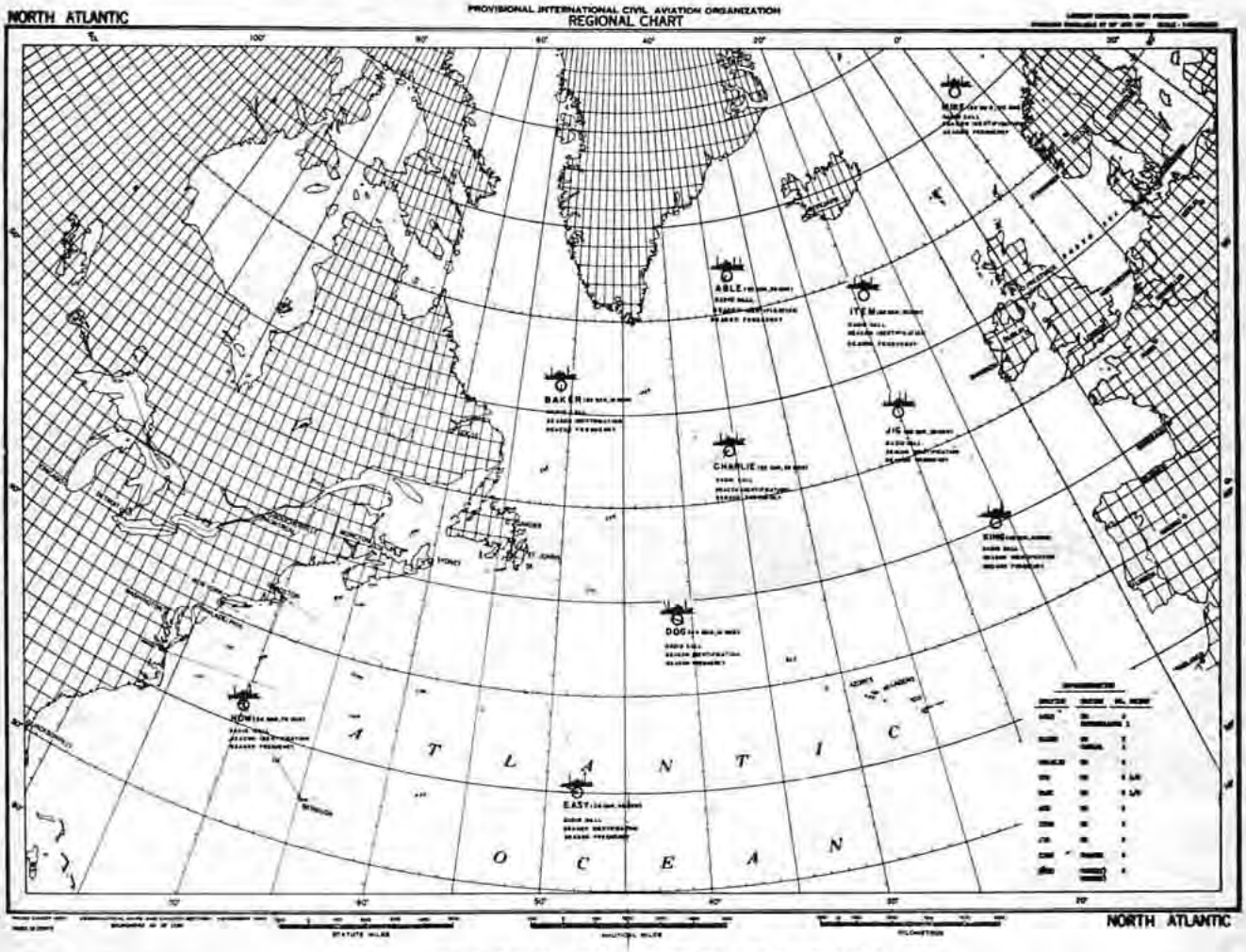
North Pacific Ocean Stations

The origin of North Pacific Ocean stations goes back to World War II when a rather extensive network of ship stations were scattered throughout the entire Pacific as support for the American air operations and weather forecasters in the area. At the completion of the war the reduction in military need was coupled with the increase in civilian need and the ocean stations were retained. The number and location of ocean stations in operation has varied continually since their beginning in the war period and currently are stabilized at four stations. Three of these stations are maintained by the United States and implemented by the United States Coast Guard. The fourth station is maintained by Japan.

The United States Ocean station vessels in the North Pacific guard 500 kc. (CW), 8280 kc. (CW), 5165 kc. (voice), and 140.58 mc. (voice). Communications may be established with these ships on any of these frequencies.

The radiobeacons on United States Ocean station vessels in the North Pacific are operated on the same basis as on the North Atlantic Ocean station vessels.

The status of the North Pacific Ocean station program as of February 1, 1950, is given in table II.



INTERNATIONAL OCEAN STATIONS, NORTH ATLANTIC

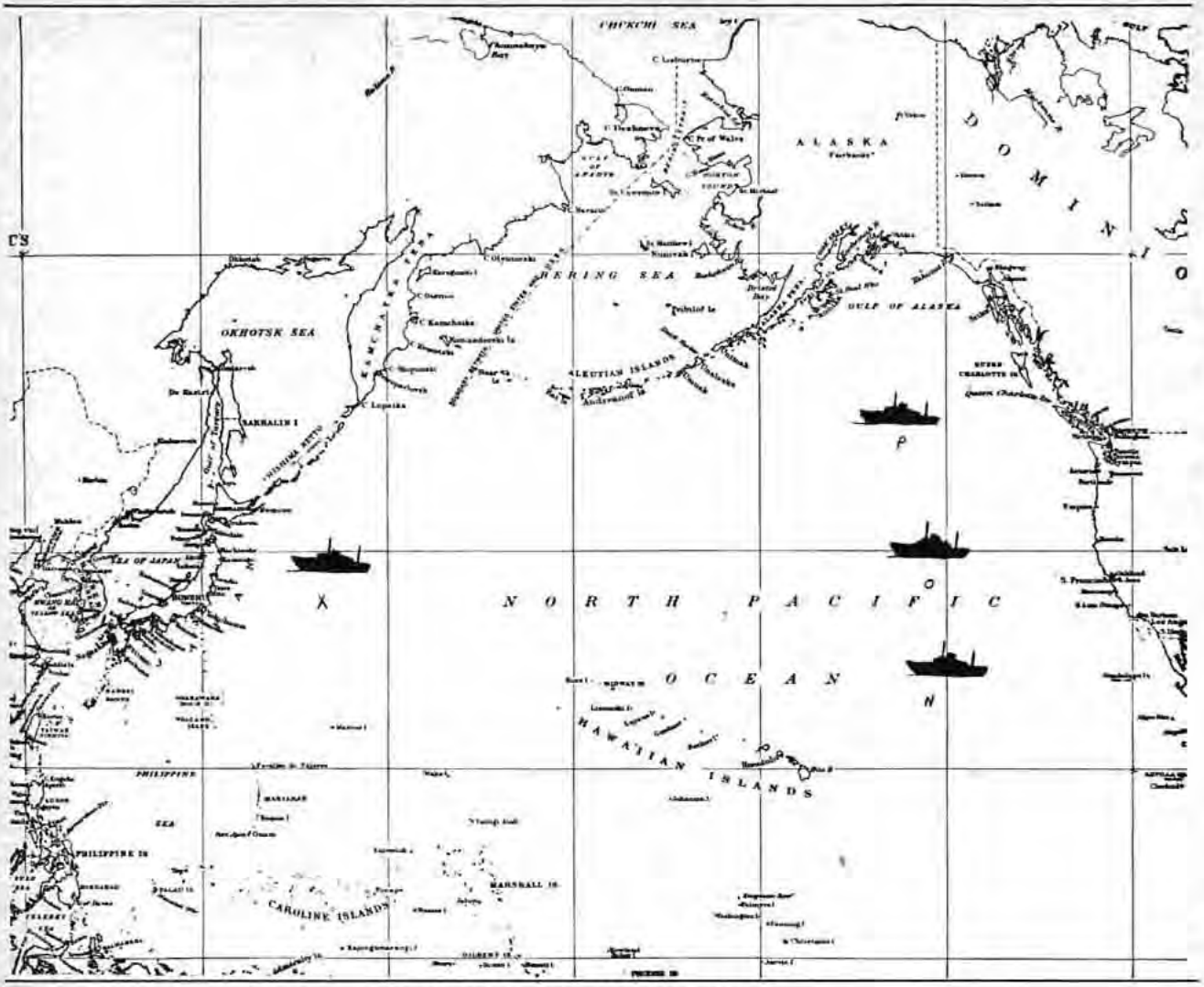
Aircraft Emergency Procedure for Attracting Surface Vessels

A standard aircraft emergency procedure for attracting attention of surface vessels has been established by the International Civil Aviation Organization (ICAO) for all aircraft on a world-wide basis and is employed by aircraft in directing the attention of surface vessels to a scene of distress.

"The aircraft will circle the vessel at least once; fly across the bow of the vessel at low altitude, opening and closing the throttle or changing propeller pitch, when possible, and will head in the direction of the distress scene. This procedure will be repeated until the vessel acknowledges by following. The aircraft will use the Aldis lamp, radio, or message drop to explain the situation, if possible. The surface craft should follow the aircraft, or indicate that it is unable to comply by hoisting the international flag 'NEGAT' or by other visual or radio means."

This procedure has been adopted by the Navy, has been published in the Weekly Notices to Mariners, in United States Coast Pilots, and soon will be published in CAA publications.

Know
Practice
Teach
SAFETY



INTERNATIONAL OCEAN STATIONS, NORTH PACIFIC

LESSONS FROM CASUALTIES

PROPER MAINTENANCE OF LIFESAVING EQUIPMENT

The proper maintenance of lifesaving equipment cannot be overemphasized. While no seaman ever wants to use the lifeboat, yet in an emergency it is good to know that such equipment is available and ready for immediate use.

In a recent accident a seaman had his left leg broken while hoisting a lifeboat manually when someone started the motor of the winch which caused the crank to spin. The officers on the vessel were conducting a fire and lifeboat drill at sea, the crew was mustered at their respective stations, and the officer in charge ordered the No. 3 lifeboat to be lowered. The lifeboat was lowered to the rail and orders were given to hoist the boat to its secure position. Each time the boatswain turned the switch "on" the electric motor to the winch would not start. The chief mate then gave orders to have the switch placed in its neutral position and three seamen used the hand crank to raise the lifeboat. The lifeboat was raised part way up on the davit tracks when the winch motor started and the crank began to spin. Two of the seamen let go of the spinning crank and jumped out of the way, but the third was thrown over and the crank handle hit him on the left leg between the knee and the ankle and broke it. He also received injuries to his back.

The record shows that in this case two conditions existed which could contribute to an accident of this type.

The two panels for the motors controlling the lifeboat winches were located in the blower room, neither of which was properly marked or identified. Under such conditions a person could easily become confused and work on the No. 2 panel for winch motors on the port side while thinking he was working on the No. 1 panel controlling the winch motors on the starboard side, or vice versa. In this case it appears that the switches may have been bypassed at the control panel since other personnel were

working on the electric control equipment in the blower room at the time of the accident.

With respect to proper identification, care must be exercised to see that identification name plates, labels, or markings are not painted over, thereby making them illegible.

The record also indicated that failure to maintain "good housekeeping practices" may have contributed to the accident. The davit tracks were fouled by overpainting. The limit switches were also heavily painted and it is possible they would fail to function under emergency conditions.

It is essential that officers of merchant vessels consider it their duty and of the utmost importance that the lifesaving equipment be kept in good condition and ready for immediate use at all times.

FIRE IN AIR HEATER OF BOILER

The modern marine steam boiler equipped with economizer and air heater is a very highly developed piece of apparatus capable of great economy in operation. However, the fact that it is such a highly developed piece of apparatus means that greater care must be taken in its operation than in that of the old fashioned Scotch boiler or earlier types of water tube boilers.

In order to extract as much heat as possible from the stack gases, clearances are smaller. Therefore, there is a greater tendency for soot to accumulate between the tubes, unless combustion is good. In a recent case of a soot fire in an air heater of one of these modern boilers the investigation showed that difficulty had been experienced shortly before the fire in maintaining the water level. This difficulty was caused by trouble with the feed pump and necessitated putting the fires out and eventually resulted in loss of steam. There was ample supply of water in the boiler not in use, and, therefore, this latter boiler was cut in while adjustments were being made to the feed pump.

In the course of an hour or two these adjustments were made and it was decided to switch the auxiliaries back to the original boiler. Shortly thereafter a soot fire was discovered in this boiler's air heater. This fire resulted in extensive damage to the tubes in the air heater.

On this ship it was part of the routine to blow tubes once a day while in port and they were last blown on the damaged boiler at 2 p. m. on the preceding day. It was also found that at the time of the casualty the air heater in the boiler concerned was being bypassed.

It was concluded that the fire was caused by the ignition of an accumulation of soot deposits on the fire side of the air heater tubes, and that these soot deposits were probably saturated with unburned particles of fuel oil which caught fire and in turn ignited the soot. As the air heater was being bypassed at the time of the fire it is evident that it was less able to resist action of the fire.

This is another one of the expensive and damaging accidents caused by a failure to keep the fire side of the air heater tubes clean.

Although the chief engineer of the ship in question recommended that the tubes in the air heater be larger and spaced farther apart, in order to reduce the likelihood of soot accumulation, it is felt that the fact that many of these boilers are in successful operation with no trouble indicates that poor cleaning is the basic cause for this accident. Had the tubes been clean no fire would have taken place, and it therefore behooves all personnel in charge of boilers equipped with air heaters to make sure that the gas passages in such heaters are kept free of soot deposits. The fact that a soot blower is fitted does not necessarily mean that it is fitted correctly. Minor misalignment on the part of steam jets may reduce their cleaning effectiveness greatly. Therefore, engineering personnel should be sure that cleaning operations are doing the job for which they were intended. The cure for this type of accident is very simple—no soot—no air heater fires. Therefore, keep the tubes clean and your air heater will be safe.

LOST—ONE DIGIT

"Accident prevention is largely an individual responsibility" is a sound bit of advice and should be heeded certainly in cases such as the following.

At an inland port not long ago a freight vessel was loading bulk cargo. As each hold was loaded, the deck crew followed behind securing and battening down the hatch covers. Two men, one on the port side, the other starboard, were placing a strongback in position. The man on the port side, after applying the butterfly bolt to the opening on the strongback with considerable difficulty, signaled that his end was in position. At this point, our port side crew member grew careless and his left thumb was caught between the strongback and the butterfly bolt as the starboard man attempted to maneuver his end into position.

The man's left thumb had to be amputated.

It appeared from the investigation that this accident could have been avoided had the seaman loosened the butterfly bolt before trying to force it into place.

Responsibility for an accident of this sort does not lie with the ship's officers.

"Accident prevention is largely an individual responsibility."

THE DANGERS OF ELECTRON TUBES

Certain electron tubes and cathode-ray tubes contain radioactive materials and chemicals which may endanger the health of persons handling them if the proper precautions are not observed. The classes and types of such tubes, the degree and nature of the danger involved and the precautions to be observed are indicated herein.

CLASSES AND TYPES

Tubes containing radioactive material.

Spark Gap tubes: 1B22, 1B29, 1B31, 1B41, 1B42, 1B45, and 1B49.

Glow lamps or cold cathode tubes: 313C, 313CA, 313CB, 313CC, 313CD, 333A, 346B, 353A, 372A, 376A, 359A, 405A, 413A, 423A, and 727A.

TR tubes: 1B23, 1B24, 1B26, 1B27, 1B28, 1B40, 1B50, 1B55, 1B58, 1B60, 1B62, 1B63, 1B63A, 702A, 702B, 709A, 721A, 721B, 724A, 724B.

Tubes containing chemicals.

All cathode-ray tubes as used in radar, loran, television, oscilloscopes, etc.

DANGERS INVOLVED

Radioactive tubes.—Tests have indicated that there is only a remote possibility of danger to personnel from radioactive tubes due to radiation. For instance, it would require 100 of the type 1B22 or 1B29 tubes unpacked and piled together to create a dangerous situation. The principal danger exists when handling fragments of broken tubes, of inhaling or injecting minute particles of radium into the human system.

Cathode-ray tubes.—Although most of the tubes in this category are harmless it is possible that some tubes would utilize phosphors which contain a small amount of beryllium and it would be impossible to distinguish these tubes from those that do not contain harmful chemicals.

PRECAUTIONS

Radioactive tubes.—Normal stowage of these tubes presents no hazard if personnel will observe warnings against touching internal elements with their hands. Disposition of damaged tubes should be effected by sinking at sea or burial to obviate the

possibility of falling into hands of uninformed personnel. It is recommended that all tubes indicated under the paragraph heading, "Classes and types," be conspicuously tagged as follows: "RADIOACTIVE—DO NOT HANDLE BROKEN TUBES." It is further recommended that tube types 1B22 and 1B29 be further tagged: "DO NOT REMOVE FROM CARTONS UNTIL READY FOR USE." This will preclude the possibility of any accumulation of unpackaged tubes.

Cathode-ray tubes.—This type of tube should be disposed of using the same precautions that are necessary in the disposition of fluorescent lamps. This involves breaking the tubes in a closed container to avoid inhalation of any of the powder and the danger from cuts by flying glass and then disposing of the broken glass in a safe manner.

APPENDIX

Amendments to Regulations

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

Subchapter A—General

[CGFR 49-40]

PART 13—DECORATIONS, MEDALS, RIBBONS, AND SIMILAR DEVICES

UNIFORM REQUIREMENTS IN AWARDING LIFE-SAVING MEDALS

The purpose of the following regulations is to prescribe uniform requirements for the award of Life-Saving Medals to persons for rescuing or endeavoring to rescue other persons from drowning, shipwreck, or other peril of the water.

By virtue of the authority vested in me as Secretary of the Treasury by R. S. 161 and section 1 of Public Law 207, 81st Congress, 1st session, approved August 4, 1949 (5 U. S. C. 22; 14 U. S. C., sections 500–501), Regulation of the Secretary of the Treasury dated December 27, 1948 (33 CFR, Chapter I, Subpart 13.01), is amended to read as follows, effective November 1, 1949.

SUBPART 13.01—GOLD AND SILVER LIFE-SAVING MEDALS, BARS, AND MINIATURES

Sec.

AUTHORITY: §§ 13.01–1 to 13.01–45 issued under sec. 633, Pub. Law 207, 81st Cong. Interprets or applies sec. 500, Pub. Law 207, 81st Cong.

SUBPART 13.01—GOLD AND SILVER LIFE-SAVING MEDALS, BARS, AND MINIATURES

§ 13.01–1 *General.* Life-Saving Medals of gold and silver, designated as the Gold Life-Saving Medal and the Silver Life-Saving Medal, respectively, may be awarded by the Secretary of the Treasury under the statute cited and the regulations in this subpart to persons rescuing or endeavoring to rescue any other person from drowning, shipwreck, or other peril of the water.

§ 13.01–5 *Gold and Silver Life-Saving Medals.* Life-Saving Medals may be awarded to any person who rescues or endeavors to rescue any other person from drowning, shipwreck, or other peril of the water. In order for a person to be eligible for a Life-Saving Medal the rescue or attempted rescue must take place in waters within the United States or subject to the jurisdiction thereof, or if the rescue or attempted rescue takes place outside such waters, one or the other of the parties must be a citizen of the United States or from a vessel or aircraft owned or operated by citizens of the United States. If such rescue or attempted rescue is made at the risk of one's own life and evidences extreme and heroic daring, the medal shall be of gold. If such rescue or attempted rescue is not sufficiently distinguished to deserve the medal of gold but evidences the exercise of such signal exertion as to merit recognition, the medal shall be of silver. Life-Saving Medals may be awarded posthumously.

§ 13.01–10 *Gold and silver bars.* No person shall receive more than one Gold Life-Saving Medal and one Silver Life-Saving Medal; but any person who has received or may hereafter receive a Gold or Silver Life-Saving Medal and who again performs an act which would entitle him to receive another medal of the same class, may be awarded, in lieu of a second medal of the same class, a gold or silver bar, as the case may be, to be worn with the medal already bestowed, and for every such additional act, an additional bar may be awarded. Gold and silver bars may be awarded posthumously.

§ 13.01–15 *Applications and recommendations.* Applications and recommendations for the award of a Life-Saving Medal may be filed by or in behalf of the person making or attempting a rescue under circumstances contemplated by the regulations in this subpart. The administrative details pertaining to the award of Life-Saving Medals are under the jurisdiction of the Commandant, U. S. Coast Guard. Applications or recommendations for awarding of medals or requests for information pertaining thereto should be addressed to the Commandant, U. S. Coast Guard, Washington 25, D. C. Such application must include:

(a) Satisfactory evidence of the services performed, in the form of affidavits, made by eyewitnesses of good repute and standing, testifying of their own knowledge. The opinion of witnesses that the person for whom an award is sought imperiled his or her own life or made signal exertions is not sufficient but the affidavits must set forth in detail all facts and occurrences tending to show clearly in what manner and to what extent life was risked or signal exertions made so that the Secretary of the Treasury may judge for himself as to the degree of merit involved.

(b) The precise locality of the rescue or attempted rescue, whether from waters within the United States or subject to the jurisdiction thereof, or if the rescue or attempted rescue is outside such waters, whether one or the other of the parties is a citizen of the United States or from a vessel or aircraft owned or operated by citizens of the United States, shall be stated. The date, time of day, nature of the weather, condition of the water, the names of all persons present when practicable, the names of all persons rendering assistance, and all pertinent circumstances and data, showing the precise nature and degree of the risk involved, should be stated.

(c) The affidavits shall be made before an officer duly authorized to administer oaths, and if taken before

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an officer without an official seal, his official character must be certified by the proper officer of a court of record under the seal thereof.

(d) The aforementioned affidavits shall be accompanied by a certificate showing the affiants to be credible persons, certified by some United States officer, such as a judge or clerk of a United States Court, district attorney, collector of customs or a postmaster. If the affiant is a citizen or resident of a foreign country, and if the affidavit is executed in such foreign country, the credibility certificate may be executed by an officer of such foreign country, who occupies an official position similar to the aforementioned United States officers.

(e) A credibility certificate shall not be required if the affiant is an officer or employee of the Federal Government, or a member of the military forces, of the United States: *Provided*, That the affiant shall show, below his or her signature on the affidavit, the title or status of the affiant as such officer or employee, or as such member of the military forces, of the United States.

§ 13.01–20 *Definitions.* As used in the statutes cited and in the regulations in this subpart:

(a) "Peril of the water" include all perils on water caused by, or which are such by reason of, the sea or bodies of water such as lakes, bays, sounds and rivers; whenever, wherever and in whatever way human life is directly imperiled by the sea or a body of water is a peril of the water.

(b) The "shipwrecked" include persons whose lives are endangered by perils of the water as well as those who are, strictly speaking, no longer in danger from the sea or a body of water, that peril already having passed, but who are in imminent danger and in great need of succor or rescue, as e. g., being adrift in an open boat or stranded on some barren coast without food or water, where, without succor or rescue, they would die of starvation, thirst, or exposure.

(c) "Waters within the United States or subject to the jurisdiction thereof," embrace all waters within the United States, and any other waters over which the United States exercises jurisdiction.

§ 13.01–25 *Description of Gold Life-Saving Medal.* (a) The Gold Life-Saving Medal is 99.9 percent pure gold and consists of a pendant suspended by a swivel from the head of an eagle attached to a silk program ribbon 1 and 3/8ths inches in width, composed of a 3/16ths of an inch red stripe, a 1/32d of an inch white stripe, a 15/16ths of an inch gold stripe, a 1/32d of an inch white stripe, and a 3/16ths of an inch red stripe. The pendant is 1 and 7/16ths inches in diameter and 3/32ds of an inch in thickness. There appear, on the obverse side of the pendant, three men in a boat in a heavy sea; one is rescuing a person clinging to a spar at the end of which is a block and line; another is standing, prepared to heave a line; a third is rowing; in the distance, to the left, is the wreck of a vessel; the whole is encircled by the words: "United States of America" in the upper half, and "Act of Congress, August 4, 1949," in the lower half. On the reverse side of the pendant there appears, in the center, a monument surmounted by an American eagle; the figure of a woman stands, to the left, holding in her left hand an oak wreath, and, with her right hand, preparing to inscribe the name of the recipient on the monument; to the right are grouped a mast, a yard with a sail, an anchor, a sextant, and a laurel branch; the whole is encircled by the words: "In testimony of heroic deeds in saving life from the perils of the water."

(b) Engraving: Before presentation, the recipient's name shall be inscribed on the "monument," on the reverse of the medal.

§ 13.01–30 *Description of Silver Life-Saving Medal.* (a) The Silver Life-Saving Medal is 99 percent pure silver and consists of a pendant suspended by a swivel from the head of an eagle attached to a silk program ribbon 1 and 3/8ths inches in width, composed of a 3/16ths of an inch blue stripe, a 1/32d of an inch white stripe, a 15/16ths of an inch silver gray stripe, a 1/32d of an inch white stripe, and a 3/16ths of an inch blue stripe. The pendant is 1 and 7/16ths inches in diameter and 3/32ds of an inch in thickness. On the obverse side of the pendant there appears the figure of a woman hovering over a man struggling in a heavy sea and extending to him one end of a long scarf; the whole is encircled by the words: "United States of America," in the upper half, and "Act of Congress, August 4, 1949," in the lower half. On the reverse there appears a laurel wreath encircled by the words: "In testimony of heroic deeds in saving life from the perils of the water."

(b) Engraving: Before presentation, the recipient's name shall be inscribed inside the laurel wreath, on the reverse of the medal.

§ 13.01–35 *Description of gold and silver bars.* (a) The bar is plain and horizontal, composed of the same metal as the medal previously awarded recipient, and is 1 and 5/8ths inches long by 3/16ths of an inch wide with a flowing ribbon draped over the left end and passing in back and appearing beneath the bar. The part of the ribbon showing beneath the bar bears the inscription "Act of Congress, August 4, 1949," in raised block letters. The bar and ribbon are in folds of a spray of laurel with the leaves showing above and beneath.

(b) Engraving: Before presentation, the recipient's name shall be inscribed on the obverse of the bar.

§ 13.01–40 *Miniature medals and bars.* (a) Miniature Gold and Silver Life-Saving Medals and bars are replicas of the Life-Saving Medals and bars, to be worn on civilian clothing. Such miniatures are not furnished by the Government.

(b) Miniature medals and bars may be procured from sources authorized by the Commandant, U. S. Coast Guard, to furnish same to persons who produce original documentary evidence of having been awarded the medal or bar for which a miniature replica is desired.

§ 13.01–45 *Replacement of medals and bars.* The Gold or Silver Life-Saving Medal or bar will be replaced at cost to the applicant upon submitting a statement in affidavit form of having been awarded a medal or bar and the circumstances involving loss of same. A Life-Saving Medal or bar, however, may be replaced without charge in the discretion of the Secretary of the Treasury, if said medal or bar has, under extremely unusual circumstances, been lost, destroyed or rendered unfit for use without fault or neglect on the part of the person to whom it was awarded.

Dated: November 25, 1949.

[SEAL] E. H. FOLEY, Jr.,
Acting Secretary of the Treasury.

[F. R. Doc. 49-9615; Filed, Nov. 30, 1949; 8:49 a. m., 14 F. R. 7234]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

Miscellaneous Amendments to Chapter

[CGFR 49-43]

A notice regarding proposed changes in the inspection and navigation regulations was published in the FEDERAL REGISTER dated August 23, 1949, 14 F. R. 5230, and a public hearing was held by the Merchant Marine Council on September 27, 1949, at Washington, D. C.

The purpose of the miscellaneous amendments to the regulations is to clarify their intent, effect editorial changes, and establish additional safety requirements.

The changes in the motorboat regulations impose a new requirement that a licensed motorboat operator shall carry his license on board a motorboat at all times when the boat

is carrying passengers for hire, as well as to transfer specification requirements for wood floats to another subchapter and change requirements for fuel supply shut-off devices and fuel tanks of motor vessels of more than 15 gross tons carrying passengers for hire.

The amendments to regulations regarding line-throwing appliances and equipment provide that certain vessels carry an impulse-projected rocket type line-throwing appliance and that other vessels may carry a shoulder gun line-throwing appliance while the Lyle gun type line-throwing appliance may be continued in use only on vessels now so equipped with that type.

The amendments regarding fire-extinguishing systems will require a water sprinkling fire-extinguishing system on vessels carrying combustible cargo in holds or other closed compartments from which inert gas or steam could escape and render crew or passenger spaces uninhabitable if inert-gas or steam extinguishing systems were installed.

The amendments to the dangerous cargo regulations revise the requirements for portable magazine chests used for the stowage of certain explosives, change shipping requirements for pyroxylin plastics and film support (nitrocelluiose base) to agree with requirements of the Interstate Commerce Commission, change the shipping requirements for the transportation of iron sponge not properly oxidized, iron mass, spent, iron sponge, spent, spent oxide, iron mass, wet, iron sponge, wet, and iron oxide, wet, as well as to permit the use of more than 30 pounds per square inch air pressure when discharging bulk cargoes of sulfuric acid.

The amendments to Subchapter Q—*Specifications* provide new and revised requirements for manufacturing buoyant apparatus, hatchets, embarkation-debarkation ladders, life rafts, life floats, shoulder gun type line-throwing appliances, portable magazine chests, wood floats, impulse-projected rocket type line-throwing appliances, floating electric lights, motor lifeboat searchlights, and hand electric flashlights.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405, as amended, and section 101 of Reorganization Plan No. 3 of 1946, 46 U. S. C. 1, 375, as well as the statutes cited with the regulations below, the following amendments to the regulations are prescribed which shall become effective ninety (90) days after date of publication of this document in the FEDERAL REGISTER:

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

PART 24—GENERAL PROVISIONS

Part 24 is amended by adding a new section reading as follows:

§ 24.12 *Exhibition of motorboat operator's license.* Any person to whom a license as a motorboat operator has been issued shall have such license in his possession and available for immediate production to any Coast Guard boarding officer at all times during which any vessel which he is operating is carrying passengers for hire. (54 Stat. 163–167, 46 U. S. C. 526–526t)

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

LIFE PRESERVERS OR OTHER LIFESAVING DEVICES

Section 25.4–3 is amended to read as follows:

§ 25.4–3 *Commercial fishing motorboats—wood floats.* Commercial fishing motorboats shall be allowed to use wood floats, one for each person on board, which shall be constructed in accordance with subpart 160.039 of Subchapter Q of this chapter. (54 Stat. 163–167, 46 U. S. C. 526–526t)

PART 27—REQUIREMENTS FOR MOTORBOATS AND MOTOR VESSELS OF MORE THAN 15 GROSS TONS CARRYING PASSENGERS FOR HIRE

INSTALLATION REQUIREMENTS FOR VESSELS USING LIQUID FUELS STORED AT ATMOSPHERIC PRESSURE AND TEMPERATURE AND HAVING FLASH POINTS OF 110° F. OR LOWER

1. Section 27.4–2 (j) is amended to read as follows:

§ 27.4–2 *Fuel tanks and piping.*

* * *

(j) *Shut-off valves.* Shut-off valves shall be installed in the fuel line; one as close to each tank as practicable, and one as close to each carburetor as practicable. Arrangements shall be provided for operating all shut-off valves at the tanks from outside the compartments in which they are located, preferably from an accessible position on deck. The operating gear for the shut-off valves at the tanks shall be accessible at all times and in efficient working condition. (54 Stat. 163–167, 46 U. S. C. 526–526t)

INSTALLATION REQUIREMENTS FOR VESSELS USING LIQUID FUELS STORED AT ATMOSPHERIC PRESSURE AND TEMPERATURE AND HAVING FLASH POINTS ABOVE 110° F.

2. Section 27.5–2 (a) is amended to read as follows:

§ 27.5–2 *Fuel tanks and piping.*

* * *

(a) *Fuel tanks.* Fuel tanks shall be constructed and tested in conformance with § 27.4–2 (c), except that internal galvanizing may be omitted in independent tanks. (54 Stat. 163–167, 46 U. S. C. 526–526t)

Subchapter G—Ocean and Coastwise: General Rules and Regulations

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

1. Section 59.60 is amended to read as follows:

§ 59.60 *Line-throwing appliances—*(a) *Requirements.* All passenger vessels (regardless of tonnage or manner of propulsion) engaged on international voyages, all ocean cargo steam vessels of 500 gross tons and over, and all seagoing motor-propelled vessels of 500 gross tons and over, carrying cargo or passengers or both, shall be equipped with an approved line-throwing appliance, and equipment auxiliary thereto, of the impulse-projected rocket type, the requirements for which are set forth in subpart 160.040 of Subchapter Q of this chapter. All ocean cargo steam vessels of 150 gross tons and over and less than 500 gross tons, and all seagoing motor-propelled vessels of 300 gross tons and over and less than 500 gross tons, carrying cargo or passengers or both, shall be equipped with an approved line-throwing appliance, and equipment auxiliary thereto, of the shoulder gun type or the impulse-projected rocket type, the requirements for which are set forth in subparts 160.031 and 160.040, respectively, of Subchapter Q of this chapter. Service use of rockets shall be within four years from date of manufacture. Lyle gun type line-throwing appliances already in service on merchant vessels may be continued in use so long as in good and serviceable condition: *Provided,* That any replacements shall be made with a line-throwing appliance of the impulse-projected rocket type or shoulder gun type, as applicable.

(b) *Accessibility.* The line-throwing appliance and its equipment shall be kept always easily and immediately accessible and ready for use. No part of this equipment shall be used for any other purpose.

(c) *Drills.* The master of a vessel equipped with a line-throwing appliance shall drill his crew in its use and require it to be fired at least once in every 3 months. Each drill shall be recorded in the ship's log book. The service line shall not be used for drill

purposes. The drills shall be conducted as follows:

(1) For impulse-projected rocket type, by actually firing the rocket with any ordinary line of proper length attached; or,

(2) For shoulder gun type, by actual firing, using the regular cartridge and projectile with any ordinary line of proper length; or,

(3) For Lyle gun type on existing vessels, by actual firing, using one-half the usual charge of powder with regular service projectile and any ordinary line of proper length.

(d) *Service recommendations.* The following precautions and procedure are recommended for the use of line-throwing appliances and equipment:

(1) *Impulse-projected rocket type.* Follow the operating instructions and safety precautions furnished by the manufacturer.

(2) *Shoulder gun type.* Follow the operating instructions and safety precautions furnished by the manufacturer.

(3) *Lyle gun type on existing vessels.* (i) Service powder charge should be about 5 ounces of black powder, and the powder bags should be furnished to the vessel containing 2½ ounces of black powder and marked "one-half normal charge". Under extraordinary circumstances, 7½ ounces (three 2½-ounce bags) of black powder may be used.

(ii) In making the line fast to the shank, pass it through the eye and take three or more half-hitches around its own part, leaving a loop of about 10 or 12 inches and taking the hitches about 6 inches apart. This will allow the line to slip slightly through the eye of the shank before the hitches fetch up, thus easing the strain on the line at the loop during the initial acceleration.

(iii) A considerable bight led over the side is recommended wherever possible, as it will tend to lessen the jerk on the line at initial acceleration.

(iv) At least a fathom of the line from the shank should be thoroughly wet before using to prevent burning.

(v) The faking box or reel should always be faced in the direction of the line of fire and placed abreast of the gun and as close to ship's side as possible. It is not advisable to place the line too close to the muzzle of the gun, as the concussion may lift several layers or coils from the top, causing a snarl which in turn may cause the line to part.

(vi) Care should be taken in placing the equipment to prevent fouling of the line in rigging, ridge ropes, etc., which have a tendency to rise or jump up when the gun is fired.

(vii) Having made the gun and equipment ready for use, the following procedure in firing is recommended: Select a place where the gun may recoil without striking anything, or where it may be securely lashed down. Note the position of the vessel to be relieved, and the direction and approximate force of the wind, and then place the gun in position, making allowance for the drift of the line. Place the line on the windward side of the gun and about 3 feet from it. Make the line fast in the eye of the shank and insert the powder charge, projectile, and primer. In loading, make sure that the projectile is seated against the wad.

(viii) After using, the line should be thoroughly dried before rewinding or faking. (R. S. 4405, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 404, 481, 1333, 50 U. S. C. 1275)

2. Section 59.61 is amended to read as follows:

§ 59.61 *Equipment for line-throwing appliances.* The equipment enumerated below is required to be carried with the various types of line-throwing appliances:

(a) *Impulse-projected rocket type.* Four (4) rockets (2 of which shall be of the buoyant type), 4 primer-ejector cartridges, 4 service lines (each 1,000 feet of 7/32-inch to 9/32-inch diameter flax or manila, having not less than 500 pounds breaking strength, in faking boxes or reels), 1 can of oil, 1 cleaning brush, 12 wiping patches, and 1 set of instructions furnished by the manufacturer, all in a suitable case or box with the appliance, with the auxiliary line (1,500 feet of 3-inch circumference manila) accessible for use either in the case or nearby.

(b) *Shoulder gun type.* Ten (10) service projectiles, 4 service lines (each 400 feet of 3/8-inch circumference flax or cotton line, having not less than 250 pounds breaking strength in faking boxes or reels), 25 cartridges, 1 cleaning rod with brush, 1 can of oil, 12 wiping patches, and 1 set of instructions, all in a suitable case or box with the gun, with an auxiliary line (500 feet of 3-inch circumference manila) accessible for use.

(c) *Lyle gun type on existing vessels.* Six (6) service projectiles, 4 service lines (each 1,700 feet of 7/32-inch to 9/32-inch diameter flax or manila, having not less than 500 pounds breaking strength, in faking boxes or reels), 1 auxiliary line (1,500 feet of 3-inch circumference manila), 1 approved firing attachment (with accessories consisting of lanyard, wrench, washer to fit between barrel and shoulder of firing attachment, blank plug for screwing into gun when firing attachment is not in place, cartridge extractor, and 25 primers in water-tight metal box), 18 bags (2½ ounces each) of black powder marked "One-half normal charge for Lyle gun, 2½ ounces black powder" in nonferrous metal screw top container, 25 paper wads, 1 ram rod, 1 wire brush, 1 can light petrolatum, 12 wiping patches, 1 tapered wooden plug for muzzle of gun when not in use, and 1 set of instructions furnished by the manufacturer of the gun, all in a suitable box or chest with the gun. (R. S. 4405, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 404, 481, 1333, 50 U. S. C. 1275)

PART 60—BOATS, RAFTS, BULKHEADS, AND LIFESAVING APPLIANCES (COASTWISE)

1. Section 60.53 is amended to read as follows:

§ 60.53 *Line-throwing appliances—*(a) *Requirements.* All coastwise steam vessels of 500 gross tons and over and all seagoing motor-propelled vessels of 500 gross tons and over shall be equipped with an approved line-throwing appliance, and equipment auxiliary thereto, of the impulse-projected rocket type, the requirements for which are set forth in subpart 160.040 of Subchapter Q of this chapter. All coastwise steam vessels of 150 gross tons and over but less than 500 gross tons and all seagoing motor-propelled vessels of 300 gross tons and over but less than 500 gross tons shall be equipped with an approved line-throwing appliance and equipment auxiliary thereto, of the shoulder gun type or the impulse-projected rocket type, the requirements for which are set forth in subparts 160.031 and 160.040, respectively, of Subchapter Q of this chapter. Lyle gun type line-throwing appliances already in service on merchant vessels may be continued in use so long as in good and serviceable condition: *Provided,* That any replacements shall be made with a line-throwing appliance of the impulse-projected rocket type or shoulder gun type, as applicable.

(b) *Accessibility.* The line-throwing appliance and its equipment shall be kept always easily and immediately accessible and ready for use. No part of this equipment shall be used for any other purpose.

(c) *Drills.* The master of a vessel equipped with a line-throwing appliance shall drill his crew in its use and require it to be fired at least once in every 3 months. Each drill shall be recorded in the ship's log book. The service line shall not be used for drill purposes. The drills shall be conducted as follows:

(1) For impulse-projected rocket type, by actually firing the rocket with any ordinary line of proper length attached; or,

(2) For shoulder gun type, by actual firing using the regular cartridge and projectile with any ordinary line of proper length; or,

(3) For Lyle gun type on existing vessels, by actual firing, using one-half the usual charge of powder with regular service projectile and any ordinary line of proper length.

(d) *Service recommendations.* The following precautions and procedure are recommended for the use of line-throwing appliances and equipment:

(1) *Impulse-projected rocket type.* Follow the operating instructions and safety precautions furnished by the manufacturer.

(2) *Shoulder gun type.* Follow the operating instructions and safety precautions furnished by the manufacturer.

(3) *Lyle gun type on existing vessels.* (i) Service powder charge should be about 5 ounces of black powder, and the powder bags should be furnished to the vessel containing 2½ ounces of black powder and marked "one-half normal charge". Under extraordinary circumstances, 7½ ounces (three 2½-ounce bags) of black powder may be used.

(ii) In making the line fast to the shank, pass it through the eye and take three or more half-hitches around its own part, leaving a loop of about 10 or 12 inches and taking the hitches about 6 inches apart. This will allow the line to slip slightly through the eye of the shank before the hitches fetch up, thus easing the strain on the line at the loop during the initial acceleration.

(iii) A considerable bight led over the side is recommended wherever possible, as it will tend to lessen the jerk on the line at initial acceleration.

(iv) At least a fathom of the line from the shank should be thoroughly wet before using to prevent burning.

(v) The faking box or reel should always be faced in the direction of the line of fire and placed abreast of the gun and as close to ship's side as possible. It is not advisable to place the line too close to the muzzle of the gun, as the concussion may lift several layers or coils from the top, causing a snarl which in turn may cause the line to part.

(vi) Care should be taken in placing the equipment to prevent fouling of the line in rigging, ridge ropes, etc., which have a tendency to rise or jump up when the gun is fired.

(vii) Having made the gun and equipment ready for use, the following procedure in firing is recommended: Select a place where the gun may recoil without striking anything, or where it may be securely lashed down. Note the position of the vessel to be relieved, and the direction and approximate force of the wind, and then place the gun in position, making allowance for the drift of the line. Place the line on the windward side of the gun and about 3 feet from it. Make the line fast in the eye of the shank and insert the powder charge, projectile, and primer. In loading, make sure that the projectile is seated against the wad.

(viii) After using, the line should be thoroughly dried before rewinding or faking. (R. S. 4405, 4426, 4488, 49 Stat. 1544, 54 Stat. 346; and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 404, 481, 1333, 50 U. S. C. 1275)

2. Section 60.54 is amended to read as follows:

§ 60.54 *Equipment for line-throwing appliances.* (See § 59.61 of this chapter, as amended, which is identical with this section.)

PART 61—FIRE APPARATUS; FIRE PREVENTION

Section 61.4 (a) (1) is amended to read as follows:

§ 61.4 *Steam and inert-gas fire-extinguishing systems—*(a) *General requirements.* (1) All mechanically propelled vessels carrying combustible cargo in the holds, 'tween decks, or other closed cargo compartments, except those engaged exclusively in the carriage of coal in bulk, shall be equipped with means for extinguishing fire in such compartments by the use of steam fire-extinguishing systems or by the use of any inert-gas fire-extinguishing system approved by the Commandant. However, in specific cases where by reason of the design, such compartments are normally accessible and considered to be part of the working or living quarters of the crew or passengers, a water sprinkling system may be required in lieu of either a steam or inert-gas fire-extinguishing system. (R. S. 4426, 4470, 4471, 49 Stat. 1544, 54 Stat. 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 404, 463, 463a, 464, 1333, 50 U. S. C. 1275)

PART 62—SPECIAL OPERATING REQUIREMENTS

Part 62 is amended by adding a new § 62.15, reading as follows:

§ 62.15 *Posting placards containing instructions for use of breeches buoy.* A placard containing instructions for the use of breeches buoy gear, Form CG 811, shall be posted in the pilothouse, engine room, and in the seamen's, firemen's, and stewards' departments of every passenger or cargo vessel required by law or regulation to carry a line-throwing appliance, as well as on every passenger vessel, cargo vessel, or manned barge, which is 150 gross tons and over, but not required to carry a line-throwing appliance. (R. S. 4405, 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 375, 404, 481, 1333, 50 U. S. C. 1275)

Subchapter H—Great Lakes: General Rules and Regulations

PART 77—FIRE APPARATUS; FIRE PREVENTION

Section 77.4 (a) (1) is amended to read as follows:

§ 77.4 *Steam and inert-gas fire-extinguishing systems.* (See § 61.4 of this chapter, as amended, which is identical with this section.)

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

PART 95—FIRE APPARATUS; FIRE PREVENTION

Section 95.4 (a) (1) is amended to read as follows:

§ 95.4 *Steam and inert-gas fire-extinguishing systems.* (See § 61.4 of this chapter, as amended, which is identical with this section.)

Subchapter J—Rivers: General Rules and Regulations

PART 114—FIRE APPARATUS; FIRE PREVENTION

Section 114.6 (a) (1) is amended to read as follows:

§ 114.6 *Steam and inert-gas fire-extinguishing systems.* (See § 61.4 of this chapter, as amended, which is identical with this section.)

Subchapter N—Explosives or Other Dangerous Articles or Substances and Combustible Liquids on Board Vessels

PART 146—TRANSPORTATION OR STORAGE OF EXPLOSIVES OR OTHER DANGEROUS ARTICLES OR SUBSTANCES AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

LIST OF EXPLOSIVES OR OTHER DANGEROUS ARTICLES CONTAINING THE SHIPPING NAME OR DESCRIPTION OF ARTICLES SUBJECT TO THE REGULATIONS IN THIS SUBCHAPTER

1. Section 146.04–5 *List of explosives and other dangerous articles and combustible liquids* is amended by deleting the articles "Iron oxide. (See: 'Iron sponge')," "iron sponge," and "iron sponge, spent" from the list.

2. Section 146.04–5 is further amended by inserting the following

articles after "Iron arsenate, solid. (See: 'Ferrous or ferric arsenate, solid')":

(In column one) Iron mass, spent. (In column two) Inf. S.

(In column one) Iron mass, wet. (In column two) Haz.

(In column one) Iron oxide, wet. (In column two) Haz.

(In column one) Iron sponge not properly oxidized. (In column two) Inf. S. (In column three) Yellow.

(In column one) Iron sponge, spent. (In column two) Inf. S.

(In column one) Iron sponge, wet. (In column two) Haz.

3. Section 146.04–5 is still further amended by inserting the following article after "Spent mixed acid":

(In column one) Spent oxide. (In column two) Inf. S.

(R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

CARGO HANDLING AND STOWAGE DEVICES; UNITED STATES COAST GUARD CONTAINER SPECIFICATIONS

4. Section 146.09–6 is amended to read as follows:

§ 146.09–6 *Portable magazine chest.* (a) Portable magazine chests shall be constructed of metal and lined with wood, and not less than 6 nor more than 40 cubic feet capacity. The lining shall be so fitted and finished as to form a smooth surface within the interior of the chest. Fastenings shall be recessed below the surface to avoid projections within the interior. Construction shall be such as to separate all containers of explosives or pyrotechnics from contact with metal surfaces. The metal shall be ⅛ inch thick and free from crimps, buckles, and rough edges. All metal surfaces shall be wire brushed and all oil, grease, rust, loose scale, and other extraneous matter, removed before application of any primer. All surfaces of the metal chest and fittings shall be given a heavy coat of quick drying red lead, zinc chromate, or other suitable primer before painting. The finish shall consist of two coats of paint. The interior shall be lined with wood sheathing of a minimum thickness of ¾ inch. Securing means shall be countersunk below the surface of the sheathing. Securing means for the cover and four (4) lashing rings shall be provided. The lashing rings shall be 3-inch I. D. x ⅜-inch wire permanently attached to the magazine chest. Two runners, not less than 2 inches high shall be permanently attached to the bottom of the chest.

(b) Portable magazine chests used for the stowage of pyrotechnic signals, rockets, and powder for line-throwing guns shall be marked, in letters at least 3 inches high, with the following legend: "Portable Magazine Chest," "Inflammable—Keep Lights and Fire Away."

(c) Portable magazine chests now in use on vessels may be continued in use while in serviceable condition. (R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

DETAILED REGULATIONS GOVERNING INFLAMMABLE SOLIDS AND OXIDIZING MATERIALS

5. Section 146.22–100 is amended by adding requirements regarding "iron sponge not properly oxidized," "iron mass, spent," "iron sponge, spent," or "spent oxide" in columns 1 through 7 to follow after "inflammable solids, N. O. S." as follows:

§ 146.22–100 *Table E—Classification: Inflammable solids and oxidizing materials.* * * *

(In column 1) Iron sponge *not properly oxidized.*

(When properly prepared and shipped in metal containers it is not subject to these regulations.)

(In column 2) *Iron sponge or iron mass that has not been properly oxidized during manufacture which is liable to spontaneous heating and ignition.*

Stow separate from all combustible material, explosives, inflammable liquids (red label), or acids (white label).

(In column 3) Yellow.

(In column 4) Stowage:

"On deck in open."

"On deck under cover."

" 'Tween decks readily accessible."

Outside containers:

Hermetically sealed metal-lined wooden boxes. Airtight metal containers.

(In column 5) Not permitted.

(In column 6) Ferry stowage (AA).

Outside containers:

Hermetically sealed metal-lined wooden boxes. Airtight metal containers.

(In column 7) Ferry stowage (BB).

Outside containers:

Hermetically sealed metal-lined wooden boxes. Airtight metal containers.

(In column 1) Iron mass, spent; iron sponge, spent; or spent oxide.

(In column 2) *Iron sponge or mass after saturation with sulfur, when used in gas purification, is liable to spontaneous heating and ignition if stowed in deep piles.*

No marking required.

(In column 3) No label required.

(In column 4) after exposure to air for a period of not less than 10 days, it may be accepted for transportation in bulk in all steel barges having open holds.

(In columns 5, 6, and 7) Not permitted.

(R. S. 4472, as amended, 54 Stat. 1023, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 50 U. S. C. 1275)

6. Section 146.22–100 is amended by changing the gross weights of shipments for "Pyroxylin plastics, rods, rolls, sheets, or tubes" and "Film support (nitrocellulose base)" so that the requirements in columns 4, 5, 6 and 7 under "Outside containers" for "Fiber drums (ICC–21A) not over 200 lbs. gr. wt." and "For sheet pyroxylin only: Special fiberboard box (ICC–12B) telescope type, not over 90 lbs. gr. wt." are amended to read as follows:

(In columns 4, 5, 6 and 7) Fiber drums (ICC–21A) not over 220 lbs. gr. wt.

For sheet pyroxylin only: Special fiberboard tube, telescope type, not over 15 lbs. net wt.

(R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

DETAILED REGULATIONS GOVERNING CORROSIVE LIQUIDS

7. Section 146.23–10 (b) is amended by adding a new subparagraph (6) reading as follows:

§ 146.23–10 *Sulfuric acid in bulk.*

* * *

(b) * * *

(6) Special approval of the Commandant may be obtained where more than 30 pounds per square inch pressure is required to discharge the cargo: *Provided,* That the tank is designed and constructed for the appropriate pressure and meets the requirements for Class II, arc-welded unfired pressure vessels (Subchapter F—Marine Engineering). (R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

DETAILED REGULATIONS GOVERNING COMPRESSED GASES

8. Section 146.24–15 is amended by changing paragraphs (a) and (l) to read as follows:

§ 146.24–15 *Liquid chlorine in bulk.* (a) Liquid chlorine may be transported in bulk on barges when loaded in Class I arc-welded steel tanks (pressure vessel type), which are independent of the structure of the vessel.

* * * * *

(l) (1) No other kind of cargo except liquid caustic soda shall be on

board any barge at the same time that chlorine in either liquid or vapor form is present in a cargo tank.

(2) Chlorine tanks shall not be installed within liquid caustic soda tanks.

(3) Barges used for the transportation of chlorine and liquid caustic soda shall be of steel construction.

(R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

DETAILED REGULATIONS GOVERNING HAZARDOUS ARTICLES

9. Section 146.27–100 *Table K—Classification: Hazardous articles* is amended by deleting all the requirements in columns 1 through 7 for "iron sponge (iron oxide)" and "iron sponge, spent."

10. Section 146.27–100 is amended by adding new requirements in columns 1 through 7 for "iron mass, wet; iron sponge, wet; and iron oxide, wet" which shall be inserted after "insulation tape (varnished cloth type)" reading as follows:

§ 146.27–100 *Table K—Classification: Hazardous articles.* * * *

(In column 1) Iron mass, wet; Iron sponge, wet; Iron oxide, wet.

(Shall not be shipped in burlap bags or other containers which are susceptible to spontaneous heating when wet.)

(In column 2) *Iron mass or sponge consisting of a mixture of wood shavings with a hydrated ferric oxide used to remove sulfur from coal gas. Iron oxide in the form of dense, dark red, powder or lumps used to remove sulfur from coal gas.*

Stow separate from infammable liquids (red label) or inflammable solids and oxidizing materials (yellow label).

(In column 3) No label required.

(In column 4) Stowage:

"On deck in open."

"On deck under cover."

"'Tween decks readily accessible."

Outside containers:

Steel barrels or drums, not over 1,760 lbs. gr. wt.

(In column 5) Not permitted.

(In column 6) Ferry stowage (AA).

Outside containers:

Steel barrels or drums, not over 1,760 lbs. gr. wt.

(In column 7) Ferry stowage (BB).

Outside containers:

Steel barrels or drums, not over 1,760 lbs. gr. wt.

(R. S. 4472, as amended, 54 Stat. 1023, 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 170, 463a, 50 U. S. C. 1275)

Subchapter Q—Specifications

PART 160—LIFESAVING EQUIPMENT

Part 160 is amended by adding the following new subparts:

SUBPART 160.010—BUOYANT APPARATUS FOR MERCHANT VESSELS

Sec.

160.010–1 Applicable specifications.
160.010–2 Types.
160.010–3 General requirements for buoyant apparatus.
160.010–4 Buoyant apparatus using balsa wood for buoyancy.
160.010–5 Buoyant apparatus using air compartments for buoyancy.
160.010–6 Capacity of buoyant apparatus.
160.010–7 Methods of sampling, inspections and tests.
160.010–8 Nameplate and marking.
160.010–9 Procedure for approval.

SUBPART 160.013—HATCHETS (LIFEBOAT AND LIFE RAFT) FOR MERCHANT VESSELS

160.013–1 Applicable specification and plan.
160.013–2 Type and size.
160.013–3 Materials, workmanship, and construction details.
160.013–4 Inspections and tests.
160.013–5 Marking.
160.013–6 Procedure for approval.

SUBPART 160.017—LADDERS, EMBARKATION-DEBARKATION (FLEXIBLE), FOR MERCHANT VESSELS

160.017–1 Applicable specifications and plans.
160.017–2 Type.
160.017–3 Materials.
160.017–4 Construction.
160.017–5 Performance and workmanship requirements.
160.017–6 Inspections and tests.
160.017–7 Marking.
160.017–8 Procedure for approval.

SUBPART 160.018—LIFE RAFTS FOR MERCHANT VESSELS

160.018–1 Applicable specifications.
160.018–2 Types.
160.018–3 Construction; general.
160.018–4 Construction; Type A; cockpit type.
160.018–5 Construction; Type B; Catamaran type.
160.018–6 Capacity.
160.018–7 Inspection and testing.
160.018–8 Marking.
160.018–9 Procedure for approval.

SUBPART 160.027—LIFE FLOATS FOR MERCHANT VESSELS

160.027–1 Applicable specifications and plans.
160.027–2 Type.
160.027–3 General requirements for life floats.
160.027–4 Balsa wood body life floats.
160.027–5 Air compartment type life floats.
160.027–6 Capacity of life floats.
160.027–7 Methods of sampling, inspection, and tests.
160.027–8 Nameplate and marking.
160.027–9 Procedure for approval.

SUBPART 160.031—LINE-THROWING APPLIANCE, SHOULDER GUN TYPE (AND EQUIPMENT), FOR MERCHANT VESSELS

Sec.

160.031–1 Applicable specification.
160.031–2 Type and size.
160.031–3 Materials, construction, workmanship, and performance requirements.
160.031–4 Equipment for shoulder gun type line-throwing appliance.
160.031–5 Inspections and tests.
160.031–6 Marking.
160.031–7 Procedure for approval.

SUBPART 160.038—MAGAZINE CHESTS, PORTABLE, FOR MERCHANT VESSELS

160.038–1 Applicable specifications.
160.038–2 Type.
160.038–3 Materials, workmanship, and construction.
160.038–4 Inspections and tests.
160.038–5 Marking.
160.038–6 Procedure for approval.

SUBPART 160.039—FLOATS, WOOD, FOR MERCHANT VESSELS

160.039–1 Applicable specification.
160.039–2 Types.
160.039–3 Materials.
160.039–4 Construction and workmanship.
160.039–5 Inspection.
160.039–6 Approval.

SUBPART 160.040—LINE-THROWING APPLIANCE, IMPULSE-PROJECTED ROCKET TYPE (AND EQUIPMENT), FOR MERCHANT VESSELS

160.040–1 Applicable specification.
160.040–2 Type and size.
160.040–3 Materials, construction, workmanship, and performance requirements.
160.040–4 Equipment for impulse-projected rocket type line-throwing appliance.
160.040–5 Inspections, sampling, and tests.
160.040–6 Marking and labeling.
160.040–7 Procedure for approval.

AUTHORITY: §§ 160.010–1 to 160.040–7 issued under R. S. 4405, 4417a, 4426, 4481, 4488, 4491, sec. 11, 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, 475, 481, 489, 1333, 50 U. S. C. 1275. Statutes applied are cited to text in parentheses.

* * * * *

PART 161—ELECTRICAL EQUIPMENT

Subchapter Q is amended by adding a new Part 161 reading as follows:

SUBPART 161.001—LIGHTS (WATER): ELECTRIC, FLOATING, AUTOMATIC (WITH BRACKET FOR MOUNTING), FOR MERCHANT VESSELS

Sec.

161.001–1 Applicable specifications.
161.001–2 Type, grade, and size.
161.001–3 Materials and workmanship.
161.001–4 Construction and performance.
161.001–5 Inspection and methods of test.
161.001–6 Marking.
161.001–7 Procedure for approval.

SUBPART 161.006—SEARCHLIGHTS, MOTOR LIFEBOAT, FOR MERCHANT VESSELS

161.006–1 Applicable specifications and plans.

AUTHORITY: §§ 161.001–1 to 161.008–8 issued under 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.

* * * * *

NOTE: Due to limitations in printing, it will not be possible to reprint these specifications in the Proceedings. Any person desiring to obtain a copy should make written request to the Commandant (HA), United States Coast Guard Headquarters, 1300 E Street NW., Washington 25, D. C.

Dated: January 4, 1950.

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

[F. R. Doc. 50–296; Filed, Jan. 10, 1950; 9:29 a. m.; 15 F. R. 110, Jan. 11, 1950]

Equipment Approved by the Commandant

[CGFR 49–47]

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

BUOYANT CUSHIONS, KAPOK, STANDARD

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

Approval No. 160.007/88/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by Elvin Salow Co., Boston, Mass., for Publix Distributors, Inc., 99–103 Portland St., Boston 14, Mass.

Approval No. 160.007/89/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by The P. R. Mitchell Co., Spring Grove and Harrison Avenues, Cincinnati 22, Ohio, for Montgomery Ward & Co., Inc., Chicago, Ill.

Approval No. 160.007/90/0, Standard kapok buoyant cushion, U. S. C. G. Specification 160.007, manufactured by Keystone Athletic Products, Inc., Burgettstown, Pa.

(54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4–1, 160.007)

BUOYANT CUSHIONS, NON-STANDARD

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

Approval No. 160.008/422/0, 15" x 15" x 2" rectangular buoyant cushion, 20 oz. kapok, flexible plastic film cover and straps, stitched seams, Dwg. No. 21, dated November 10, 1949, manufactured by Melman, Inc., 1901 Northwest Miami Court, Miami 36, Fla.

Approval No. 160.008/423/0, 17½" x 20" x 2½" rectangular buoyant cushion, 39 oz. kapok, Dwg. dated November 28, 1949, manufactured by Bilt-Rite Sailmakers, 1342 West Eleventh Street, Long Beach, Calif.

(54 Stat. 164, 166; 46 U. S. C. 526e, 526p; 46 CFR 25.4–1, 160.008)

LADDERS, EMBARKATION-DEBARKATION

Approval No. 160.017/8/0, Viking, Type B–3, embarkation-debarkation ladder, wire rope suspension, wood ears, Dwg. No. 561–S1604–31, revised November 14, 1949, manufactured by Viking Marine Co., 253 Colman Building, Seattle, Wash.

(R. S. 4426, 4488, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 404, 481, 1333, 50 U. S. C. 1275; 46 CFR 59.63, 76.56a, 94.55a, 113.47a)

LIFEBOATS

Approval No. 160.035/233/0, 12' x 4.42' x 1.92' aluminum oar-propelled lifeboat, 6-person capacity, identified by construction and arrangement Dwg. No. 3240 dated September 14, 1948, and revised October 26, 1948, manufactured by Welin Davit and Boat Division of Continental Copper & Steel Industries, Inc., Perth Amboy, N. J.

(R. S. 4417a, 4426, 4481, 4488, 4492, 35 Stat. 428, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 396, 404, 474, 481, 490, 1333, 50 U. S. C. 1275; 46 CFR 37.1–1, 59.13, 76.16, 94.15, 113.10)

BOILERS, HEATING

Model FLT vertical fire tube heating boilers, welded steel plate construction, 30 pounds per square inch maximum pressure, Dwg. No. 84957–A, dated November 9, 1949, manufactured by Erie City Iron Works, Erie, Pa., approved for the following sizes:

Approval No.	Boiler size	Steaming capacity (pounds per hour)
162.003/88/0	1	125
162.003/89/0	2	170
162.003/90/0	3	220
162.003/91/0	4	255
162.003/92/0	5	350
162.003/93/0	6	450
162.003/94/0	7	545
162.003/95/0	8	625
162.003/96/0	9	725
162.003/97/0	10	840
162.003/98/0	11	1020
162.003/99/0	12	1235
162.003/100/0	13	1455
162.003/101/0	14	1580
162.003/102/0	15	1835
162.003/103/0	16	2095
162.003/104/0	17	2365
162.003/105/0	18	2575
162.003/106/0	19	2990
162.003/107/0	20	3340
162.003/108/0	21	3805

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

FIRE EXTINGUISHERS, PORTABLE, HAND, CARBON-DIOXIDE TYPE

Approval No. 162.005/26/0, Model R–15, 15-lb. carbon dioxide type hand portable fire extinguisher, Parts List Dwg. No. 755 dated April 19, 1947, rev. No. 7, dated October 19, 1949, Assembly Dwg. No. 675 dated July 30, 1945, rev. No. 8 dated July 8, 1949, Name plate Dwg. No. 922 dated November 19, 1947, manufactured by Randolph Laboratories, Inc., 8 East Kinzie Street, Chicago 11, Ill.

Approval No. 162.005/25/0, Model R–10, 10-lb. carbon dioxide type hand portable fire extinguisher, Parts List Dwg. No. 754 dated February 7, 1946, rev. No. 9 dated October 19, 1949, Assembly Dwg. No. 735 dated December 7, 1945, rev. No. 6 dated July 12, 1948, Name plate Dwg. No. 922 dated November 19, 1947, manufactured by Randolph Laboratories, Inc., 8 East Kinzie Street, Chicago 11, Ill.

(R. S. 4417a, 4426, 4479, 4492, 49 Stat. 1544, 54 Stat. 165, 166, 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 463a, 472, 490, 526g, 526p, 1333, 50 U. S. C. 1275; 46 CFR 25.5–1, 26.3–1, 27.3–1, 34.5–1, 61.13, 77.13, 95.13, 114.15)

Be Safety Conscious

FLAME ARRESTERS FOR TANK VESSELS

Approval No. 162.016/31/0, Type "LT" flame arrester, open atmospheric pattern, semi-steel body, copper or aluminum alloy arrester elements, Dwg. No. TS–1, dated October 31, 1949, approved for sizes 6", 8" and 10", manufactured by The Staytite Co., 3606–3612 Polk Avenue, Houston 3, Texas.

Approval No. 162.016/32/0, Type "OST" flame arrester, open atmospheric pattern, semi-steel body, copper or aluminum alloy arrester elements, Dwg. No. TS–2, dated October 31, 1949, approved for sizes 3" and 4", manufactured by The Staytite Co., 3606–3612 Polk Avenue, Houston 3, Texas.

(R. S. 4417a and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 391a, 50 U. S. C. 1275; 46 CFR 30.3)

FIRE EXTINGUISHING SYSTEMS, SEMI-PORTABLE

Kidde carbon dioxide fire extinguishing system, Hose Application Model HR–1, 50-pound, and 100-lb. carbon dioxide hose reel or hose rack installations, local or remote control, Kidde Dwg. Nos. L–82840 dated July 11, 1946, L–82350 dated December 10, 1945, L–82663 dated February 8, 1946 (Rev. A), L–81814 dated February 19, 1945 (Rev. A), L–83060 dated December 26, 1946, L–83061 dated December 16, 1946, L–5849 dated June 7, 1946 (Rev. L), National Bureau of Standards Report TG10236–48, FP2847, dated November 10, 1949, manufactured by Walter Kidde & Co., Inc., Belleville 9, N. J.

(R. S. 4417a, 4426, 4479, 4492, 49 Stat. 1544, 54 Stat. 346, 1028, and sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 391a, 404, 463a, 472, 490, 1333, 50 U. S. C. 1275; 46 CFR 34.3–2, 61.14, 77.14, 95.14)

Dated: January 4, 1950.

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

[F. R. Doc. 50–297; Filed, Jan. 11, 1950, 8:47 a. m.; 15 F. R. 178]

TERMINATION OF APPROVAL OF EQUIPMENT

[CGFR 49–45]

By virtue of the authority vested in me as Commandant, United States Coast Guard, by R. S. 4405 and 4491, as amended, 46 U. S. C. 375, 489; and section 101 of Reorganization Plan No. 3 of 1946, 11 F. R. 7875, 60 Stat. 1097, 46 U. S. C. 1, as well as the additional authorities cited with specific items below, the following approvals of equipment are terminated because the items of equipment covered are no longer being manufactured:

BOILERS, HEATING

Termination of Approval No. 162.003/35/0, Erie City Iron Works No. 1203, 42-inch diameter welded vertical fire tube heating boiler, heating surface 243 square feet, Dwg. No. 80847–A, maximum pressure 30 pounds per square inch, manufactured by Erie City Iron Works, Erie, Pa. (Approved Federal Register, August 27, 1947)

Termination of Approval No. 162.003/36/0, Erie City Iron Works No. 1210, 42-inch diameter welded vertical fire tube heating boiler, heating surface 284 square feet, Dwg. No. 81293, maximum pressure 30 pounds per square inch, manufactured by Erie City Iron Works, Erie, Pa. (Approved Federal Register, August 27, 1947)

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

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 4, 1950.

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

[F. R. Doc. 50–298; Filed, Jan. 11, 1950; 8:47 a. m.; 15 F. R. 178]

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of Ships' Stores and Supplies certificated from November 25, 1949, to December 25, 1949, inclusive, for use on board vessels in accordance with the provisions of part 147 of the regulations governing explosives or other dangerous articles on board vessels, are as follows:

Mill Creek Products Co., Inc., 50 West Forty-sixth Street, New York 19, N. Y., Certificate No. 299, dated December 19, 1949. "Insecticide "B."

Mill Creek Products Co., Inc., 50 West Forty-sixth Street, New York 19, N. Y., Certificate No. 300, dated December 19, 1949. "Water Base Residual Spray."

WELDING ELECTRODES

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

Air Reduction Sales Co., 42d Street, New York 17, N. Y. Arcrods Corp. (Manufacturer) Airco No. 351 (2¼ Cr.–1 Mo.) Type E9016.

General Electric Co., Schenectady, N. Y. Arcrods Corp., (Manufacturer) GE W–65 (2¼ Cr.–1Mo.) Type E9016.

Wilson Welder & Metals Co., Lincoln Building, 42d Street & Grand Central, New York 17, N. Y. Arcrods Corp. (Manufacturer), Wilson 551 (2¼ Cr.–1Mo.) Type E9016.

Operating Positions and Electrode Size

The ⅛" and 5/32" diameter electrodes will be allowed for all position welding.

FUSIBLE PLUGS

The Marine Engineering Regulations and Material Specifications require that manufacturers submit samples from each heat of fusible plugs to the Commandant for test prior to plugs manufactured from the heat being used on vessels subject to inspection by the Coast Guard. A list of approved heats which have been tested and found acceptable during the period from December 15, 1949, to January 15, 1950, is as follows:

H. B. Sherman Manufacturing Co., 22 Barney Street, Battle Creek, Mich. Heats Nos. 690 through 694.

AFFIDAVITS

The following affidavit was accepted from December 15, 1949, to January 15, 1950:

Henry Vogt Machine Co., 1000 West Ormsby Street, Louisville 10, Ky. Flanges.

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 considered until the item is examined and listed by Coast Guard Headquarters. Before listings of electrical appliances are made it is necessary for the manufacturer to submit to the Commandant (MMT), 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.

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	
Associated Lighting Service, San Francisco, Calif.:					
Lighting fixture, nonwatertight, Westlite No. 0501, 1 100-watt lamp max., No. 0502, 1 150-watt lamp max., Dwg. No. 207, Alt. 0	X				11/23/49
Control Instrument Co., Inc., Brooklyn, N. Y.:					
Salinity indicator system, type 17C, 115-volt, A. C., 60-cycle, Dwg. Nos. 22278, Alt. 1 and 22279, Alt. 1	X	X			12/13/49
The Dayton Manufacturing Co., Dayton, Ohio:					
Wall bracket fixture, nonwatertight, 1 60-watt lamp max., fixture No. B-5204-A, Dwg. No. 49G1529, Alt. A	X				12/30/49
Ceiling fixture, nonwatertight, 1 50-watt lamp max., fixture No. C-10479, Dwg. No. 49D1521, Alt. 0	X				12/30/49
Ceiling fixture, nonwatertight, 1 50-watt lamp max., fixture No. C-10479A, Dwg. No. 49D1523, Alt. 0	X				12/30/49
Federal Enterprises, Inc., Chicago, Ill.:					
Siren, type D, 115-volt A. C. or D. C. max., Dwg. Nos. 8193D-1A, Alt. 0 and 8193, Alt. 0	X	X			12/14/49
Henschel Corp., Amesbury, Mass.:					
Whistle timer, 115-volt 60-cycle A. C. or D. C., Dwg. No. 40-059, Alt. 3	X	X			11/22/49
Mechanical telegraph wrong direction contact maker, 1 ampere, 115-volt max., Dwg. No. H-119, Alt. 0	X	X			11/19/49
Lovell-Dressel Co., Inc., Arlington, N. J.:					
Junction box, watertight, with 25-ampere, 600-volt, 3-section terminal block, Dwg. No. M-5434, Alt. 0	X	X	X		12/28/49
Luminator, Inc., Chicago, Ill.:					
Mirror light, nonwatertight, fixture No. L-8223, 2 40-watt lamps max., Dwg. No. 8223, Alt. 3	X				12/9/49
Mirror light, nonwatertight, fixture No. L-8226, 1 40-watt lamp max., Dwg. No. 8226, Alt. 3	X				12/9/49
Paramount Industries, Inc., Flint, Mich.:					
Lighting fixtures, fluorescent, nonwatertight, mariner model craft lite, model Nos. 640 and 641, 2 20-watt lamps, model Nos. 642 to 647, inclusive, 2 40-watt lamps, 115-volt, A. C., 60-cycle, Dwg. No. 151, Alt. 0	X				12/ 7/49
Lighting fixtures, fluorescent, nonwatertight, mariner model craft lite, model Nos. 620 and 621, 1 20-watt lamp, model Nos. 622 to 625, inclusive, 1 40-watt lamp 115-volt, A. C., 60-cycle, Dwg. No. 706, Alt. 0	X				12/ 7/49
Pauluhn Electric Mfg. Co., Inc., New York, N. Y.:					
Mast, blinker, or telegraph signal light, watertight, cat. No. 1453, 1 60-watt lamp max., cat. No. 1454, 1 50/50-watt mogul double filament lamp, Dwg. No. 28, Alt. 0	X	X	X		12/27/49
Mast, blinker, or telegraph signal light, watertight, cat. No. 1451, 1 40-watt lamp max., Dwg. No. 24, Alt. 0	X	X	X		12/27/49
Mast, blinker, or telegraph signal light, watertight, cat. No. 1452, 1 60-watt lamp max., Dwg. No. 26, Alt. 0	X	X	X		12/27/49
Connection and fuse box, watertight, cat. Nos. 562 and 571, with connection block, 30-ampere, 250-volt max., cat. Nos. 560 and 570, with fuse block for 1½" x 13/32" midget fuses, 3-ampere, 125-volt max., Dwg. No. 24A, Alt 1	X	X	X		12/27/49
Pilot Marine Corp., New York, N. Y.:					
Salinity indicator system power relay for dumping valve solenoid, Dwg. No. PM-605, Alt. 2	X	X			11/30/49
Salinity indicator system, model 83A5-2PR, circuit diagram, Dwg. No. 650H, Alt. 6					11/30/49

HAND TOOLS

1. Select the right tool for the job—never use a makeshift.

2. Use only tools in good condition—no cracked or broken handles, none without handles, no tools with mushroomed or broken heads.

3. Keep keen-edged blades sharp; store them safely when not in use.

4. Do not use a hammer with a hardened face on a highly tempered tool such as a drill, die, or jig. Chips may fly.

5. Use wrenches of the right size for the job. Face the jaws of an adjustable wrench in the direction of the pull.

6. Never apply a wrench to moving machinery; stop the machine; then remove all tools before starting it again.

7. See that pipe wrench jaws are sharp and chains in condition so they will not slip.

8. Never use any tool in such a way that you will be injured if it slips.

ROPE IT OFF

Decks necessarily wet and soapy while being washed down are a serious slipping hazard to the unwary. While the man who is doing the mopping may reasonably be expected to give warning to passers-by, there are undoubtedly many locations where a man could step through a doorway or turn a corner in a passage and suddenly be in the slippery area.

A piece of small line used to rope off the approach to the slippery area would help to prevent these accidents. If a man has to duck under a line he will either be definitely aware of the slippery condition or, preferably, avoid the area altogether.

As an alternative, a few small signs bearing some legend such as "Caution—Wet Deck" might be made up with supporting pedestals. These could be placed at the edges of the wet area and easily moved as necessary.

An additional precaution which can be taken by the man doing the cleaning is to lay out his work so that the minimum practical area of deck is soapy and unmopped at any one time.

Slipping, on ships and in all industries, is the most frequently occurring single type of accident. Every slipping hazard which can be controlled means one fewer chance of injury. *Courtesy, Seamen's Safety Guide.*

From the beginning of time, man has worked long and hard to invent new safety devices or to improve on the old one in order that one human life may be kept free from harm; yet even today, people in all walks of life either through carelessness or sheer ignorance, refuse to, or fail to understand how to utilize even the most simple safety device—common sense!

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 400 cases during the month of December 1949. From this number, hearings resulted involving 12 officers and 64 unlicensed men. In the case of officers, no licenses were revoked, 3 were suspended, 7 were suspended with probation granted, none were voluntarily surrendered, 2 cases were dismissed after hearing and 1 hearing was closed with an admonition. Of the unlicensed personnel, 9 certificates were revoked, 6 were suspended, 26 were suspended with probation granted, 10 were voluntarily surrendered, 1 was closed with an admonition and 9 were dismissed after hearing.

Merchant Marine Personnel Statistics

MERCHANT MARINE LICENSES ISSUED DURING DECEMBER 1949

DECK OFFICERS

		Region								Total	
		Atlantic coast		Gulf coast		Great Lakes and rivers		Pacific coast			
		O	R	O	R	O	R	O	R	O	R
Master	Ocean	26	127	9	39	0	4	8	74	43	244
	Coastwise	3	8	1	2	0	0	0	1	4	11
	Great Lakes	0	4	0	0	5	46	0	0	5	50
	B. S. & L.	6	27	0	0	0	0	0	8	6	35
	Rivers	2	2	0	2	2	14	0	0	4	18
Chief mate	Ocean	12	36	7	7	0	2	9	21	28	66
	Coastwise	0	0	1	0	0	0	0	1	1	1
Second mate	Ocean	18	39	4	11	0	2	6	28	28	80
	Coastwise	0	0	0	0	0	0	0	0	0	0
Third mate	Ocean	11	42	2	8	0	6	11	23	24	79
	Coastwise	0	1	0	0	0	0	0	0	0	1
Mate	Great Lakes	0	0	0	0	0	0	0	0	0	0
	B. S. & L.	1	2	0	0	0	0	1	2	2	4
	Rivers	0	0	0	1	1	9	0	0	1	10
Pilots	B. S. L. & R.	61	107	16	12	23	79	17	48	117	246
Master	Uninspected vessels	0	3	0	0	0	0	3	6	3	9
Mate	Uninspected vessels	0	1	0	0	0	0	3	0	3	1
Total		140	399	40	82	31	162	58	212	269	855
Grand total		539		122		193		270		1,124	

ENGINEER OFFICERS

Steam	Chief engineer: Unlimited	13	141	4	32	0	17	5	63	22	253
	Chief engineer: Limited	0	63	0	7	1	48	0	3	1	121
	First assistant engineer: Unlimited	13	28	6	15	1	4	9	35	29	82
	First assistant engineer: Limited	0	2	0	0	4	6	0	3	4	11
	Second assistant engineer: Unlimited	16	89	4	16	3	14	5	39	28	158
	Second assistant engineer: Limited	0	0	0	0	1	5	0	0	1	5
	Third assistant engineer: Unlimited	17	97	2	19	1	23	9	31	29	170
	Third assistant engineer: Limited	0	1	0	0	1	0	0	0	1	1
Motor	Chief engineer: Unlimited	1	29	0	7	1	2	4	22	6	60
	Chief engineer: Limited	9	38	3	5	2	9	2	12	16	64
	First assistant engineer: Unlimited	2	2	0	1	0	1	2	3	4	7
	First assistant engineer: Limited	4	1	1	0	2	0	0	0	7	1
	Second assistant engineer: Unlimited	0	14	1	0	0	2	1	2	2	18
	Second assistant engineer: Limited	0	0	0	0	0	0	0	0	0	0
	Third assistant engineer: Unlimited	1	113	0	23	1	29	2	42	4	207
	Third assistant engineer: Limited	0	0	0	0	0	0	0	0	0	0
Uninspected vessels	Chief engineer	0	1	0	0	0	0	3	5	3	6
	Assistant engineer	0	0	0	0	0	0	13	0	13	0
Total		76	619	21	125	18	160	55	260	170	1,164
Grand total		695		146		178		315		1,334	

ORIGINAL SEAMEN'S DOCUMENTS ISSUED MONTH OF DECEMBER 1949

Region	(1) Staff officer	(2) Continuous discharge book	(3) U. S. merchant mariner's documents	(4) AB any waters unlimited	(5) AB any waters 12 months	(6) AB Great Lakes, 18 months	(7) AB tugs and towboats any waters	(8) AB bays and sounds[1]	(9) AB seagoing barges	(10) Lifeboatman	(11) Q. M. E. D.	(12) Radio operators	(13) Certificate of service	(14) Tankerman
Atlantic coast	23	6	446	104	30	1	1	1	1	106	70	3	384	7
Gulf coast	6	.....	112	42	8	1	.....	.....	.....	13	18	.....	109	10
Pacific coast	21	1	187	56	18	4	.....	.....	.....	106	51	3	159	1
Great Lakes and rivers	.....	5	100	13	21	10	.....	.....	.....	7	54	1	89	16
Total	50	12	845	215	77	16	1	1	1	232	193	7	741	34

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

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

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

Region	Number of vessels	Deck officers substituted for higher ratings	Engineer officers substituted for higher ratings	Able seamen substituted for deck officers	Ordinary seamen substituted for able seamen	Qualified members of engine department substituted for engineer officers	Wipers or coal passers substituted for qualified members of engine department	Wipers, coal passers or cadets substituted for engineer officers	Ordinary seamen or cadets substituted for deck officers	Total
Atlantic coast										
Gulf coast										
Pacific coast										
Great Lakes										
Total										

NOTE.—In addition, individual waivers were granted to permit the employment of 2 able seamen holding certificates for "any water—12 months" in excess of the 50 percent authorized by general waiver.

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