

Season's
Greetings

PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL
UNITED STATES COAST GUARD

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This copy for
not less than
20 readers.
PASS IT ALONG

MERCHANT MARINE COUNCIL

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of the United States
Coast Guard

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For each meeting two District Commanders and three Marine Inspection Officers are designated as members by the Commandant.

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E: mo (1).
List 141M.

COUNCIL ACTIVITIES

Following is the list of countries which commenced to enforce the requirements of the International Convention for the Safety of Life at Sea, 1948, on November 19, 1952, with the dates the countries accepted the Convention.

United Kingdom.....	Sept. 30, 1949
New Zealand.....	Dec. 25, 1949
United States of America.....	Jan. 5, 1950
France.....	Feb. 8, 1950
Netherlands.....	Apr. 18, 1950
Sweden.....	May 16, 1950
Norway.....	June 12, 1950
Union of South Africa.....	Aug. 18, 1950
Iceland.....	Oct. 19, 1950
Portugal.....	Nov. 30, 1950
Canada.....	Feb. 1, 1951
Pakistan.....	Feb. 1, 1951
Denmark.....	Oct. 15, 1951
Yugoslavia.....	Nov. 13, 1951
Italy.....	Nov. 19, 1951
Belgium.....	Dec. 5, 1951
Israel.....	July 2, 1952
Japan.....	July 23, 1952

The Coast Guard regulations to implement the requirements of the 1948 Convention were published in the Federal Register on October 18, 1952. Space does not permit the reprinting of these regulations in this publication as is customary, however, a copy of this Federal Register may be purchased for approximately 40 cents from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Present expectations are that the revised editions of the regulations incorporating these requirements will be available for distribution to the public next spring.

Navigation and Vessel Inspection Circular No. 11-52, which explains how these requirements will be enforced, is in the appendix of this issue, and it is believed it will explain many questions which may exist at this time.

RADAR: A BRIEF RESUMÉ

The chief advantage of Radar is that it succeeds in those conditions where other methods of navigation are impractical or impossible, to wit, in fog, heavy rain, and other conditions of poor visibility. These conditions, however, have a decided effect upon any Radar set, and it is well to have an understanding of these effects in order to utilize Radar to the fullest extent when it is most needed.

Rain, snow, sleet, and clouds generally have the same effect on the picture observed on the scope. If the ship is in the midst of a light rain, Radar operation is usually near normal, but there might be a slight haze on the screen. In the case of heavy concentrations of precipitation, the scope will be blanked out to some degree. However, during this time, the Radar will detect normally in the other areas of the scope if the heavy precipitation is local in nature. Also, targets may be seen on the same azimuth as the storm, but either closer to or beyond it.

The operation of Radar in fog is usually good and usually can be relied upon, although there may be a reduction in the range at which targets are first detected.

Wind, though not a condition of poor visibility, is even a more important factor in the operation of Radar. The effects of wind are most pronounced in open water. The wind by itself gives no trouble, but the attendant sea results in an obscuration of the Radar known as "sea return." This "sea return" can obscure smaller targets. The waves resulting from wind blowing over the water surface present myriads of targets for the Radar signals to detect, with the most pronounced effect being in the direction of the sea. Depending on sea conditions, "sea return" may obscure the scope up to the 10-mile range ring.

Admittedly, merchant marine Radar sets are equipped with devices for minimizing the effect of "sea return" and permitting more or less normal operation of the set. While such devices are quite effective they do not wholly remove the sea clutter in bad weather. With careful conning of the ship it is usually possible to pick up large targets, such as ships, before they get close enough to get into the "sea return". It is also possible in most cases to properly manipulate the receiver gain control and "sea return" suppressor to detect ships inside the

range of the "sea return", because a ship normally gives a larger concentrated echo than do waves. This, of course, depends on the human element. However, the Radar set in this condition is operating at reduced sensitivity and will miss small targets obscured by "sea return" which may still be a source of potential danger to the ship.

Other factors which more or less impose limitations on Radar are tabulated and briefly discussed below:

(1) Objects cannot be readily identified unless additional electronic devices (Radar aids) are used in conjunction with the Radar itself, though identification can quite often be accomplished by implication, such as movement, relation to other objects, shape (coastline), and sometimes initial range of detection.

(2) Radar chart presentation on the scope requires interpretation due to the line-of-sight characteristics which give shadow effects, that is to say, larger intervening objects may blank out objects behind them.

(3) Radar can be used reliably for only slightly over line-of-sight distances.

(4) Certain types of objects because of their characteristics or motion may go undetected. For example, ice and some other things, due to their physical characteristics and reflecting properties, are relatively poor targets. So is a low-lying point of land. All mariners know the motion of small objects, such as small buoys and boats, caused by bobbing up and down in a seaway, tends to reduce the echo returned to the Radar. These considerations become particularly important when such things as "sea return" and rain are present to reduce the Radar visibility.

While Radar has limitations, its advantages more than compensate for these limitations. The distinct operational advantages are summarized below:

(1) It is the best anticollision device perfected to date.

(2) It provides greater safety while piloting or making landfalls during periods of low visibility.

(3) It indicates continuous instantaneous ranges and bearings of objects.

(4) It presents a chartlike picture of the surroundings, the presentation being in the nature of a polar chart with PPI presentation.

(5) By observation of the scope, movement of objects may be noticed.

To sum up, Radar is definitely not a "cure-all" to replace other devices and methods of navigation, but is rather a supplement to such devices and methods.

Soon after the structural failure of the T2 tankers *Pendleton* and *Fort*

T2 TANKERS

Mercer last winter, the Technical Committee of the American Bureau of Shipping ordered certain structural alterations to T2 tankers. At the same time the Committee directed that a manual for the loading of T2 tankers be prepared jointly by the American Bureau of Shipping and the U. S. Coast Guard.

This booklet, the Guidance Manual for Loading T2 Tankers, has now been completed and is being distributed to owners of T2 tankers by the American Bureau of Shipping for the guidance of those responsible for loading these ships. It explains in simple terms the need for care in determining a favorable distribution of the cargo or ballast and presents a simple method for checking any particular load distribution.

Briefly, the method presented consists of a calculation which results in two numerals called the "Hogging" and "Sagging" numerals. If either of these numbers were to exceed 100, the indication would be that the loading condition being checked would subject the vessel in question to a condition more severe than that for which the vessel was designed.

The method is described in the instructions, and a numerical example is worked out for a condition which would produce a sagging number of 123.8. This is then followed by another example showing the same loading and the same trim, but with the cargo distributed so that neither numeral exceeds 64.

The manual also contains a summary of typical loading and ballasting conditions which are satisfactory. These cargo conditions cover a wide range of densities as well as a number of typical loadings of mixed cargoes.

When distributing cargo or ballast in tankers, judgment and experience can be depended upon to get a good trim condition. Even if distribution is wrong, the undesirable trim is fairly obvious and the condition can be corrected. However, in addition to effecting the trim, certain longitudinal distributions of cargo or ballast have a marked effect on the stresses produced in the hull, particularly when the vessel is in heavy weather. A poor distribution of the cargo from this point of view is not obvious unless it results in a structural failure. For this reason, a careful use of the Guidance Manual is important on those vessels which have completed their structural alterations as well as those which have not.

MARINE SECTION, NATIONAL SAFETY COUNCIL

The Marine Section of the National Safety Council held its annual meeting in Chicago, Ill., October 21-23, 1952.

After welcoming and opening remarks by the general chairman, FredERIC R. Pratt, general manager of the marine transportation department of Socony-Vacuum Oil Co., the meeting commenced with the Ship Operators Session. The remainder of the program consisted of the Business Meeting and Election of New Officers, the General Session, the Coast Guard Session, and a Joint Luncheon with the Propeller Club of Chicago.

The General Session was opened by John J. Pew, vice-general chairman of the Marine Section of the National Safety Council, who is the vice-president of Sun Shipbuilding & Dry Dock Co. of Chester, Pa. The Coast Guard Session was opened by Rear Admiral Halbert C. Shephard, Chief, Office of Merchant Marine Safety, U. S. Coast Guard, in behalf of Vice Admiral Merlin O'Neill, Commandant of the U. S. Coast Guard who was chairman of the Coast Guard Session and was unable to attend.

In his opening remarks Admiral Shephard listed seven outstanding accomplishments in ship safety during the past year:

1. The formation of the National Cargo Bureau, Inc., to serve as a clearing house for shippers and ship owners as to the proper stowage of dangerous cargo.
2. Promulgation of cargo gear regulations to be administered by the American Bureau of Shipping and designed to prevent accidents to longshoremen and harbor workers.
3. Requirements for the further strapping and strengthening of T2 tankers built during the war, to make them more seaworthy.
4. Preparation of a manual for guidance of ship masters in the proper distribution of cargo and ballast to avoid undue stress of T2 tankers.
5. The first major revision of the Coast Guard's General Rules and Regulations pertaining to the design, construction, operation and manning of merchant vessels.
6. A program to correct unsafe working practices by harbor workers and the crew on shipboard.

7. Completion of the S. S. *United States*, which exceeds international and national standards in safety design and construction.

He then reported progress in improving safety through self-regulation by the marine industry, describing this as "a history-making departure from the usual governmental administrative policies," and citing as examples of self-regulation the formation of the National Cargo Bureau, Inc., which will issue certificates indicating the proper stowage of dangerous cargo, and the program of the American Bureau of Shipping to prevent accidents by prescribing standards of cargo gear construction.

Speakers at the Coast Guard Breakfast Club Meeting in addition to Admiral Shephard were; Captain Vernon E. Day, USCG, Chief, Engineering Division, Third Coast Guard District, who spoke on Safety at the Coast Guard Yard; Commander Paul E. Savonis, USCG, Merchant Vessel Inspection Division, Coast Guard Headquarters, who discussed Merchant Marine Casualties, Causes and Corrections; and Commander Leonard E. Penso, USCG, Merchant Marine Technical Division, Coast Guard Headquarters, who discussed precautions in the use of Fire Extinguishing Equipment.

Space limitations do not permit an extensive treatment of the various addresses made before the marine section as a whole, consequently only a few extracts and summations follow.

Captain Harry R. Iehle, Safety Director of Farrell Lines, Inc. brought out: "Careful supervision on the part of the Ship's Officers, probably does more than any one thing to prevent accidents. It's the old story, where a carefully trained man, on the job, can see what is going on and correct any practices that are not right. He can also establish safe procedures for the many and varied jobs encountered on board ship, and see that these recommended procedures are followed. A good Officer, if properly trained, can see many things at once. He can also recognize what he does see. Without taking his mind off his work he will notice conditions about the ship. Unnecessary obstructions about the deck; oil or water spills; makeshift platforms to stand on; improper rigging and the incorrect usage of tools will be observed—All in time to correct, and before they have caused an accident. He will spot a seaman with

a bit too much to drink, and get him off the deck before he hurts himself or his shipmates. He will see the man chipping without goggles, or the fellow over the side without a life preserver. The man aloft without a Safety Belt will not escape his surveillance, nor will the fellow 'horsing around' with the power tools. He will see all these things, without effort, and quietly give the order to make the suggestion that eliminates the hazard. He is valuable—and necessary. For he can give 'on the job' training to his men—under actual working conditions—where it will do the most good and where it is most likely to be remembered.

"Intelligent supervision is important on shipboard, too. A well run ship is not only a happy ship—it is a safe ship. For seamanship is safety, and a ship operated in a seamanlike manner is always safer than one aboard which this quality is lacking. Attention is paid to details, such as cleanliness and good order. A clean and orderly ship is not just a ship that's good to look at, but one on which many of the hazards which cause accidents are not present. There are no loose lines or gear strewn about the decks to stumble on, no oil or grease to slip on, nor makeshift ladders or platforms to fall off of, or no piles of rubble to plug scuppers or catch on fire. Such a ship is truly a safer ship and the exercise of supervision aboard can keep it that way."

Mr. T. T. Wilkinson, superintendent engineer of the Sinclair Refining Co.'s marine department in discussing the "Prevention and Cure of Fire in the Pumproom" described Sinclair's pumproom experiences and outlined the steps taken to prevent pumproom explosion and to extinguish fire if and when it occurs. In summing up his remarks he said: "The all important step is to prevent leakage of cargo into the bilge and toward the end we propose to use rotary rather than reciprocating or high speed centrifugal pumps, to install valves instead of spectacle blinds in pump room lines that cannot be drained, and to use neoprene covered blinds in all other cargo lines to prevent ignition of vapors if we cannot prevent their collecting."

Mr. I. C. Yates, Safety Director of the Alabama Drydock & Shipbuilding Co., of Mobile, discussed first aid and rescue training as a requisite to safety education. He stated: "First-aid

training gives the individual an insight on the necessity for further training, because it reveals what the ultimate results might possibly be, should we fail to train properly and completely. It also replaces all doubt in the average persons' mind as to the necessity for further education. It creates a willingness to accept, to respect, and to regard the whole program as one that is especially designed for the individual benefit, as well as for that of an organized team. It replaces doubt and fear with confidence and determination.

"During the years 1941 through 1945, many of us were engaged in an extensive training program for both production and safety. Since that time it has been the privilege of some to be in a position to look back and see what the difference actually was. Our records indicate that those who have received first aid training, definitely made us the better employees in every respect. The supervisory training phase gave us good, if not better, results. It is a proven fact that employees who are trained in first aid methods are fifty per cent less likely to become accident victims. Here again, may I emphasize the point that can be gained by getting on the inside of the human element angle to accident prevention.

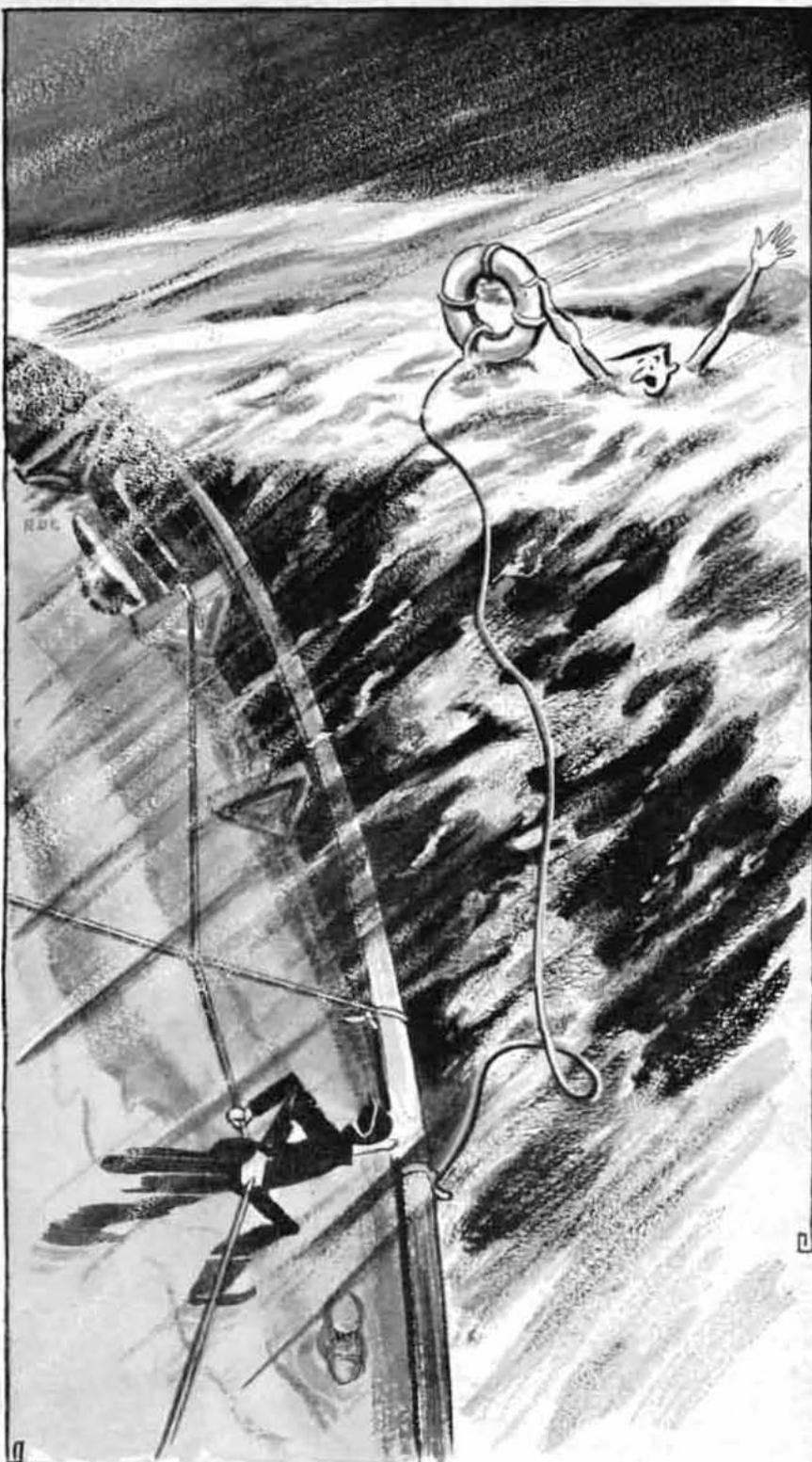
"Possibly the saddest answer that has ever been given in accident investigation to determine the cause is 'I didn't know'. How often have we arrived at the scene of a highway accident where broken and bleeding bodies were scattered about, and seen those who were not so unfortunate trying to do something to help, and didn't know how? The same situation applies to every individual whether on the streets, highways, playgrounds, in the home, or on the job.

"Continuing, he cited accident cases to bear this out. He then closed as follows: "We must definitely assume the positive approach to accident prevention. Why should we make the mistake of relying exclusively on the negative approach—to talk about how bad things are? Why don't we take the affirmative stand, and tell the good things about our accident prevention programs? We can do this by simply telling the truth, because our accident records are better, and have become so in relatively a very short time. With all these facts to motivate us, with all the 'know-how' that is available today, all we need now is the continuation of the courage that has brought us the reputation of being in the safest nation on the face of the earth."

It is unfortunate the other addresses could not be dealt with in this space, for many of them were of extreme interest.

December 1952

MOPE and DOPE



"Where's the directions on how to use this thing?"

CARE AND USE OF OXYGEN BREATHING APPARATUS

Since Marine Safe Practices Pamphlet No. 5 was issued in September 1947, many vessels have converted their oxygen breathing apparatus from the demand type to the "chemox" canister type. This Supplement is intended to outline the features and use of the canister type apparatus. However, many introductory facts to oxygen breathing apparatus will not be repeated, hence it is suggested that Marine Safe Practices Pamphlet No. 5 be reread before studying this Supplement.

THE CHEMOK SELF-GENERATING OXYGEN BREATHING APPARATUS

The chemox provides complete respiratory protection in toxic or oxygen-deficient atmospheres for a minimum of 45 minutes.

This apparatus represents an unusual departure in the design of self-contained breathing equipment. In place of the conventional cylinder of compressed oxygen, the chemox has a chemical canister from which oxygen is generated gradually.

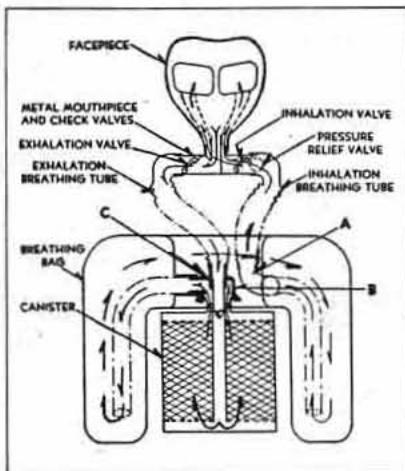
The entire apparatus weighs 13½ pounds. A considerable saving in weight is made possible by the absence of an oxygen cylinder and the usual high pressure fittings found on self-contained equipment of different design.

COMPONENT PARTS OF THE CHEMOK

- A facepiece assembly, including a facepiece, a valve assembly containing check valves and a pressure relief valve, and two breathing tubes.
 - A breathing bag, which acts as a reservoir for the oxygen generated from the canister.
 - The canister, which generates oxygen and removes carbon dioxide from the breathing system.
 - The plunger assembly, consisting of a plunger which punctures the seal in the neck of the canister, and a plunger casting, through which the exhaled breath is transmitted to the canister, and through which the evolved oxygen is conducted to the breathing bag.
 - An insulated breast plate and canister frame with attached bail and handwheel for holding canister. Breathing bag is attached to breast plate.
- A mechanical timer which rings to indicate the end of the approved 45 minutes service life of the canister, or any shorter period selected.
 - A web harness for wearing the apparatus. This consists of two shoulder straps and a waist strap, all adjustable, and fastened by means of D-rings and snaps. A large D-ring to which a lifeline can be attached is fastened to the harness straps at the point where they intersect across the back.

THE FACEPIECE ASSEMBLY

The facepiece assembly consists of a facepiece and attached breathing tubes. The facepiece is the "All-Vision" type, having large contoured lenses. Lens fogging is prevented by the flow of dry oxygen directed across the lens by ducts located in the facepiece.



Attached to the lower portion of the facepiece is a metal facepiece valve assembly, containing inhalation and exhalation check valves and a manually operated pressure relief valve. (This valve permits one-direction flow only. Therefore, it is not possible to inhale through it and contaminate the breathing system.)

Connected to the ends of the valve assembly are corrugated rubber breathing tubes. The inhalation breathing tube leads into the left side of the breathing bag via an elbow (A) mounted on the plunger assembly. The exhalation tube directs the exhaled breath into the canister via the plunger casting (B). The breathing tubes are fastened at both ends by

coupling nuts, which facilitate removal for cleaning.

The facepiece is held in place by a headband consisting of five adjustable rubber headstraps—two on each side of the facepiece, and one fitting over the forehead.

THE BREATHING BAG

The breathing bag, which acts as a reservoir for the oxygen generated by the canister, has a capacity of approximately six liters (5½ quarts). The bag, made from sturdy Neoprene, is highly resistant to fumes and gases, and is vulcanized at the seams, which, in effect, renders it of one-piece construction. It is constructed in the shape of an inverted U and is fastened to the canister frame by means of tabs and screws.

Oxygen from the canister flows into the breathing bag through a fitting (C) leading from the plunger casting to the upper right side of the breathing bag. From this point the oxygen is conducted to the lower right side of the bag through a flexible tube connected to the fitting. A similar tube runs down through the left side of the breathing bag and joins the inhalation breathing tube at the elbow (A) on the plunger assembly. Thus, this forced circulation through the entire breathing bag insures adequate cooling of the oxygen before it reaches the facepiece.

THE PLUNGER ASSEMBLY

The plunger assembly consists of a spring-loaded plunger within a hollow housing mounted on the canister holder. The plunger is a cylindrical tube with a cone-shaped tip, whose function is to pierce the exposed copper foil in the canister neck when the canister is thrust up against it. The tip of the plunger is perforated to allow the exhaled breath to enter the canister.

The plunger housing is the duct through which oxygen generated in the canister, flows into the breathing bag. A tube (C) fitted to the housing, carries the oxygen into the upper right side of the bag, where the oxygen begins to circulate as previously described.

THE CANISTER

The canister consists of a steel shell having an inner liner of copper. It contains five layers of the oxygen-evolving chemical, potassium tetroxide, separated by copper screening to prevent caking. The bottom layer

of chemical is impregnated with a catalyst, which serves to speed the chemical reaction by which the oxygen is generated.

To provide adequate circulation of the incoming breath, and to insure minimum breathing resistance, a space is maintained between the lower layer of chemical and the bottom of the canister.

Fibre glass cloth filters are placed at the top and bottom of the canister to prevent any tiny particles of potassium tetroxide, which might result from rough handling of the canister, from entering the breathing system.

A hollow tube of copper extends downward from the neck of the canister. The tip of the plunger fits into the mouth of the tube, so that the exhaled breath travels through the plunger and down through the tube to the bottom of the canister. Here, the potassium tetroxide activated by the moisture in the breath, liberates oxygen, and, by a subsequent chemical reaction, removes carbon dioxide. The liberated oxygen flows up through the canister into the plunger housing, and, from there, into the right side of the breathing bag.

Since oxygen is evolved in response to the wearer's exhalations, once the canister is started, an adequate supply is assured regardless of whether he is breathing normally or rapidly. Thus, the Chemox canister serves the double function of providing a plentiful supply of pure oxygen while, at the same time, removing carbon dioxide from the breathing system.

The canister is hermetically sealed to prevent air from coming in contact with its contents, and so may be stored indefinitely, if the seal is not broken.

THE TIMER

The timer, mounted on the plunger housing, is the means of announcing that the approved 45 minutes service life of the canister has elapsed. A bell rings at the end of this period to warn the wearer to return to fresh air.

The timer is actuated by twisting the pointer clockwise (as worn) as far as it will turn. This automatically sets the bell to ring after 45 minutes. If the user expects that more than a few minutes will be required to make his exit to fresh air, he should allow for the extra time when setting the pointer. For example, if 10 minutes will be needed to return to fresh air, the pointer should be set at the 35, rather than at the 45 minute mark.

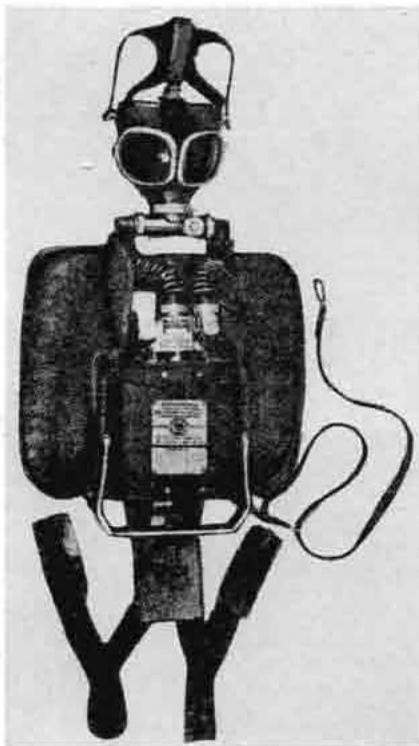
QUESTIONS AND ANSWERS

Q. What is the purpose of the manual pressure relief valve, and when should it be used?

A. The pressure relief valve is a means of venting off any excess pressures which might build up in the breathing bag. Oxygen is generated by the canister at a somewhat faster rate than it is consumed and, unless the excess oxygen seeps out around the facepiece, it will occasionally be necessary to bleed it off by means of the relief valve. An uncomfortably high resistance to exhalation is the signal that there is excess oxygen in the system and that it should be vented off.

Q. In addition to the timer, what other indications are there that the canister is approaching the end of its service life?

- A. (1) Lens fogging during inhalation.
- (2) An uncomfortably high resistance to both inhalation and exhalation which cannot be alleviated by use of the pressure relief valve.
- (3) Gradual deflation of the breathing bag.



Q. What is the proper method of discarding exhausted canisters?

A. After the canister has been removed from the apparatus, it should be punctured on both sides and on the bottom with a small clean nail or tool and placed in a nearly-full bucket of water. After the bubbling ceases, indicating complete exhaustion of the potassium tetroxide, the canister can be discarded. The water,

which is caustic, should be poured down a drain or disposed of in some other suitable manner.

Q. Should a canister be reused if it has not been used for its entire 45 minute service life?

A. No. Once a canister has been opened, it should be discarded, regardless of how much of its service life is thought to remain. Since moisture in the air will react with the oxygen evolving chemical and, since the canister cannot be resealed to completely exclude moisture, the service life of a once-opened canister cannot be accurately predicted after a period of storage.

Q. How long may an unopened canister be stored?

A. Indefinitely.

Q. What checks should be made on the Chemox before entering unbreathable atmospheres?

A. (1) See that the handwheel is screwed tight against the bottom of the canister to insure a complete seal between the plunger housing and the gasket in the canister neck.

(2) Test for proper facepiece fit:

Grasp both breathing tubes and squeeze to close them off. Inhale. If the facepiece collapses against the face, it is properly fitted. If air can be drawn around the side of the facepiece, the headstraps should be tightened until an airtight fit is obtained.

(3) Test the apparatus for leaks:

Inflate breathing bag and press down on it with the elbows. If bag deflates, the apparatus leaks and should not be used.

Q. Can the Chemox be used at temperatures below freezing?

A. Yes. Once the canister is started, it will continue to operate at temperatures down to -20° F. In cold weather it may be necessary to put more than the usual five to six breaths through the canister, but under extreme conditions not more than 15 breaths should be required. The apparatus and canisters should always be stored, and started, at temperatures above freezing. Otherwise, if apparatus and canisters are permitted to become chilled before using, the breath moisture will condense in them, making starting difficult or impossible.

(NOTE.—The information in this Pamphlet is extracted from a pamphlet entitled, "Facts you Should Know About the Chemox Oxygen Breathing Apparatus, and the M. S. A. Demand-Type Apparatus" issued by the Mine Safety Appliances Company. Illustrations are from sales literature.)

Courtesy Accident Prevention Bureau of Pacific Maritime Association.

NUMBERED AND UNDOCUMENTED VESSELS

The table below gives the cumulative total of undocumented vessels numbered under the provisions of the act of June 7, 1918, as amended (46 U. S. C. 288), in each Coast Guard district by customs ports for the quarter ending September 30, 1952. Generally speaking, undocumented vessels are those machinery-propelled vessels of less than five tons engaged in trade which by reason of tonnage are exempt from documentation.

Coast Guard District	Customs port	Total
1 (Boston)	(4) Boston	17,482
	(1) Portland, Maine	11,901
	(2) St. Albans	2,954
	(5) Providence	5,001
		37,338
2 (St. Louis)	(45) St. Louis	15,411
	(12) Pittsburgh	2,618
	(34) Pembina	71
	(35) Minneapolis	5,705
	(40) Indianapolis	3,280
	(42) Louisville	2,550
	(43) Memphis (part)	8,343
	(46) Omaha (part)	513
	38,511	
3 (New York)	(10) New York	44,378
	(6) Bridgeport	9,788
	(11) Philadelphia	21,290
	75,455	
5 (Norfolk)	(14) Norfolk	16,991
	(13) Baltimore	24,574
	(15) Wilmington, N. C.	9,056
	50,621	
7 (Miami)	(18) Tampa (part)	23,203
	(16) Charleston	2,013
	(17) Savannah	3,418
	(49) San Juan	490
	(51) St. Thomas	103
	29,227	
8 (New Orleans)	(20) New Orleans	20,826
	(18) Tampa (part)	777
	(19) Mobile	8,550
	(21) Port Arthur	4,086
	(22) Galveston	11,169
	(23) Laredo	2,192
	(24) El Paso	6
(43) Memphis (part)	76	
	47,682	
9 (Cleveland)	(41) Cleveland	6,620
	(7) Ogdensburg	2,593
	(8) Rochester	4,718
	(9) Buffalo	4,168
	(36) Duluth	2,509
	(37) Milwaukee	3,550
	(38) Detroit	16,551
	(39) Chicago	5,417
		46,126
11 (Long Beach)	(27) Los Angeles	9,613
	(25) San Diego	1,865
	(26) Nogales	114
	11,592	
12 (San Francisco)	(28) San Francisco	21,177
	21,177	
13 (Seattle)	(30) Seattle	16,677
	(29) Portland, Oregon	8,518
	(33) Great Falls	430
	25,625	
14 (Honolulu)	(32) Honolulu	4,051
	4,051	
17 (Juneau)	(31) Juneau	7,068
	7,068	
Grand total		394,483

THE PROPOSED INTERNATIONAL RULES OF THE ROAD

There is reason to believe that some misunderstanding exists as to when the proposed International Rules of the Road will take effect.

The International Rules of the Road, otherwise known as the International Regulations for Preventing Collisions at Sea, were revised to some degree at the International Safety Conference, 1948, along with the International Convention for the Safety of Life at Sea, 1929. However, and this is important, the Conference recommended the revisions to participating governments separately.

The Final Act of the Conference states:

"The Conference also had before it and used as a basis for discussion the present International Regulations for Preventing Collisions at Sea. The Conference considered it desirable to revise these Regulations and accordingly approved the International Regulations for Preventing Collisions at Sea, 1948, but decided not to annex the revised Regulations to the International Convention for the Safety of Life at Sea, 1948. The Conference invites the Government of the United Kingdom to forward the International Regulations for Preventing Collisions at Sea, 1948, to the other Governments which have accepted the present International Regulations for Preventing Collisions at Sea, and also invites the Government of the United Kingdom, when substantial unanimity has been reached as to the acceptance of the International Regulations for Preventing Collisions at Sea, 1948, to fix the date on and after which the International Regulations for Preventing Collisions at Sea, 1948, shall be applied by the Governments which have agreed to accept them. The Conference requests the Government of the United Kingdom to give not less than one year's notice of this date to the Governments of all States.

"The International Regulations for Preventing Collisions at Sea, 1948, are appended hereto as Annex B to this Final Act."

The term "substantial unanimity" is the key as to why the Proposed Rules of the Road did not take effect on November 19, 1952, along with the requirements of the International Convention for the Safety of Life at Sea, 1948. To date the following nations have indicated acceptance of the proposed International Rules of the Road. Though large in number, they do not represent a sufficient portion of the world's shipping to provide "substantial unanimity."

Australia	Ireland
Belgium	Italy
Brazil	Mexico
Burma	The Netherlands
Canada	New Zealand
Chile	Nicaragua
Denmark	Pakistan
Dominican Republic	Poland
Ecuador	Spain
Egypt	Sweden
Finland	Turkey
France	
	Union of South Africa
Greece	U. S. S. R.
Iceland	The United States
India	The United Kingdom
Iraq	Yugoslavia

The new International Rules of the Road, proposed by the International Safety Conference, 1948, did not go into effect on November 19, 1952.

HOW ARE YOUR HOLDING DOWN BOLTS?

A company which operates a fleet of T2-SE-A1 tank vessels mailed the following letter to its chief engineers:

"On one vessel, six of the holding-down bolts of the main shaft thrust bearing were found fractured, and 14 others were loose. The thrust bearing was, of course, loose on its foundation bedplate. Fortunately, the defects were discovered before serious damage was done to the shaft, thrust collar, and main motor.

"Examination of the fractured bolts revealed crystallization of the steel. This might have been caused by the natural vibration and frequency during the years of service since construction.

"Please promptly examine the holding-down bolts of the main shaft thrust bearing of your vessel, sound with a hammer, and check for tightness with a wrench.

"The importance of this inspection cannot be over emphasized."

As a result of this letter, a second vessel in the fleet reported fractured holding-down bolts on the main shaft thrust bearing. Thus, by publicizing an unsafe condition found on one vessel, possible serious damage was averted on another.

Your ~~Fact~~ Forum

Q. If you were in charge of a lifeboat, how would you proceed to come alongside a gangway under ordinary conditions, and what orders would you give?

A. Come up to the vessel from astern so that the boat is parallel to the vessel when about 100 yards from the gangway, and then give the orders "In bows" whereupon the two-bow oarsmen boat their oars and stand by with boat hooks; when the boat is about two boat lengths from the gangway, give the order "Oars," followed by "Boat your oars," whereupon all of the oars are boated; next sheer the bow in toward the gangway, and when it nearly touches, shift the helm and sheer the bow out, bringing the stern in. Due regard, of course, must be had for wind, tide, and sea. It is customary to have a painter ready at hand at the gangway, and led well forward on the vessel, for use in moderate weather.

Q. When and in what region of the Atlantic do icebergs appear in greatest numbers?

A. Off the Newfoundland banks as far south as 40 N. latitude during the months of April, May, and June.

Q. Approaching a coast on a misty night you expect to pick up a certain light having definite characteristics. Two hours before you expect to sight the light you pick up a light showing different characteristics not definitely recognized. As captain, what would you do?

A. Stop; have a sounding taken and request radio compass bearings. With the sounding and the bearing of the light try for an approximate fix by plotting the light bearing on all probable aids to navigation as the characteristic of the expected light may have been changed and the "Notice to Mariners" not yet received by the ship, or the light may have been changed on account of some derangement. If the sounding showed the ship inside a safe depth curve, anchor until the position is satisfactorily determined.

Q. How is a sea anchor hauled in?

A. A sea anchor is hauled in by its tripping line which upsets it so that it is brought in small end first with greatly reduced resistance to its passage through the water.

Q. What are the parts of an anchor?

A. The parts of an anchor are stock, shank, fluke, crown, arm, and shackle or ring.

Q. Entering port, how can one tell by observation which direction the tide is setting?

A. By noting the direction in which the buoys are inclined, especially spar buoys.

Q. What is a frapping line?

A. A frapping line is any piece of line passed around a boat fall, one end being made fast on deck and the other being hauled taut and belayed to prevent the boat from swinging.

Q. What is the difference between a revolving, a flashing and an occulting light?

A. A revolving light shows a light gradually increasing and decreasing in its intensity during the period of its display. A flashing light shows to its full intensity during its whole flash period. The duration of the flash is always shorter than the eclipse. An occulting light is a continuous light suddenly and totally eclipsed at regular intervals; the duration of the light being always greater than, or equal to the eclipse.

Q. Which oar is the stroke oar in a lifeboat?

A. The oar nearest the stern in a single-banked boat. In a double-banked boat, the port and the starboard oars nearest the stern are both stroke oars.

Q. If you were in charge of a lifeboat, how would you prevent it from swinging as the vessel rolled when the boat is at the embarkation deck?

A. By the use of frapping lines. Some vessels carry permanent wire frapping lines which automatically swing the boat into the embarkation deck.

Q. How is the size of a chain cable measured?

A. By the diameter of the iron forming the links.

Q. Which anchor is preferable to let go in the Northern Hemisphere and why?

A. The port anchor, as in the Northern Hemisphere the wind shifts to the right. Then should it be necessary to let go the second anchor, there will be no danger of fouling it as the cables will lead clear of each other.

Q. How would you let go an anchor in deep water?

A. Lower it with the windlass.

Q. What is the necessary precaution in taking a twin-screw vessel away from a wharf?

A. Not to use the inside screw until the stern is well clear.

PRECAUTIONS IN THE USE OF FIRE EXTINGUISHING EQUIPMENT

By LEONARD E. PENSO, Commander, USCG
Merchant Marine Technical Division—USCG Headquarters

An address presented at the annual meeting of the Marine Section of the National Safety Council at Chicago, Ill., October 21-23, 1952. This address highlights the importance of studying casualty case histories and cites several pointed lessons learned from them.

A study of our casualty records would lead one to believe that fire is almost as well organized as Murder, Inc., for it seems to strike at our weakest points and when we least suspect it.

Efforts of the shipping industry relative to fire protection in cooperation with Coast Guard inspection have yielded excellent results but there is still room for improvement. Obviously the answer is adequate fire-fighting equipment kept in good condition, with personnel trained in its use. Our regulations supply the adequate equipment. From that point we pass the ball to you to maintain the equipment and train your personnel. Many shipping companies, particularly the tanker industry, have made excellent strides in this connection, by providing elaborate fire-fighting manuals and, in some cases, sending their men to fire-fighting schools. The tanker industry is of necessity more fire-conscious than other shipping interests. However, the record indicates that losses due to fires on vessels other than tank vessels are such as to warrant more consideration by some passenger and cargo vessel operators although certain operators have excellent safety programs.

There is no point in bringing to your attention the details of the selection, operation, and maintenance of portable fire extinguishers or fixed fire-extinguishing systems. Such information is available from a variety of sources which you have undoubtedly used in preparing fire-fighting manuals and other safety publications for the guidance of your employees. There is, however, considerable merit in bringing to your attention certain lessons from casualties which could be used in the preparation of such fire-fighting manuals. Many lessons from casualties are published in the Proceedings of the Merchant Marine Council, and the Coast Guard encourages reference to these lessons in your safety literature because it is recognized that an actual case history is one of the most effective ways of illustrating a point. We have many casualty records that have not been publicized, and a discussion of some of them might provoke further study

and corresponding additional safety precautions.

The case of the Texas City disaster brings to mind the fact that even if a vessel is fitted with an efficient carbon dioxide or steam smothering system and the crew is well trained in its use, it is still necessary to know something of the general chemistry of fire and have some knowledge of the characteristics of the cargo being carried. In the case of the French steamer *Grandcamp* at Texas City this was not done. The officers on the *Grandcamp* attempted to smother the fire by closing all vents and hatches and introducing steam into the fire area. This action did nothing to remove the heat from the burning ammonium nitrate. As the heat increased the decomposition of the nitrate into explosive gases was accelerated and the gases having no means of escape through the battened hatch and covered vents finally exploded. The blast cost the lives of 552 people, over 3,000 were injured, and damages totaled nearly \$50,000,000. The only practical way to have avoided the explosion was to have fought the fire initially with large quantities of heat-absorbing water.

In a recent case we lost a Liberty ship due to the fact that the CO-2 system was not discharged into the fire area. It appears that when the boiler room fire progressed to a point where it was necessary to use the gas, one of the assistant engineers operated the proper valve to the space on fire but neglected to pull the control handle in the break-glass pull box. Further testimony revealed that another engineer passed the fire-control station a short time later and noted that the tripcock was hanging down with about eight inches of the "lanyard" showing, which position he described as being the normal position which he had observed previously. Such confusion can only lead one to believe that neither engineer was entirely familiar with the operation of the CO-2 system. In the abandon-ship operation, which followed the fire, five men lost their lives.

In another boiler-room fire we were more fortunate but only because the fire was relatively small. In this case the fixed CO-2 system was put in use by opening the valve to the boiler-room space and pulling the control handle for the wrong space such that only seven cylinders were discharged into the boiler room instead of the required 20. The testimony reveals that this did not put the fire out and that it was only through the valiant efforts

of the crew using portable extinguishers and a bucket brigade that the fire was brought under control.

In still another case, the chief mate and chief engineer of a vessel insisted that they had operated the fixed CO-2 system properly. Yet the testimony and findings of fact reveal that they had not in fact released the gas inasmuch as all cylinders were weighed upon arrival in port and found to be fully charged. Here again it appears obvious that neither man was familiar with the operation of the system.

These cases bring to mind the fact that training must proceed on a continuous basis. It must be remembered that even though a mate or an engineer has many years of seagoing experience it is quite possible that he has been shipmates with only one type of fire-extinguishing system and needs indoctrination when confronted with an unfamiliar arrangement.

Admittedly, it is impracticable to practice with a fixed fire-extinguishing system due to the expense and recharging difficulties. This may explain, in part, why some such systems have been improperly used in the past. Although no definite procedure for training is suggested at this time, it is recommended that a study be made in each case of a training program so that the persons involved will have first hand information of the operation, intricacies, and limitations of their particular systems. If you have developed a training program covering such matters and would care to share it with others, the Coast Guard would be pleased to pass on this information in the Proceedings of the Merchant Marine Council.

In the case of hand portable fire extinguishers the training program is, as you know, much simpler but just as essential. Consider the case of a fire in a shore-side plant which was adequately equipped with numerous carbon dioxide hand portable extinguishers. Untrained personnel attempted to use the extinguishers without first pulling the locking pin which is installed to prevent tampering. When the extinguishers failed to operate they began reading the instructions and found that it was necessary to remove the locking pins first, whereupon they discovered that in their frantic haste to operate the extinguishers they had bent the pins to such an extent that they could not be removed. In the meantime, the fire had gained such headway that it was beyond the scope of hand extinguishers. This could happen on any ship especially if a crew member has

been trained solely by reading fire-fighting manuals.

Unfortunately, it is general practice at annual inspections to assemble such extinguishers on the after deck or on the dock and discharge the contents into the water. How much better it would be if small practice fires could be made available in a safe place for training the crew when discharging these extinguishers. The standard test fires used by the National Bureau of Standards, Underwriters' Laboratories, Inc., and the Factory Mutual Laboratory could be used for this purpose. Practice in the actual extinguishment of a fire would make a lasting impression on all crew members.

This point was clearly demonstrated last year when the Coast Guard conducted a series of fire tests at the Coast Guard Yard. Certain special standard test fires simulating those likely to occur on motorboats were set up. New recruits were given various types of extinguishers and instructed in their use, after which they were to attempt to extinguish the various test fires. It was surprising how many fires were not extinguished. In most cases, fear was the dominating factor which caused the operator to stand too far away for the extinguisher to be effective. On the second and third attempts the improvement was remarkable and most of the fires were extinguished. There were, of course, cases where the operator failed to pull the pin as mentioned previously. With the experience acquired in these tests it is not likely that he will make the same mistake again.

One interesting phase of this test program was the experience gained in attacking the fires from the windward side. A number of recruits approached the test fires from the leeward side using carbon-tetrachloride extinguishers. Needless to say they retreated from the scene in great haste after being exposed to the irritating vapors peculiar to these extinguishers. Although these tests were not designed to train personnel, the recruits gained invaluable experience in practical fire fighting. One of the hidden benefits in this practical experience was acquiring an appreciation of just what a portable extinguisher can do. When the recruits had difficulty extinguishing the four-by-four-foot spill fire as used by the National Bureau of Standards, it impressed upon them the fact that the terminology of "first aid fire appliance" as applied to hand portable fire extinguishers is for good reason. When these men are confronted with an appreciable size fire on shipboard they are not likely to waste time

using a portable extinguisher and will undoubtedly bring more adequate equipment into play immediately. The disastrous fire on the S. S. *Noronic* is a typical case of wasting time using a portable extinguisher on too serious a fire. The testimony indicates that "The fire originated in a linen locker on C deck. One of the passengers first noticed smoke coming from this area and called a bell boy who opened the linen locker. A large amount of smoke and some flames were immediately apparent. Together these two attempted to control the fire with a portable carbon-tetrachloride extinguisher and a fire hose from the adjacent passageway, but the extinguisher was not large enough to have any appreciable effect, and there appeared to be no pressure on the fire main so these efforts were abandoned." Of course carbon-tetrachloride was not a suitable extinguishing agent for this class A fire in any case.

Speaking of carbon-tetrachloride extinguishers brings to mind a technique developed by a ferry vessel operator some years ago wherein he introduced a coloring in the liquid in order to prevent employees and passengers from using the extinguishers for cleaning purposes. As you know this is a very dangerous practice, for carbon-tetrachloride extinguishers are extremely sensitive to their recharge liquids. To illustrate this point, we need only to quote from Navigation and Vessel Inspection Circular 4-48 wherein it was stated that "The manufacturer has informed the Coast Guard that the reason for the failures (of their carbon-tetrachloride extinguishers) was caused by a change made by their supplier in the method of preparing the chemicals used in the extinguishing liquid. The questionable liquid is believed to have caused internal corrosion of the extinguishers, making them inoperative." If just a change in the method of preparing the chemicals can cause such damage, it can be appreciated that introducing a coloring agent by anyone other than the manufacturer is almost bound to give trouble.

Fire fighting is a skill in which the average seaman has little or no practical knowledge or experience. Yet, when a fire occurs at sea, he is expected to act quickly and intelligently to effect extinguishment. It has been said that the art of building ships in a manner to restrict the spread of fire has made great advances in the past few decades, but the operation of ships in a fire-safe manner has not kept pace with this improvement of design and construction, and the art of fire extinguishment on board ves-

sels has fallen far behind the skill employed in fires involving land structures. In a sense this is understandable since fires on land are usually fought by expert fire fighters who devote their lives to this cause.

Let us all work together therefore to remove this stigma on our fire-fighting abilities so that next year at this time we can look back with pride on our accomplishments.

SHORT, SHORT

A seaman, while stripping his foreign-made pistol, accidentally allowed the slide to slip from his fingers seating a cartridge. At about this time the vessel rolled, sending the seaman off-balance. The gun discharged and wounded the bow lookout.

STEERING ORDERS

Because of the possibility of confusion, the use of the words "starboard" and "port" in orders to the helmsman has been prohibited by an act of Congress. The orders to the helmsman, which must be used instead of those formerly used, are as follows:

"Right rudder," which is an order for the wheel to be turned to the right, so that the rudder and the head of the vessel go to the right.

"Left rudder," which is an order for the wheel to be turned to the left, so that the rudder and the head of the vessel go to the left.

Rudder indicators must be consistent with the above provisions.

The use of these orders to the helmsman is mandatory on all vessels.



Courtesy Maritime Reporter.

LESSONS FROM CASUALTIES

MAY WE SUGGEST

A recent fatality on a coastwise tug not subject to inspection has brought out a danger which may exist on other vessels engaged in towing operations. This danger, having lain dormant for some years, finally struck, proving that a repeated unsafe practice will in time claim a victim. Wherever you are, whoever you are, we hope you will consider this fatality and act on our suggestions.

This is what happened.

The tug, a diesel propelled vessel of 288 gross tons, was engaged in towing a barge. At 0230 on a dark, clear night with light rain, smooth sea and light northeast wind, the tug approached the entrance to its destined harbor. At this time the deceased was on the after deck flaking down a manila line which was to be used for mooring purposes upon arrival at the pier.

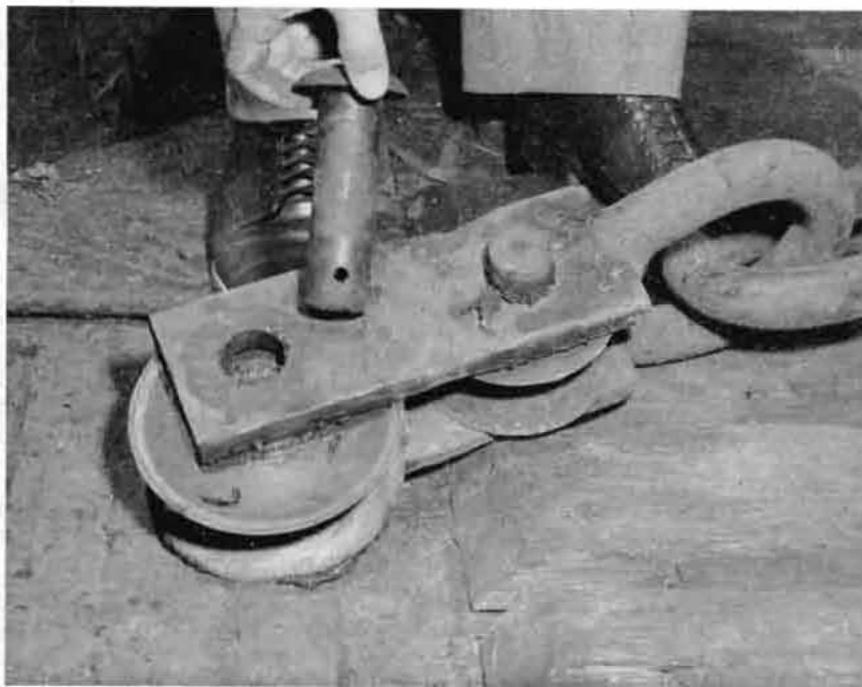
The second mate stated he was standing near the after end of the deck house with his back turned to the deceased when he heard the sound of the towing wire whip across the deck and strike the deceased, who then fell face forward by the bulwark. Unconscious, he was removed to the vessel's messroom where first-aid treatment was administered. An ambulance was waiting at the pier upon

arrival, but to no avail. The injured man was pronounced dead, apparently having been killed *instantly* when his head struck the vessel's bulwark with great force.

The investigation disclosed that the cotter pin holding the sheave pin in place on the fair-lead block had broken off, allowing the sheave pin to drop out and the towing wire to slip out of the fair-lead. (See picture.) By putting the pieces of the broken cotter pin together, it was determined that the pin was made of iron, approximately four inches long and 1/4-inch thick in its separate parts, also that it had been in a rusted condition and very brittle. On the other hand, the fair-lead was found to be in a generally good condition.

The apparent cause of this fatal accident was the breaking off of the cotter pin on the fair-lead block which allowed the towing wire to sweep across the deck and fatally injure the deceased. Obviously, the cotter pin in question was *inadequate* and *unsafe* due to its deteriorated condition. By referring to the illustrative picture, it can be readily seen just how inadequate the cotter pin assembly would be even under the best of conditions.

We suggest and urge that such fair-lead block arrangements be recognized as unsafe and, recommend that a bearing pin secured *with* a nut and retaining pin be used.



CARELESS HANDLING OF FIREARMS

A section of the Criminal Code states in part: "Whoever brings, carries, or possesses any dangerous weapon * * * on board of any vessel registered, enrolled, or licensed under the laws of the United States * * * without previously obtaining the permission of the owner or master of such vessel * * * shall be fined not more than \$1,000 or imprisoned not more than one year, or both."

It may not be immediately apparent, but this law places a tremendous responsibility on the master, for he becomes the judge of who is sufficiently responsible, intelligent, judicious, and rational to be considered a good bet for a shipmate while in possession of such dangerous weapon.

Recently, one master made a poor choice.

A Chief Engineer had been assigned to the vessel for maintenance and security reasons at a time when the vessel was laid up. He purchased a shotgun to use for hunting in the vicinity of the vessel. When the vessel was reactivated, this same Chief Engineer was retained on board, and having no occasion to dispose of the shotgun, he kept it on board—with the master's cognizance.

Members of the crew generally believed that the engineer was incompetent with the firearm because on numerous occasions he played with the shotgun in his quarters even though other persons were present. This act in itself, of course, was a basis for skepticism for it set the stage for the most famous of famous last words: "I didn't know the gun was loaded."

But, on with the story.

The crew signed foreign articles, and the vessel departed for European ports.

One evening, under way in the Mediterranean, the Chief Engineer was paid a visit by the Third Assistant and another crew member. They found the Chief in the process of attempting to extricate a cartridge from the gun. He was on his knees with his back to the two persons, the stock of the gun on the deck with the barrel pointing up. In some manner, while the engineer was working with the mechanism, the gun fired, discharging pellets into the back of the Third As-

Continued on page 274

IMPORTANCE OF PROPER NAVIGATION LIGHTS

A couple of months ago, a fishing vessel left port en route to the fishing banks off Alsea, Oreg. Aboard were the operator and two other fishermen. The vessel arrived in the fishing area at about 0730, and fishing was commenced immediately. They fished all day, until, at 2030, the anchor was let go in 35 fathoms of water in a position about 6 miles west of the Alsea Can Buoy. The anchor light was turned on shortly after anchoring, and the operator observed this light to be burning. The operator and the two crew members turned in for the night after dinner. The last one to retire turned off the galley light and noted at the time that the only light showing on the vessel was the anchor light.

The anchor light was located on top of the mast some 40 feet above the water. The bulb was of 6-candlepower and had been in service 4 months. It burned as brightly as any 6-candlepower lamp could burn for the benefit of the crew before they turned in, but chose this night, while the crew was soundly sleeping below, to burn out.

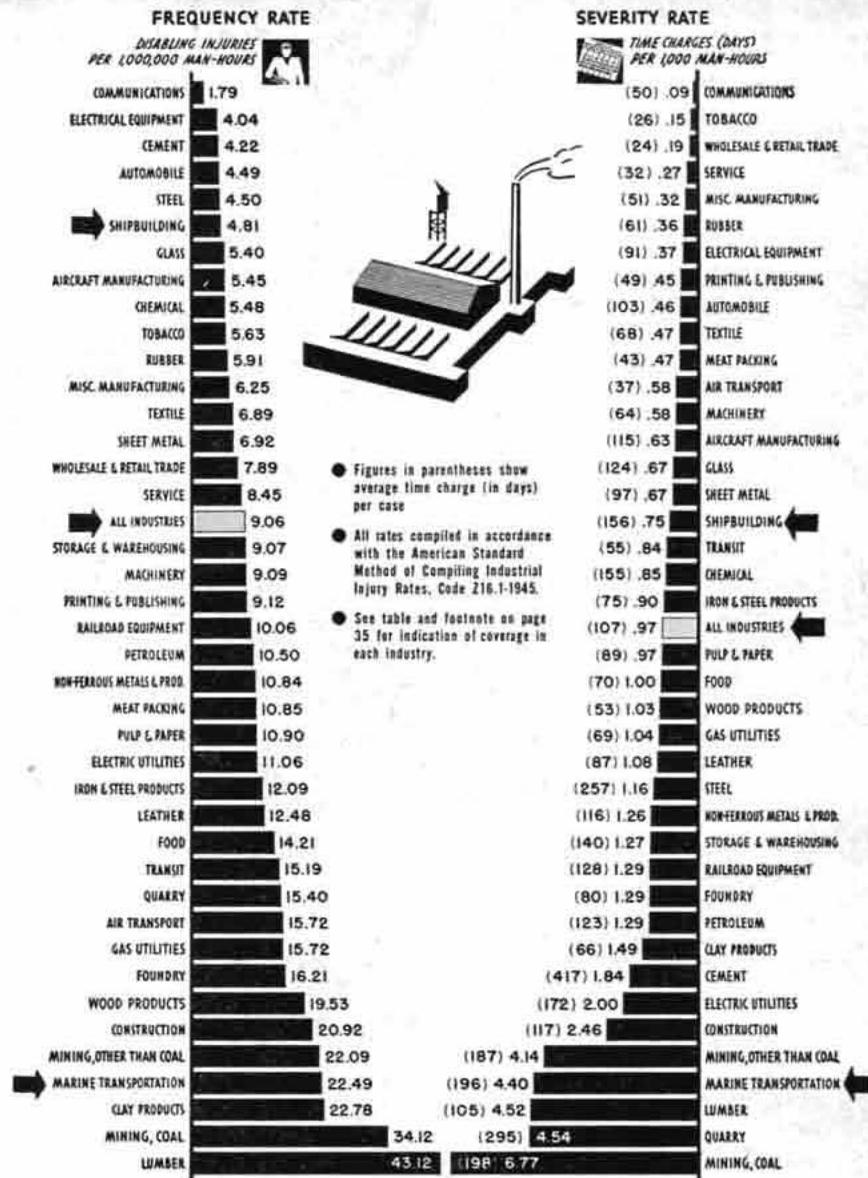
Another fishing vessel with a full hold was proceeding towards home on a full ahead bell, doing about 8 knots. The helmsman who was scanning the horizon for lights sighted nothing but the lights on shore to starboard. The fathometer indicated the depth of water to be 36 fathoms. As the helmsman leaned over to turn off the fathometer, a slight impact was felt and a vessel was observed off the starboard bow, close aboard. The vessel was showing no light whatsoever. The course was retraced, the captain called, but, still, no lights on the other vessel were visible. After continuing the search several minutes, lights were observed off the port bow. The vessel showing these lights appeared to be going down by the stern and listing. Soon a flashing light was observed in a skiff, and shortly thereafter the three occupants of the skiff were picked up. The sinking vessel sank along with its cargo of fish.

It's an awfully big ocean, and the odds against this collision are very high, but this and other casualties prove that even if you can't see 'em, you can still hit 'em.

No one will argue about the wisdom of displaying a proper anchor light. It makes good sense. But in cases like this, where everyone turns in, too much dependency is placed on one small fragile bulb. There are two ways to prevent a repeat performance (if there is a ship left with which to

ACCIDENT FACTS

1951 injury rates, reporters to National Safety Council



perform), namely: (1) Station a man on the fantail whose sole occupation is to watch the anchor light, and provide him with a spare bulb; (2) employ a double filament-type bulb with an automatic tell-tale panel in the wheelhouse. When one filament fails, the other will come into use. At the same time a buzzer will sound in the wheelhouse. This arrangement is especially recommended on fishing vessels that lie at anchor frequently without an anchor watch.

That there are many similar casualties and probably hundreds of near

misses as a result of the failure of motorboats to carry lights at night is borne out by the following briefed cases.

One outboard motorboat was run down in the dangerous twilight interval. The operator was possibly in doubt as to whether or not he should exhibit his lights, but mistakenly felt sure of his ground in a crossing situation (in which he was the burdened vessel). The other motorboat was displaying the proper lights, but failed to see the outboard in time to avert collision.

An auxiliary yawl was struck by an unlighted barge towed by an improperly lighted towboat. The yawl suffered extensive damage to frames and planking, and the owner did not derive the satisfaction of a judgment in his favor because the barge and tug remain unidentified.

A cabin cruiser was capsized by a collision occurring at night. The owner and several guests were on a fishing party. When night fell, they anchored the boat. Then, some prepared fishing lines, etc., while a few turned in. A tank vessel which was properly navigating the right hand side of the ship channel struck the cabin cruiser which was anchored in the fairway without a proper anchor light. All members of the party on the pleasure boat were rescued. Subsequent questioning concerning the anchor light brought out that each thought the boys had taken care of it.

The occupants of the struck vessels such as above have usually risen, sputtering, to the surface or have taken off in a dory thinking unkind thoughts of the uncorrected myopia of certain navigators.

Occasionally, loss of life results.

A shrimp trawler underwent an overhaul which included her machinery and the partial rewiring of her lighting system. New wiring was installed from the masterswitch down into the engine room. From the master switch upward and outward, new wiring was spliced onto the old wiring.

Following completion of repairs, the trawler tested her equipment and navigation lights and found all in good operating condition. She set out on a post availability trial run in the Gulf of Mexico. Proceeding on a southerly course, the shrimper en-

countered head swells which caused the vessel to ship spray over the bow. Later on the course was altered to bring the vessel back into port.

After leaving the Gulf and while proceeding up the channel, darkness overtook the shrimp trawler. When the captain attempted to turn on his running lights, he found that they were inoperative. The crew member took over the helm while the captain made temporary repairs. He found that the master switch had shorted out, probably due to the spray taken aboard earlier in the day. He improvised an anchor light by bypassing the master switch, connecting one end of a length of wire to the bank of four 8-volt engine room batteries and splicing the other end onto the anchor light cable. This, according to the captain, did the trick. The vessel proceeded on her way into port, allegedly showing her anchor light.

The course was changed momentarily to allow an outboard vessel to pass safely. Not long afterward, while on her own starboard side of the channel, the shrimp vessel was struck from behind by an overtaking vessel and sunk. The master, who was observed clinging to the bow of the rapidly sinking vessel, was saved; the crew member went down with the vessel.

Witnesses aboard the overtaking vessel stated that the shrimp trawler was not seen until immediately prior to the collision and that it was unlighted. The master of the shrimper persisted in his statement that the anchor light was burning throughout his run up the channel. For reasons other than curiosity, the shrimp boat was raised and an investigating officer of the Coast Guard examined it, drawing the following conclusions:

(1) That doubt exists whether the vessel's lighting system was in good operating condition, or was tried, prior to the vessel's departure for the Gulf.

(2) It is doubted that spray over the bow could account for the shorting out since the three switches serving the lighting system were sheltered in the pilot house.

(3) That although the wiring had been improvised as claimed, it could not have completed the circuit to the anchor light, because the wire ends were not cleaned and still retained their insulation to the very tips.

(4) That had proper connections been made, the improvised wiring could not have served the anchor light, because a switch on the independent circuit containing the anchor light and tri-color was "off."

(5) That had this switch been "on", the anchor light could not have been burning due to the elementary fact that there was no bulb in the anchor light receptacle nor was there a male end in place as if the bulb had been broken.

It can safely be said, then, that this vessel was operated without lights, not even an anchor light. And by this time the lesson to be learned is quite obvious. To operate a vessel at night without proper lights is to invite disaster. The lesson is aimed not only at the operators of that large group of vessels not inspected or certificated by the Coast Guard for seaworthy purposes but to the operators of all vessels, that they may be sensitive to the fact that other vessels may be operating at night without lights particularly in sheltered waters and on fishing grounds.

A SHORT SHORT STORY

"Insignificant"	said the victim
"Infection"	said the doctor
"Incredible"	said the mourners
"In Peace"	says the granite block



GET FIRST AID
PROMPTLY



(National Safety Council)

APPENDIX

Amendments to Regulations

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

Subchapter G—Marine Regattas or Marine Parades [CGFR 52-48]

PART 100—SAFETY OF LIFE ON NAVIGABLE WATERS DURING MARINE REGATTAS OR MARINE PARADES

PERMISSIBLE STATE REGULATION OF MARINE REGATTAS OR MARINE PARADES

The purpose of the following new regulation is to clarify the status of the marine regattas or marine parades on navigable waters of the United States which could be controlled by State authorities. It is hereby found that compliance with the notice of proposed rule making, public rule making procedure thereon, and effective date requirements of the Administrative Procedure Act is unnecessary because the new regulation is a relaxation of requirements applicable to marine regattas or marine parades.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), as well as the statute cited with the regulation below, the following new regulation is prescribed which shall become effective on the date of publication of this document in the Federal Register:

Part 100 was amended by adding a new § 100.30, reading as follows:

§ 100.30 *Permissible state regulation of marine regattas or marine parades.* (a) In the exercise of his discretion as provided in section 1 of the act of April 28, 1908, as amended (sec. 1, 35 Stat. 69, as amended; 46 U. S. C. 454), the Commandant has determined that the regulations in this part shall not be applicable to a marine regatta or a marine parade occurring on the interior waters of a state if:

(1) The state directs and controls the operation of such a marine regatta or marine parade in a manner such as to insure the safety of life on navigable waters during a marine regatta or marine parade; and,

(2) The state submits to the Commander of the Coast Guard district in

which the marine regatta or marine parade is to occur, its complete plans for regulation of such regatta or parade, such plans to be submitted at least two weeks before the occurrence of such regatta or parade.

(b) Upon the completion of his study of the plans and at least one week before the occurrence of a marine regatta or marine parade, the Commander of the Coast Guard district will notify the state which submitted the plans:

(1) That the plans are approved and the regulations in this part shall not be applicable to such regatta or parade; or,

(2) That the interest of safety of life on the navigable waters requires specific change or changes in the plans before they can be approved; or,

(3) That the plans are not approved, with reasons for such disapproval, and that the regulations in this part are applicable to the marine regatta or marine parade.

(Sec. 1, 35 Stat. 69, as amended; 46 U. S. C. 454)

Dated: October 7, 1952.

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

[F. R. Doc. 52-11028; Filed, Oct. 10, 1952;
8:51 a. m., 17 F. R. 9075-10/11/52.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

Subchapter B—Merchant Marine Officers and Seamen

[CGFR 52-49]

PART 10—LICENSING OF OFFICERS AND MOTORBOAT OPERATORS AND REGISTRATION OF STAFF OFFICERS

EXAMINATION FOR LICENSE AS DECK OFFICER OF OCEAN OR COASTWISE STEAM OR MOTOR VESSELS; INTERNATIONAL AND INLAND RULES OF THE ROAD

The purpose of the following amendment to the regulations is to correct the lists of subjects for deck officers of ocean or coastwise steam or motor vessels to agree with the type of questions presently used in examinations for all grades of ocean and coastwise licenses. It is hereby found that compliance with the notice of proposed rule making, public rule making procedure thereon, and effective date requirements of the Administrative Procedure Act is unnecessary.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department

Order No. 120, dated July 31, 1950 (15 F. R. 6521), as well as the statutes cited with the regulations below, the following amendment to the regulations is prescribed which shall become effective on the date of publication of this document in the Federal Register:

Section 10.05-45 (b) is amended by correcting Table 10.05-45 (b)—Subjects for Deck Officers of Ocean or Coastwise Steam or Motor Vessels, as follows:

a. Subject "28. International and Inland Rules of the Road" shall be applicable to: Master: Ocean, coastwise, coastwise limited 300 miles, sail, yachts; chief mate: Ocean, coastwise, coastwise limited 600 miles; second mate: Ocean, coastwise, coastwise limited 600 miles; and third mate: Ocean, coastwise.

b. Subject "29. International Rules of the Road" is deleted.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interprets or applies R. S. 4417a, 4426, 4427, 4438, 4439, 4440, as amended, 49 Stat. 1544, 1545, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404, 405, 224, 226, 228, 367, 50 U. S. C. App. 1275)

Dated: October 7, 1952.

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

[F. R. Doc. 52-11029; Filed, Oct. 10, 1952;
8:51 a. m., 17 F. R. 9076-10/11/52.]

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

[CGFR 52-50]

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

SUBPART—GENERAL REGULATIONS

ASSIGNMENT AND CERTIFICATION BY NATIONAL CARGO BUREAU, INC.

The purpose of the following new regulation is to recognize and utilize the services of the National Cargo Bureau, Inc., a non-profit organization incorporated under the laws of the State of New York, with principal offices in New York, New York, and with authorized surveyors or representatives in the principal ports of the United States, as one of the organizations deemed helpful in administering the provisions of the Dangerous Cargo Act (R. S. 4472, as amended; 46 U. S. C. 170) and the regulations promulgated thereunder, as provided by law. The President by

a proclamation dated September 10, 1952, proclaimed that the International Convention for the Safety of Life at Sea, 1948, was duly ratified and shall come into force and effect on and after November 19, 1952, and that this Convention, with each and every article and clause thereof, shall be observed and fulfilled with good faith by the United States of America and by the citizens of the United States of America and all other persons subject to the jurisdiction thereof. As a contracting Government the United States assumes obligations with respect to the carriage of dangerous cargoes under Chapter VI of this Convention. The President in Executive Order 10173, as amended by Executive Orders 10277 and 10352 (15 F. R. 7005, 707, 7008; 16 F. R. 7537; 7538; 17 F. R. 4607), declared that the security of the United States was endangered necessitating additional measures to be taken under the Magnuson Act (64 Stat. 427, 428, 50 U. S. C. 191), regarding supervision and control of explosives or other dangerous cargo on vessels and waterfront facilities. On December 16, 1950, the President issued Proclamation No. 2914, proclaiming the existence of a national emergency. Since this new regulation provides alternate means for obtaining prima facie evidence of compliance with the requirements of law and regulation, thereby facilitating the administration an enforcement of the requirements above mentioned under emergency conditions presently existing, it is hereby found that compliance with the notice of proposed rule making, public rule making procedure thereon, and effective date requirements of the Administration Procedure Act and R. S. 4472, as amended, is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), to promulgate regulations in accordance with the statutes cited with the regulations below, the following new § 146.02-6a is prescribed and added to Part 146 which shall become effective on and after November 1, 1952:

§ 146.02-6a *Assignment and certification.* (a) The National Cargo Bureau, Inc., is authorized to assist the United States Coast Guard in administering the provisions of the Dangerous Cargo Act (R. S. 4472, as amended, 46 U. S. C. 170) and the regulations in this subchapter with respect to:

- (1) Inspection of vessels for suitability for loading dangerous cargo;
- (2) Examination of stowage of dangerous cargo;

(3) Making recommendations as to stowage requirements of dangerous cargo; and

(4) Issuance of certificates of loading setting forth that the stowage of dangerous cargo is in accordance with the regulations in this subchapter.

(b) Certificates of loading of the National Cargo Bureau, Inc., may be accepted as prima facie evidence of compliance with the Dangerous Cargo Act (R. S. 4472, as amended, 46 U. S. C. 170) and the regulations in this subchapter.

(R. S. 4405, as amended, 4462, as amended, 4472, as amended; 46 U. S. C. 375, 416, 170. Interprets or applies sec. 5, 55 Stat. 244, 245, as amended; 50 U. S. C. App. 1275)

Dated: October 9, 1952.

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

[F. R. Doc. 52-11283; Filed, Oct. 16, 1952;
8:56 a. m., 17 F. R. 9183-10/17/52]

Navigation and Vessel Inspection Circular No. 10-52

UNITED STATES COAST GUARD

WASHINGTON 25, D. C.

October 5, 1952.

Subj.: EC-2 Type Liberty cargo vessels; cracking of connections between upper deck longitudinal girders and bulkhead 88; repairs of.

1. *Purpose.* This Circular sets forth a suggested method for repairing cracks occurring in connections between upper deck longitudinal girders and bulkhead 88 on EC-2 Type Liberty cargo vessels.

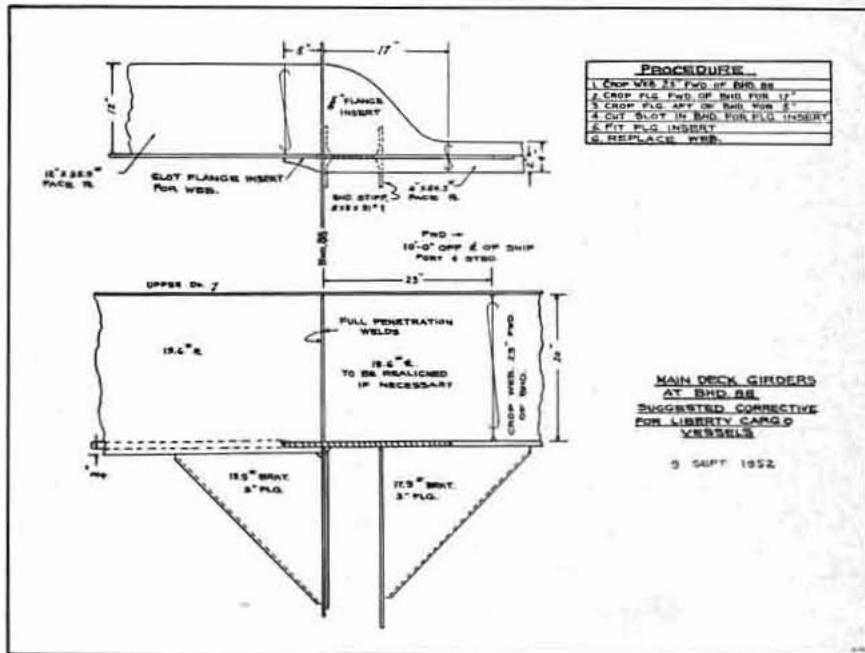
2. *Discussion.* Numerous reports have been received indicating cracking has occurred in connections between the upper deck longitudinal girders and bulkhead 88 on EC-2 Type Liberty cargo vessels. This condition has been discussed with the American Bureau of Shipping and the enclosed sketch substantially indicates a method of repair suggested by them. This method of repair results in improved continuity of the girder flanges and permits correction of misalignment of the girder webs, both important in the production of an efficient structural connection.

3. *Action recommended.* It is recommended that the procedure set forth in the enclosed sketch dated September 9, 1952, be employed whenever repairs of connections between upper deck longitudinal girders and bulkhead 88 on EC-2 Type Liberty cargo vessels are necessary.

By direction of the Commandant.

H. S. Shepleard

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



Equipment Approved by the Commandant

DEPARTMENT OF THE TREASURY

United States Coast Guard

[CGFR 52-44]

APPROVAL AND TERMINATION OF APPROVAL OF EQUIPMENT

1. The procedures for approvals and termination of approvals of various items of lifesaving, fire-fighting and miscellaneous equipment or installations used on merchant vessels or motorboats are set forth in 46 CFR 2.75-1 to 2.75-50, inclusive. In order that approvals of equipment can be kept current and to provide a definite means for identification, the approvals have been limited to five years and assigned approval numbers.

2. The present numbering and certifying system for approved equipment was inaugurated on July 31, 1947, and a notice of approval was published in the FEDERAL REGISTER of that date (12 F. R. 5185-5237). The items of equipment appearing in the FEDERAL REGISTER dated July 31, 1947, were approved for a period of five years from date of publication. In January 1952 individual letters were sent to the manufacturers of all items of equipment listed in this notice except where the approvals of equipment already had been superseded, suspended, or terminated. In cases where the manufacturers did not reply or letters were returned, follow-up letters were sent. Where the manufacturer indicated he desired to have his approval extended, a check was made to determine whether or not each item complied with current Coast Guard requirements and in those cases where the original approval did not comply with current requirements the manufacturer was so advised and he was given an opportunity to bring his equipment into compliance prior to the expiration date of his approval.

3. By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120 dated July 31, 1950 (15 F. R. 6521), and in compliance with the authorities cited below with each item of equipment, *It is ordered*, That:

(a) All the approvals for lifesaving, fire-fighting and miscellaneous equipment or installations which are listed in Part I of this document are prescribed and are extended for a period of five years from July 31, 1952, unless sooner canceled or suspended by proper authority; and,

(b) All the termination of approvals for lifesaving, fire-fighting and miscellaneous equipment or installations which are listed in Part II of this document shall be effective as of July 31, 1952, in accordance with the notice published in the FEDERAL REGISTER dated July 31, 1947 (12 F. R. 5186). The reason for termination of approvals, as set forth in Part II of this document, is that (1) the manufacturer is no longer in business; or (2) the manufacturer does not desire to retain the approval; or (3) the item of equipment no longer complies with present Coast Guard requirements. In the case of power boilers it has been decided that since detailed plans of power boilers must be submitted for each vessel or a group of vessels of a particular design there is no advantage in type approving such boilers. Accordingly, the approvals for power boilers are being terminated and new designs will no longer be listed under the heading of approved equipment. Notwithstanding the termination of approvals of equipment as listed in Part II of this document, such equipment already in service may be continued in use so long as such equipment is in good and serviceable condition.

[Ed. note: Due to the voluminous nature of this document, space limitations prevent the reprinting of the individual approvals and termination of approvals of equipment. Copies of this document may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.]

Dated: September 24, 1952.

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

[F. R. Doc. 52-10599; Filed, Sept. 30, 1952;
8:48 a. m., 17 F. R. 8710-10/1/52.]

[CGFR 52-45]

VALVES, SAFETY (FOR STEAM HEATING BOILERS)

Approval No. 162.012/9/0, Cat. No. 2501 pop safety valve, bronze body, for steam heating boilers and unfired steam generators, dwg. No. A-24144, Rev. B, dated April 22, 1948, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
3/4	189
1	324
1 1/4	351
1 1/2	495
2	711
2 1/2	900

manufactured by the Crane Co., 836 S. Michigan Avenue, Chicago 5, Ill.

Approval No. 162.012/10/0, Series 70 pop safety valve, cast iron body en-

closed spring standard outlet for steam heating boilers and unfired steam generators, dwg. No. P-20119, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
1	400
1 1/4	659
1 1/2	1,366
2	1,989
2 1/2	2,497
3	3,000
4	5,112

manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa.

Approval No. 162.012/11/0, Series 70E pop safety valve, cast iron body exposed spring standard outlet for steam heating boilers and unfired steam generators, dwg. No. P-20120, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
1	400
1 1/4	659
1 1/2	1,366
2	1,989
2 1/2	2,497
3	3,000
4	5,112

manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa.

Approval No. 162.012/12/0, Series 72 pop safety valve, cast iron body enclosed spring expanded outlet for steam heating boilers and unfired steam generators, dwg. No. P-20119, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
1	400
1 1/4	659
1 1/2	1,366
2	1,989
2 1/2	2,497
3	3,000
4	5,112

manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa.

DANGER

NO JOB IS SO IMPORTANT
NO WORK IS SO URGENT
THAT WE CAN NOT TAKE TIME
TO PERFORM OUR WORK SAFELY

Approval No. 162.012/13/0, Series 72E pop safety valve, cast iron body exposed spring expanded outlet for steam heating boilers and unfired steam generators, dwg. No. P-20120, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
1	400
1 1/4	659
1 1/2	1,366
2	1,989
2 1/2	2,497
3	3,000
4	5,112

manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa.

Approval No. 162.012/14/0, Series 5 pop safety valve, bronze body, for steam heating boilers and unfired steam generators, dwg. No. D-5L-2 1/2, dated December 14, 1948, approved for a maximum pressure of 30 p. s. i. in the following sizes and capacities:

Continued from page 268

sistant at a point slightly below the shoulder blade on his left side.

The other man immediately ran from the room and spread the alarm while the Chief Engineer notified the officer of the watch. The Master and First Assistant Engineer appeared and administered first aid. Radio medics were sent out and the vessel's course was altered to put in at Tunis. The wound itself was dressed in accordance with radio medical advice.

Later a U. S. Naval seaplane landed alongside and a doctor was brought aboard who remained with the injured man until he was discharged to a hospital in Tunis.

Fortunately the Third Assistant responded to medical treatment at the hospital and subsequently returned to his home.

The casualty was, of course, accidental in nature, but it was the direct result of improper use and careless handling of firearms.

Like several other cases of a similar nature it proved the same point—that firearms handled with any degree of carelessness become highly unsafe.

To prevent similar acts of carelessness the determination of who shall be permitted the privilege of keeping a firearm on board a vessel should be made with caution. The position of the individual on the ship has no bearing on the matter. The Chief Mate may be less responsible than the Second Cook. Only intimate contact with the applicant for the master's permission to keep a firearm can disclose his reliability and care in the handling of firearms.

Size (inches):	Capacity (pounds/hour) at 30 p. s. i.
3/4	219
1	306
1 1/4	576
1 1/2	1,060
2	1,070

manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa.

(R. S. 4405, 4417a, 4418, 4426, 4433, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 375, 391a, 392, 404, 411, 489, 367, 1333, 50 U. S. C. App. 1275; 46 CFR 52.65)

VALVES, PRESSURE VACUUM RELIEF AND SPILL

Approval No. 162.017/64/0, Figure 100 pressure vacuum relief valve, atmospheric pattern, weight-loaded poppets, all bronze construction, dwg. No. 100-A, dated January 12, 1951, approved for sizes 2 1/2", 3" and 4", manufactured by the Mechanical Marine Co., Inc., 17 Battery Place, New York 4, N. Y.

Approval No. 162.017/66/0, Figure 120 pressure only relief and spill valve, atmospheric pattern, weight-loaded poppet, all bronze construction, dwg. No. 120-A, dated January 12, 1951, approved for size 6", manufactured by the Mechanical Marine Co., Inc., 17 Battery Place, New York 4, N. Y.

Approval No. 162.017/67/0, Figure 130 pressure vacuum relief valve, enclosed pattern, weight-loaded poppets, all bronze construction, dwg. No. 130-A, revised February 7, 1951, approved for sizes 3", 4", 5" and 6", manufactured by the Mechanical Marine Co., Inc., 17 Battery Place, New York 4, N. Y.

(R. S. 4405, 4417a, 4491, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 375, 391a, 489, 50 U. S. C. App. 1275; 46 CFR 162.017)

INDICATORS, BOILER WATER LEVEL, SECONDARY TYPE

Approval No. 162.025/6/1, Figure 4312, secondary boiler water level indicator, remote reading wall-mounted type, 700 p. s. i., maximum pressure, dwg. Nos. EL-912-108, revision A, dated February 23, 1952, EL-13021, revision E, dated June 16, 1952, and EL-14269, dated July 22, 1952, manufactured by Yarnall-Waring Co., Chestnut Hill, Philadelphia 18, Pa. (Supersedes Approval No. 162.025/6/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.025/30/1, Figure 4314, secondary boiler water level indicator, remote reading panel-mounted type, 700 p. s. i., maximum pressure, dwg. Nos. EL-912-108, revision A, dated February 23, 1952, EL-13021, revision E, dated June 16, 1952,

and EL-14269, dated July 22, 1952, manufactured by Yarnall-Waring Co., Chestnut Hill, Philadelphia 18, Pa. (Supersedes Approval No. 162-025/30/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.025/31/1, Figure 4316, secondary boiler water level indicator, remote reading wall-mounted type, 1500 p. s. i. maximum pressure, dwg. Nos. EL-912-109, revision B, dated May 12, 1952, EL-13003 dated October 11, 1944, EL-12975 dated February 21, 1949, and EL-14269 dated July 22, 1952, manufactured by Yarnall-Waring Co., Chestnut Hill, Philadelphia 16, Pa. (Supersedes Approval No. 162.025/31/0 published in the Federal Register dated July 31, 1947.)

Approval No. 162.025/32/1, Figure 4318, secondary boiler water level indicator, remote reading panel-mounted type, 1500 p. s. i. maximum pressure, dwg. Nos. EL-912-109, revisions B, dated May 12, 1952, EL-13003 dated October 11, 1944, EL-12975 dated February 21, 1949 and EL-14269 dated July 22, 1952, manufactured by Yarnall-Waring Co., Chestnut Hill, Philadelphia 18, Pa. (Supersedes Approval No. 162.025/32/0 published in the Federal Register dated July 31, 1947.)

(R. S. 4405, 4417a, 4418, 4426, 4433, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 367, 375, 391a, 392, 404, 411, 489, 1333, 50 U. S. C. App. 1275; 46 CFR Part 52)

INCOMBUSTIBLE MATERIALS

Approval No. 164.009/10/2, Fiberglass Insulation Type TW-MC, glass wool insulation type incrustible material identical to that described in National Bureau of Standards Test Report No. TG 3610-1493, FP2569, dated Nov. 10, 1947, and National Bureau of Standards Test Report No. TG 10210-1624: FP2806, dated Aug. 9, 1949, modified by Owens-Corning Fiberglas Corporation letter dated July 9, 1952, approved in a 2 to 3 1/2 pounds per cubic foot density, manufactured by Owens-Corning Fiberglas Corp., Toledo 1, Ohio. (Supersedes Approval No. 164.009/10/1 published in the Federal Register dated Aug. 24, 1951, and Approval No. 164.009/19/0 published in the Federal Register dated Oct. 7, 1949.)

(R. S. 4405, 4417a, 4426, 49 Stat. 1384, 1544, 54 Stat. 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 369, 375, 391a, 404, 463a, 50 U. S. C. 1275; 46 CFR 164.009)

CORRECTION TO PRIOR DOCUMENT

In Federal Register Volume 17, Number 139, of the issue for Thursday, July 17, 1952, 17 F. R. 6568, under the heading "Buoys, Life, Ring, Cork or Balsa Wood," Approval No. 160.009/40/0 shall be corrected by changing the name of the manufacturer from

"George Broom & Sons" to "George Broom's Sons."

Dated: October 7, 1952.

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

[F. R. Doc. 52-11030; Filed, Oct. 10, 1952;
8:52 a. m., 17 F. R. 9080-10/11/52.]

[CGFR 52-46]

TERMINATION OF APPROVAL OF EQUIPMENT

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and in compliance with the authorities cited below, the following approvals of equipment are terminated for the reasons set forth in notes with each item of equipment:

BUOYANT CUSHIONS, KAPOK, STANDARD

NOTE: The following approval is terminated because the manufacturer is no longer in business.

Termination of approval No. 160.007/74/0, Standard kapok buoyant cushion, U. S. C. G. Specification Subpart 160.007, manufactured by Distin Boat Co., Inc., Saranac Lake, N. Y. (Approved Federal Register dated October 2, 1948.)

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

VALVES, SAFETY

NOTE: The following approvals are terminated because they do not comply with the requirements of power boiler safety valves.

Termination of approval No. 162.001/85/0, Cat. No. 2501, Crane Co. pop safety valve, bronze body and bonnet, enclosed spring, single lifting lever, screwed inlet and outlet, maximum working pressure 30 p. s. i., dwg. No. A-24144, Rev. B, approved for sizes 1½", 2" diameters, sizes ¾", 1", and 1¼" diameter are approved only for heating boiler service, manufactured by Crane Co., 836 South Michigan Avenue, Chicago 5, Ill. (Approved Federal Register dated July 1, 1948.)

Termination of approval No. 162.001/87/0, Series 70, cast iron body pop safety valve, enclosed spring, expanded outlet, maximum working pressure 30 p. s. i., maximum temperature 450° F., limited to installation on heating boilers and evaporators, not permitted on power boilers, dwg. No. P-20119, approved for sizes 1½", 2", 2½", 3", and 4", manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa. (Approved Federal Register dated August 28, 1948.)

Termination of approval No. 162.001/88/0, Series 70E, cast iron body pop safety valve, exposed spring, expanded outlet, maximum working pressure 30 p. s. i., maximum temperature 450° F., limited to installation on heating boilers and evaporators, not permitted on power boilers, dwg. No. P-20120, approved for sizes 1½", 2", 2½", 3", and 4", manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa. (Approved Federal Register dated August 28, 1948.)

Termination of approval No. 162.001/89/0, Series 72 cast iron body pop safety valve, enclosed spring, standard outlet, maximum working pressure 30 p. s. i., maximum temperature 450° F., limited to installation on heating boilers and evaporators, not permitted on power boilers, dwg. No. P-20119, approved for sizes 1½", 2", 2½", 3", and 4", manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa. (Approved Federal Register dated August 28, 1948.)

Termination of Approval No. 162.001/90/0, Series 72E cast iron body pop safety valve, exposed spring, standard outlet, maximum working pressure 30 p. s. i., maximum temperature 450° F., limited to installation on heating boilers and evaporators, not permitted on power boilers, dwg. No. P-20120, approved for sizes 1½", 2", 2½", 3", and 4", manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa. (Approved Federal Register dated August 28, 1948.)

Termination of Approval No. 162.001/100/0, Series 5, bronze body pop safety valve, enclosed spring, screwed inlet and outlet, 30 pounds per square inch maximum pressure, 366° F. maximum temperature, limited to installation on heating boilers and evaporators, not permitted on power boilers, dwg. No. D-5L-2½", approved for sizes ¾", 1", 1¼", 1½", 2", 2½", and 3", manufactured by Marine & Industrial Products Co., 3731 Filbert Street, Philadelphia 4, Pa. (Approved Federal Register dated Feb. 19, 1949.)

(R. S. 4405, 4417a, 4418, 4426, 4433, 4491, 49 Stat. 1544, 54 Stat. 346, and sec. 5 (e), 55 Stat. 244, 245, as amended; 46 U. S. C. 367, 375, 391a, 392, 404, 411, 489, 1233, 50 U. S. C. App. 1275; 46 CFR 52.65)

INCOMBUSTIBLE MATERIALS

NOTE: The following approval is terminated because the incombustible material has been incorporated with Approval No. 164.009/10/2.

Termination of Approval No. 164.009/19/0, Fiberglass Insulation Type TW-MC-611, glass wool insulation type incombustible material iden-

tical to that described in National Bureau of Standards Test Report No. TG 10210-1624:FP2806, dated August 9, 1949, approved in a 2 pound per cubic foot density, manufactured by Owens-Corning Fiberglas Corp., Toledo 1, Ohio. (Approved Federal Register dated October 7, 1949.)

(R. S. 4405, 4417a, 4426, 49 Stat. 1384, 1544, 54 Stat. 1028, sec. 5 (e), 55 Stat. 244, as amended; 46 U. S. C. 367, 369, 375, 391a, 404, 463a, 50 U. S. C. 1275; 46 CFR 164.009)

CONDITIONS OF TERMINATION OF APPROVAL

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 in service before the effective date of termination of approval may be used so long as it is in good and serviceable condition.

Dated: October 7, 1952.

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

[F. R. Doc. 52-11027; Filed, Oct. 10, 1952;
8:51 a. m., 17 F. R. 9080-10/11/52.]

[CGFR 52-47]

COAST GUARD PORT SECURITY CARDS

The United States Coast Guard is authorized to issue Coast Guard Port Security Cards as one means of identification of persons regularly employed on vessels or on waterfront facilities or of persons having regular public or private business connected with the operation, maintenance, or administration of vessels, their cargoes, or



Courtesy Maritime Reporter

waterfront facilities. The practice is to limit the validity of these Coast Guard Port Security Cards to 2 years from date of issuance. It is not deemed appropriate or necessary to require the rescreening of holders of Coast Guard Port Security Cards and the reissuance of such cards at this time. By virtue of the authority vested in me as Commandant, United States Coast Guard, by 33 CFR 6.10-7 in Executive Order 10173, as amended by Executive Orders 10277 and 10352 (15 F. R. 7005, 7007, 7008, 16 F. R. 7537, 7538, 17 F. R. 4607), notice is given to holders of Coast Guard Port Security Cards (Form CG 2514) that the period of validity of such cards issued on or before June 30, 1952, 2 years from date of issue as shown on the reverse side thereof, is hereby extended for two additional years. New Coast Guard Port Security Cards will not be issued, and Coast Guard personnel and others concerned shall honor such outstanding cards issued on or before June 30, 1952, unless sooner surrendered or canceled by proper authority, for a period of 4 years from date of issue.

Dated: October 7, 1952.
 [SEAL] A. C. RICHMOND,
 Rear Admiral, U. S. Coast Guard,
 Acting Commandant.

[F. R. Doc. 52-11026; Filed, Oct. 10, 1952;
 8:50 a. m., 17 F. R. 9080-10/11/52.]

FUSIBLE PLUGS

The regulations prescribed in Subpart 162.014, Subchapter Q, Specifications, require that manufacturers submit samples from each heat of fusible plugs 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 September 15 to October 15, 1952, is as follows:

The Lunkenheimer Co., P. O. Box 360, Annex Station, Cincinnati 14, Ohio. Heat Nos. 437, 438, 439 and 441.

ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from September 26 to October 27, 1952, inclusive, for use on board vessels in accordance with the provisions of Part 147 of the regulations governing "Explosives or Other Dangerous Articles on Board Vessels" are as follows:

Oil Specialties and Refining Co., Inc., 18 Bridge Street, Brooklyn 1, N. Y. Certificate No. 359, dated October 16, 1952. "UNIVERSAL-METALL-PUTZ-FOMADE."

Merchant Marine Personnel Statistics

MERCHANT MARINE OFFICER LICENSES ISSUED DECK

August, 1952

Grade	Original	Re-natal
Master:		
Ocean.....	40	227
Coastwise.....	4	16
Great Lakes.....	2	12
B. S. & L.....	12	70
Rivers.....	3	23
Radio officer licenses issued.....	49	
Chief Mate:		
Ocean.....	39	42
Coastwise.....		2
Mate:		
Great Lakes.....		
B. S. & L.....		5
Rivers.....	9	20
Second mate:		
Ocean.....	54	67
Coastwise.....		
Third mate:		
Ocean.....	60	37
Coastwise.....		
Pilots:		
Great Lakes.....	2	15
B. S. & L.....	80	217
Rivers.....	44	48
Master: Uninspected vessels.....	3	4
Mate: Uninspected vessels.....	2	1
Total.....	403	806
Grand total.....		1,209

ENGINEER

Grade	Original	Re-natal
STEAM		
Chief engineer:		
Unlimited.....	36	229
Limited.....	7	105
First assistant engineer:		
Unlimited.....	37	65
Limited.....		21
Second assistant engineer:		
Unlimited.....	50	86
Limited.....	1	
Third assistant engineer:		
Unlimited.....	105	75
Limited.....	3	8
MOTOR		
Chief engineer:		
Unlimited.....	4	61
Limited.....	29	78
First assistant engineer:		
Unlimited.....		12
Limited.....	5	4
Second assistant engineer:		
Unlimited.....		6
Limited.....	1	
Third assistant engineer:		
Unlimited.....	55	94
Limited.....	1	4
Chief engineer: Uninspected vessels.....	3	4
Assistant engineer: Uninspected vessels.....	2	
Total.....	339	853
Grand total.....		1,192

INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 836 cases during the month of

ORIGINAL SEAMEN'S DOCUMENTS ISSUED

August, 1952

Type of document	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Canal Zone	Total
Staff officer.....	35	5	16	6		62
Continuous discharge book.....		11				11
Merchant mariner's documents.....	948	259	552	914	1	2,674
AB any waters unlimited.....	81	28	55	14	1	179
AB any waters, 12 months.....	53	8	34	65		160
AB Great Lakes, 18 months.....	4	2		22		28
AB tugs and towboats, any waters.....						
AB bays and sounds.....	2					2
AB seagoing barges.....						
Lifeboatman.....	120	23	118	74	1	336
Q. M. E. D.....	142	29	69	70		310
Certificate of service.....	851	226	514	812		2,403
Tankerman.....	7	19	4	53		83

† 12 months, vessels 500 gross tons or under, not carrying passengers.

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

WAIVER OF MANNING REQUIREMENTS

Waivers	Atlantic coast	Gulf coast	Pacific coast	Great Lakes	Total
Deck officers substituted for higher ratings.....	1		3	3	7
Engineer officers substituted for higher ratings.....	4		5	2	11
O. S. for A. B.....	9	6	13	23	51
Wiper or coalpassers for Q. M. E. D.....	5		10	3	18
Total waivers.....	19	6	31	31	87
Number of vessels.....	15	4	21	18	58

NOTE.—In addition, individual waivers were granted to permit the employment of 53 able seamen holding certificates for "any waters, 12 months" in excess of the 25 percent authorized by statute.

August 1952. From this number, hearings before examiners resulted involving 14 officers and 52 unlicensed men. In the case of officers, 1 license was revoked, 5 were suspended without probation, 4 were suspended with probation granted, 1 license was voluntarily surrendered, 1 case was dismissed after hearing, and 1 hearing was closed with an admonition. Of the unlicensed personnel 7 certificates were revoked, 15 were suspended without probation, 23 were suspended with probation granted, 5 certificates were voluntarily surrendered, no hearings were closed with admonitions, and 3 cases were dismissed after hearing.

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