PROCEEDINGS OF THE

MERCHANT MARINE COUNCIL

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

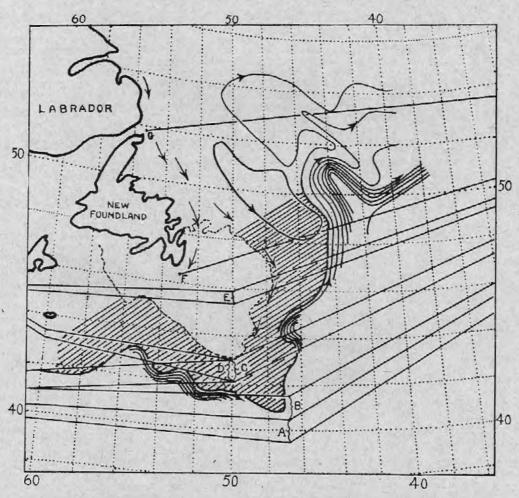
UNITED STATES COAST GUARD

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Vol. 11 April 1954 . No. 4



THE GENERAL DISTRIBUTION OF WARM AND COLD WATER SOUTHEAST
OF NEWFOUNDLAND DURING THE ICE SEASON

Proceedings of the

MERCHANT MARINE COUNCIL

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The

Merchant Marine Council
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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Front cover: The offshore boundary of the shaded area is known as the Cold Wall. Inshore, in the shaded area and over the Grand Banks, is the area of persistent fog which prevails during the period, May to July, as much as 90 percent of the time. Note the salient of the warm Atlantic Current which extends northward to latitude 51° N., in longitude 44° W. Steamers plying between European-U.S. ports are advised to follow the prescribed tracks which are laid south of the normal fog and iceberg waters.

MAILING LIST FOR PROCEEDINGS

It is required by the regulations of the Joint Committee on Printing, dated July 1, 1953, that the mailing list for the Proceedings of the Merchant Marine Council be circularized to determine whether this publication is still desired by the persons to whom it is addressed.

List 111.

All addressees on the mailing list for the Proceedings will be sent a card requesting that an affirmative reply be returned to the Commandant (CMC), United States Coast Guard, by no later than July 1, 1954.

If you desire to continue to receive the Proceedings and you do not receive a card by June 1, 1954, it is suggested that you send a card to the Commandant (CMC), United States Coast Guard, Washington 25, D. C., setting forth the following information:

- (a) Quantity desired.
- (b) Quantity now received.
- (c) Name and address to which the Proceedings are now sent.
- (d) The new postal address, if different from that to which the Proceedings are now sent.
 - (e) Name of the firm, company,

corporation, or individual requesting the Proceedings.

(f) The nature of your profession or business or relation to marine safety

In order to reduce the size of the mailing list to budgetary limitations it is most advantageous to have copies of the Proceedings, when several are involved, mailed under the same cover to the same address. Unless there is some reason to make this impracticable in certain cases, multiple addressees of this type will normally be grouped in this manner.

Only a limited number of copies of the Proceedings are published each month. Its distribution is accordingly limited to those concerned with marine safety or engaged in activities under the cognizance of the Coast Guard. To insure that the Proceedings receives the widest possible dissemination, it is requested that recipients of this periodical make it available to as many other people as is feasible.

If no affirmative reply requesting continuance is received by July 1, 1954, the addressees named will be removed from the mailing list.

PROPOSED RULEMAKING

ESTABLISHMENT OF FEES FOR LICENSING AND RELATED ACTIVITIES UNDER NAVIGATION AND VESSEL INSPECTION LAWS, RULES, AND REGULATIONS

Pursuant to the provisions of Title V of the Independent Offices Appropriation Act, 1952 (65 Stat. 290, 5 U. S. C. 140), the Commandant, United States Coast Guard, is considering the establishment of a schedule of fees for processing applications or requests for certain permits, certificates, or other documents issued in accordance with navigation and vessel inspection laws, rules, and regulations which are administered or enforced by the United States Coast Guard.

A notice to this effect was published in the Federal Register of March 2, 1954, and is brought to your attention here, in view of its general interest and applicability.

Certain provisions of Title V of the Independent Offices Appropriation Act of 1952 (65 Stat. 290, 5 U. S. C. 140) read as follows:

It is the sense of the Congress that any work, service, publication, report, document, benefit, privilege, authority, use, franchise, license, permit, certificate, registration, or similar thing of value or utility performed, furnished, provided, granted, prepared, or issued by any Federal agency (including wholly owned Government corporations as defined in the Government Corporation Control Act of 1945) to or for any person (including groups, associations, organizations, partnerships, corporations, or businesses), except those engaged in the transaction of official business of the Government, shall be self-sustaining to the full extent possible, and the head of each Federal agency is authorized by regulation (which in the case of agencies in the executive branch, shall be as uniform as practicable and subject to such policies as the President may prescribe) to prescribe therefor such fee, charge, or price, if any, as he shall determine, in case none exists, or redetermine in case of an existing one, to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts, and any amount so determined or redetermined shall be collected and paid into the Treasury as miscellaneous receipts: Provided. That nothing contained in this section shall repeal or modify existing statutes prohibiting the collection, fixing the amount, or directing the disposition of any fee, charge, or price: Provided further, That nothing contained in this section shall repeal or modify existing statutes prescribing bases for calculation of any fee, charge or price, but this proviso shall not restrict the redetermination or recalculation in accordance with the prescribed bases of the

amount of any such fee, charge or price.

The Bureau of the Budget, on behalf of the President, has issued a

Circular No. A-25 relating to "fees for licensing, registration, and related activities" which sets out, in some detail, uniform standards to be applied by the Departments and Agencies of the Government in establishing fees to be charged. The United States Coast Guard has conducted a survey to determine fees and charges which should be imposed and collected to meet the intent of Congress expressed in Title V of the Independent Offices Appropriation Act, 1952 (see par. 3 above), that certain services, authorities, licenses, and other things of value, as specified in this act, which may be furnished, provided, granted, prepared, or issued by the United States Coast Guard to or for any person or company or corporation or organization, shall be self-sustaining to the fullest extent possible.

It is proposed to add regulations to 33 CFR Part 1 and 46 CFR Part 1 to provide for the imposition and collection of the fees for processing applications for items listed in paragraphs 6 to 13, inclusive, below, which are quoted from the Federal Register of March 2, 1954. The regulations relating to the transactions affected are cited in the list and such regulations may be amended to include an appropriate reference to the new regulations should the latter sections be added as proposed;

"6. Permit to establish and operate a private aid to navigation, including those on a bridge or a dam (33 CFR Parts 66 and 68). The fee for each permit is to be \$15.

"7. Permit to load or unload class A explosives at a waterfront facility, including use of barges used in conjunction therewith when necessary for the transfer from the common carrier to the facility or vice versa (33 CFR 126.17). The fee for each permit is to be \$15.

"8. Merchant marine certificates or documents. The fee to obtain certain documents is to be as follows:

"a. Duplicate certificate of registry as staff officer (46 CFR 10.25-7 (1)); \$1.50.

"b. Duplicate continuous discharge book (46 CFR 12.02-23 (b)): \$1.50.

"c. Duplicate merchant mariner's document (46 CFR 12.02-23 (b)); \$1.50.

"d. Duplicate certificate of discharge (46 CFR 12.02-23 (b)): \$0.35 for the first copy and \$0.10 for each additional copy requested at the same time

"e. Transcript of service (46 CFR 154.07): \$0.25 for each entry.

"9. Permit for a vessel (other than a barge used incident to loading the common carrier which makes final delivery to ports of consignment) to load class A explosives (46 CFR 146.20-85). The fee for each permit is to vary according to amount of class A explosives as follows:

"a. 100 tons or under: \$15.

"b. Over 100 tons but not exceeding 500 tons: \$25.

"c. Over 500 tons but not exceeding 1,500 tons: \$35.

"d. Over 1,500 tons: \$45.

"10. Certificate of approval of article of ships' stores, exclusive of cost of required tests (46 CFR 147.01-4). The fee for each certificate is to be \$10. This certificate may be renewed without charge if there is no change

in the product.

"11. Certification or acceptance of an item of equipment or material as authorized for use on vessels in accordance with law or rules and regulations in 46 CFR Chapter I. In those instances where charges based on actual costs have been made for tests and examinations conducted by Government agencies or commercial organizations at the request of the Coast Guard, such charges will continue in addition to the fees indicated below. The fee to obtain each certification or acceptance is to be as follows:

"a. Appliances, liquefied compressed gas consuming (petroleum) (46

CFR 162.018): \$32.

"b. Boilers, auxiliary, automatically controlled, packaged, for merchant vessels (46 CFR 162.026): \$282.

"c. Boilers, heating (46 CFR 52.01-15); \$146.

15): \$146. "d. Bulkhead panels (46

"d. Bulkhead panels (46 CFR 164.008): \$42.
"e Buoyant apparatus (46 CFR

"e. Buoyant apparatus (46 CFR 160.010): \$90.

"f. Buoyant cushions, kapok, standard (46 CFR 160.007): \$25.

"g. Buoyant cushions, nonstandard (46 CFR 160.008); \$25.

"h. Buoys, life, ring, cork or balsa wood, for merchant vessels and motorboats (46 CFR 160.009): \$45.

"i. Compasses, lifeboat (46 CFR 75.20-15 (e)): \$50.

"j. Containers, emergency provisions (46 CFR 33.15-1, 75.20-15, 75.20-20, 95.20-15, 94.20-20): \$43.

"k. Containers, water (46 CFR 160.026): \$43,

"1. Davits, gravity type (46 CFR 160.032): \$258.

"m. Davits, quadrantal or sheath screw type (46 CFR 160,032); \$198.

"n. Deck coverings (46 CFR 164.-006): \$42. Continued on page 66

VOYAGE DESCRIPTIONS IN SHIPPING ARTICLES

The use of ambiguous language or language of insufficient clarity in the voyage description of shipping articles frequently creates a difficult problem in determining the rights of the parties under the agreement. Ordinarily the problem involves one of two questions:

(1) Whether a proposed voyage is authorized by the agreement.

(2) Whether or not the obligations of the contract have been satisfied.

The questions are equally important as it has been held by the courts that shipping articles which are so vague that they are not informative are void (Newton v. Gulf Oil Corporation, 180 Fed. 2d,491, cert. denied 340 U.S. 814).

It is required under the provisions of R. S. 4511 (46 U. S. C. 564) that shipping articles of every vessel bound from a port in the United States to any foreign port (other than vessels engaged in trade between the United States and the British North American possessions, or the West Indies, or the Republic of Mexico), or any vessel of the burden of 75 tons or upward bound from a port on the Atlantic to a port on the Pacific, or vice versa, contain the following particulars:

First. The nature and, as far as practicable, the duration of the intended voyage or engagement, and the port or country at which the voyage is to terminate.

Second. The number and description of the crew, specifying their respective employment.

Third. The time at which each seaman is to be on board to begin work.

Fourth. The capacity in which each seaman is to serve.

Fifth. The amount of wages which each seaman is to receive.

Sixth. A scale of the provisions which are to be furnished to each seaman.

Seventh. Any regulations as to conduct on board, and as to fines, short allowances of provisions, or other lawful punishments for misconduct, which may be sanctioned by Congress or are authorized by the Secretary of Commerce (now the Commandant of the Coast Guard) not contrary to or not otherwise provided for by law, which the parties agree to adopt.

Eighth. Any stipulations in reference to advances and allotment of wages, or other matters not contrary to law.

Under the first clause of this statute, the shipping articles must show the "nature and, as far as practicable, the duration of the intended voyage or engagement, and the port or country at which the voyage is to terminate." Thus, whether or not the language used in the voyage description is in compliance with the provision of the

statute with respect to the "nature" of the voyage or engagement is critical in determining the validity of shipping articles.

No particular period is established by statute insofar as the "duration" of the intended voyage or engagement is concerned. However, with the exception of a vessel assigned to "shuttle" service between foreign ports, it is generally possible to prevent the expiration of shipping articles prior to the completion of the voyage by their being drawn up for a sufficient period of time to cover normal contingencies. Moreover, if the period of time specified in the shipping articles expires prior to the completion of the voyage, through no fault of the vessel, master or owner, it is the duty of the seaman to remain with the vessel until completion of the voyage to the port of destination (Hamilton v. U. S., 268 Fed. 151; Shanley v. U. S., 294 Fed. 502).

The provision of the statute requiring that the articles indicate the port or country at which the voyage is to terminate" rarely presents a problem since voyages of Americanflag vessels usually terminate in the United States. But, when shipping articles call for the termination of the voyage within a specified area in the United States-for example, on the Pacific coast, on the Atlantic coast, or on the Gulf of Mexico-the guestion often arises as to whether or not seamen who have been engaged after the commencement of the voyage, at either foreign or domestic ports, and sign the shipping articles then in effect are entitled to transportation. wages, and subsistence to the same extent as the seamen engaged at the outset of the voyage, should the voyage not terminate within the area designated in the articles.

This question appears to have been resolved in McDonald v. U. S., 292 F. 593, C. C. A. N. Y. 1923, where shipping articles provide for "return" transportation, but not otherwise. In this case, the shipping articles provided for return transportation to Seattle. Wash., if the vessel did not return to the Pacific coast. The voyage was completed at New York. The seamen engaged at the commencement of the voyage received transportation and subsistence on discharge at New York. Certain seamen engaged in England brought suit for transportation and subsistence to Seattle. In rejecting the claim of these seamen, the court pointed out that the articles provided for return transportation to Seattle; not merely transportation to Seattle. thus implying an understanding for

a return to a former location.

It would, therefore, appear that seamen who are engaged after the commencement of the voyage and who sign the shipping articles then in effect would be entitled to transportation, wages, and subsistence to the same extent as seamen engaged at the commencement of the voyage, unless the word "return" appears in the provisions of the articles under which transportation would be paid. There is, however, no statutory requirement that all seamen employed on a vessel sign the same agreement and separate shipping articles calling for a different area or place of discharge, either, within or without the United States, may be used if agreeable to the master and seamen concerned.

In order for shipping articles to be valid, they must inform the seamen, in general terms at least, what kind of voyage is planned, reserving on their face, if need be, sufficient latitude for changes to meet subsequent exigencies. (U. S. v. Westwood, 266 Fed. 696). It is, therefore, desirable, whenever possible, to include in the voyage description the ports at which the vessel is expected to call. The call of the vessel at additional ports thereafter would be authorized under the language "and such other ports and places in any part of the world as the master may direct," which appears as a part of the printed matter in all shipping articles provided by the Coast Guard.

Examples of voyage descriptions which would normally be in compliance with the statute in all respects for vessels engaged in the foreign and intercoastal trades, respectively, fol-

low:

From the port of New York, N. Y., to Antwerp, Belgium, and Rotterdam, Holland, and such other ports and places in any part of the world as the master may direct, and back to a final port of discharge in the United States, for a term of time not exceeding six (6) calendar months.

From the port of Philadelphia, Pa., to one or more ports on the Pacific coast via one or more ports on the Atlantic and/or Gulf coast and back to a final port of discharge on the Atlantic coast for a term of time not exceeding six (6) calendar months.

In some situations, because of the nature of the vessel's operations or the requirements for military secrecy, it is not possible to word the voyage description in shipping articles in such manner as to name the ports at which the vessel will call. Examples of these situations are a vessel engaged in tramp service and a vessel engaged in the transportation of military sup-

plies and equipment. The following voyage description has been approved by the Coast Guard for shipping articles of vessels which are actually engaged in tramp service:

From the port of Galveston, Tex., on a tramp freighter (or tanker as applicable) voyage to ports in the U. S. Gulf and/or Caribbean Sea and/or South America and/or European ports and/or African ports and/or ports in the Far and Near East and/or Australia and such ports and places in any part of the world as the master may direct and back to a final port of discharge in the United States not exceeding twelve (12) calendar months.

It is the opinion of the Coast Guard that the above voyage description complies with R. S. 4511 (46 U. S. C. 564) and the court decisions thereunder, in that it sets forth the nature of the intended voyage, i. e., "a tramp freighter or tramp tanker voyage;" it sets forth the duration of the voyage or engagement as "for a term of time not to exceed twelve (12) calendar months"; and it sets forth the port or country at which the voyage is to terminate, i. e., "a final port of discharge in the United States". If, in any case, the mention of all of the areas in the above voyage description are not necessary, those not required should be omitted. Also, it would be appropriate to substitute other areas for those mentioned if, in so doing, it would more accurately describe the possible itinerary of the vessel.

The following voyage description has been approved by the Coast Guard when in the opinion of competent military authority the destination of the vessel should not be disclosed for security reasons:

From the port of New York to a point in the Atlantic Ocean to the eastward of New York and thence to such ports and places in any part of the world as the master may direct or as may be ordered or directed by the United States Government or any department, commission, or agency thereof and back to a final port of discharge in the United States, for a term of time not exceeding twelve (12) calendar months.

The above voyage description is quite similar to the voyage description used generally during World War II for security reasons. It is emphasized that the use of this voyage description has been approved by the Coast Guard only in those instances where competent military authority is of the opinion that in the interest of security the destination of the vessel should not be revealed.

The statutes require that seamen employed on vessels bound from a port in the United States to any foreign port (other than vessels engaged in trade between the United States and the British North American possessions, or the West Indies, or the Republic of Mexico) and vessels of the burden of 75 tons or upward from a port on the Atlantic to a port on the Pacific, or vice versa, be shipped and discharged before shipping commissioners or United States consular representatives, R. S. 4512, 4549 (46 U. S. C. 565, 641).

There is no statutory requirement that shipping articles, or an agreement in writing or print, be entered into between the master and seamen of a vessel engaged in trade between the United States and the Dominion of Canada, or the West Indies, or the Republic of Mexico (The Lily, 69 F. 2d 898, C. C. A. 9th, 1934), but such an agreement is usually entered into. The shipment of seamen employed on vessels in these trades, as well as vessels engaged in the coastwise trade, in the presence of shipping commissioners at the request of the master or owner is authorized by the act of June 19, 1886 (46 U.S. C. 563). Whenever seamen employed on vessels in these trades are engaged in the presence of shipping commissioners, the provisions of R. S. 4511 with respect to the particulars of shipping articles, except for the sixth and eighth items, apply and if seamen are so engaged they must be discharged and paid their wages in the presence of shipping commissioners or United States consular officers.

The requirement for an agreement in writing or print between the master and seamen of a vessel in the coastwise trade is found in R. S. 4520 (46 U. S. C. 574), which reads as follows:

Every master of any vessel of the burden of 50 tons or upward, hound from a port in one State to a port in any other than an adjoining State, except vessels of the burden of 75 tons or upward, bound from a port on the Atlantic to a port on the Pacific, or vice versa, shall before he proceeds on such voyage make an agreement in writing or in print with every seaman on board such vessel, except such as shall be apprentice or servant to himself or owners, declaring the voyage or term of time for which such seaman shall be shipped.

It has been held by the courts that the term "adjoining State" used in the above statute means States that adjoin at any point (Thurson v. Peterson, 9 Fed. 517, 519). For example, New York and Pennsylvania are adjoining States, and hence no agreement in writing between the master and seamen of a vessel making a voyage from New York to Philadelphia would be required.

Although it is not required that the agreement between masters and seamen on vessels engaged in the coastwise trade be on the form of shipping articles prescribed by the Coast Guard, the use of this form, or one

similar thereto, is recommended in the interest of uniformity. Furthermore, the first page of this form provides an outline for "declaring the voyage or term of time for which such seamen shall be shipped" as required by R. S. 4520.

A voyage description such as the following in the shipping articles of a vessel in the coastwise trade, when it is desired that the agreement cover a single voyage, would meet the requirements of the statute and at the same time, be entirely clear as to the responsibilities of the parties thereunder:

From the port of Boston, Mass., to one or more U. S. Gulf ports and such other coastwise ports as the master may direct and back to a final port of discharge in the United States on the Atlantic coast, north of Cape Hatteras, for a term of time not exceeding three (3) months.

In the event that it is desired that the agreement cover a series of continuous coastwise voyages, a voyage description such as the following may be included in the shipping articles:

From the port of Boston, Mass., to one or more U. S. Gulf ports and such other coastwise ports as the master may direct, for one or more voyages, and back to a final port of discharge in the United States on the Atlantic coast, north of Cape Hatteras, for a term of time not exceeding six (6) calendar months.

The use of a voyage description such as the following in shipping articles of vessels in the coastwise trade, when the agreement was not entered into before a shipping commissioner and when the Coast Guard form was used, has been noted from time to time:

From the port of New Haven, Conn., to coastwise and such other ports and places in any part of the world as the master may direct and back to a final port of discharge in the United States, for a term of time not exceeding _______ calendar months. (Not shown)

Here use of the word "coastwise" and the omission of any period of time in the voyage description would not, in the opinion of the Coast Guard, satisfy the requirement of the statute with respect to "declaring the voyage or term of time for which such seamen are shipped." Furthermore, it would not be possible to determine just what the intent of the parties was when the agreement was entered into.

It is also considered advisable to point out that the statutes requiring an agreement in writing or print between the master and seamen of a vessel, in every case, provide that such agreement shall be signed before the vessel proceeds to sea, and if not so signed it is not binding upon the seamen (The Theodore Perry, Fed. Cas. No. 13, 890).

OIL POLLUTION

The Government of Great Britain has recently completed a study of the pollution of the sea by oil. Because of the seriousness of the situation in Great Britain and reports of similar conditions existing in continental European countries, the Government of Great Britain has issued an invitation to 40 countries to attend an International Conference on Oil Pollution of the Sea, to be held in London beginning April 26, 1954. The United States was invited to send representatives, and the Department of State, after consultation with interested agencies, accepted the invitation. The other nations invited to be represented are the same nations that sent representatives to the International Conference on Safety of Life at Sea in 1948.

A Technical Committee of representatives of the United States Government and the maritime industry is developing a position as a basis for use of American delegates to the Conference. In view of the fact that the situation is not as serious in the United States because of the educational programs sponsored by Government and industry, the measures proposed by the British report are being studied very carefully by the Technical Committee.

The Conference will consider measures for the prevention of pollution of the sea by oil such as outright prohibition of discharge, discharge zones, oil separators, and port reception facilities. It is reported that the aim of the Conference is to reach agreement on the terms of an International Convention to be signed at the Conference.

Even though oil pollution has not reached the serious proportions in the United States as it is reported to have reached overseas, it is necessary that the United States maritime industry continue to strive to reduce pollution of the sea by oil.

AMENDMENTS TO EGYPTIAN

On January 7 the Council of Ministers approved amendments to the law regulating ship safety. The most significant addition to the law was the stipulation that henceforth chapter 1 through chapter 6 of the International Convention for the Safety of Life at Sea signed in London on June 10, 1948, would become an integral part of Egyptian law. Chapters 2 and 3 and the annexes of a similar convention signed in London in July 1930 will also be complied with by the Egyptian Government.

Other amendments clarified the original law, No. 21 of 1940, without

altering the original meaning or intent. These amendments make it clear that any Egyptian shipowner, captain, or transporter who contravenes any of the safety conditions set down in the original law will be subject to the prescribed punishment.

A GLANCE AT OUTBOARD MOTORBOATING CALLS FOR A SECOND LOOK

During the fiscal year 1953, 69 outboard motorhoat accidents involving the loss of 109 lives were reported to and investigated by the Coast Guard as opposed to 24 accidents with the loss of 36 lives in fiscal year 1952.

A typical accident involving an outboard motorboat where the loss of life was somewhat higher than usual was the case of a family who after finishing their picnic supper decided to go across a navigable lake in a small outboard motorboat. family, 10 in number, boarded the boat which shortly after departure, capsized and 9 of the 10 occupants drowned. The boat was provided with no lifesaving devices. The sole survivor stated, "Without any warning or apparent cause the boat sank and sank suddenly; 9 of the 10 persons in the boat were drowned. I was the only survivor. Prior to that time there had been no indication that there was anything wrong with the boat."

In a similar casualty of overloading where no lifesaving devices of any type were carried and 5 persons were drowned, the nwner/operator stated, "I loaded the boat with 7 passengers and proceeded upstream for a short ride. About a mile upstream one of the passengers complained that her child was cold. I immediately shut the throttle of the motor down to minimum speed and proceeded to make a turn to return. As the boat upon its return approached the wake. which we had created as we went upstream, water entered the boat over the bow causing a panic as near as I can remember amongst them, thereby capsizing the boat." The Coast Guard has referred this latter case as well as other similar cases, where the operator has survived, to the United States Attorney General for criminal prosecution for reckless operation of a motorboat and manslaughter. Whether or not an operator survives so that he may be criminally prosecuted and whether or not any convictions are obtained, the fact remains that nothing can bring back the lives of those lost while under his charge.

The state of mind of the above survivors as evidenced by their state-

Continued on page 71

REPEATED OVERLOADING OF TANKERS NOTED

A number of recent violations of the Coastwise Load Line Act on the part of Cities Service Oil Co.'s vessels running between Lake Charles, La., and Petty's Island, Camden, N. J., has once again focused attention on the dangerous and costly practice of overloading a vessel beyond its loadline mark.

On May 29, 1953, the SS. Chiwawa arrived at Petty's Island with her loadline submerged.

On October 9, 1953, the same vessel, now under another master, arrived at Petty's Island with her loadline submerged.

On February 10, 1954, the SS. Cantigny arrived at Petty's Island with her loadline submerged 14 inches.

In each of these three violations suspension and revocation proceedings were instituted under R. S. 4450, as amended, and the respective master's licenses and other valid certificates and documents were suspended. The Cities Service Oil Co. was also cited for violation of 46 U. S. C. 88g in each instance.

It is suggested others might benefit by the realization that loadline violations will be pursued in like terms.

By overloading a vessel certain hazardous conditions are created whereby:

 Bad weather might seriously endanger the vessel and the lives of those on board.

(2) The ship's structure might be weakened to such an extent that in a later voyage serious damage may occur without apparent justification.

1953 HEARINGS

There were 1,278 hearings held during the year 1953 on charges of misconduct, incompetence, and negligence. The major specifications* in order of frequency were as follows:

be and decised in ord the form	PO .
Misconduct:	3 3
Fail perform duty	487
AWOL	
Fail to join (domestic-	
foreign)	275
Assault	256
Insubordination	176
Negligence (inattention to du	ty):
Neglect of duty	156
Misconduct:	
Narcotics (possession, use	
or traffic of)	100
Intoxication	98
Disobey lawful command	
Desertion (domestic, for-	
eign)	28
Incompetence:	
Mental, physical and pro-	
fessional	21
*There may have been more than specification under a charge at a bearing	
specification under a charge at a nearing	51

ACCESSORIES TO S-L-O-W MURDER

A PREREQUISITE TO THE NARCOTICS PROBLEM IS A NARCOTICS SUPPLY

In November 1953, Commissioner Harry J. Anslinger, Bureau of Narcotics, appeared before the Senate Subcommittee To Investigate Juvenile Delinquency to testify on the extent of narcotic addiction in youths under 21. After summing up the narcotics problem, he urged heavier penalties for the seller of narcotics, and called the illicit traffic in narcotics a vicious, commercial racket which lives on the slow murder of its customers. He then specifically recommended:

(1) Heavier penalties for the

trafficker (or seller).

(2) Enactment of heavier penalty laws for the trafficker by all States.

(3) Addict commitment laws providing institutional treatment by all States.

(4) Senate approval of protocol to limit the production of opium to the medical needs of the world.

In brief, his testimony pointed out: "The Bureau of Narcotics has been concentrating particular attention on wiping out juvenile narcotic addiction, and is now able to report progress. . . . The problem has been obscured by alarmism, academic theory, overemphasis, overstatement, and sociological jargon. . . . It is a popular impression that a large number of our youth throughout the land are menaced by narcotic addiction. However, youthful addiction has not occurred generally throughout the country, but is confined mostly to certain segments of the population and to certain neighborhoods in some of the large

"Addiction generally follows in the wake of juvenile delinquency, and does not often precede it. . . Crime breeds drug addiction, and drug addiction breeds crime. It is a vicious circle."

"Another important contributing element in a renaissance of the narcotic traffic has been a decline in penalties. . . Federal, State, and local police efforts have been stepped up. Prosecutions have been speeded in many places and are more vigorous. Strong penalties are being imposed, but there is still much room for improvement. . . In places where heavier penalties are imposed, the traffic is rapidly diminishing. . .

"The immediate need concerning the addict is the enactment of State legislation providing compulsory treatment... If the drug addict is made a fugitive from the health officer, it will take much of the bravado out of the vice of drug addiction... As long as addicts are on the streets,

they spread addiction and contaminate others. The addict . . . will seldom go through with a cure voluntarily."

Now, if we look at a booklet called Living Death, which is put out by the Bureau of Narcotics, we find "A drug addict is a person who continues to use habit-forming drugs, chiefly morphine or heroin (which is derived from morphine). By taking one of these drugs frequently for a short time, a person can become an addict.

"He gets such an abnormal desire for the drug that he feels he cannot get along without it. When he cannot get the drug, he suffers horribly. He feels that his muscles are being torn from his arms and legs. He has violent pains in his stomach. He vomits and has diarrhea, often of a bloody type. He becomes depressed and wants to kill himself.

"The idea that an addict takes dope just to feel good is a mistake. He takes it to head off for a little while the horrible effect he feels when he doesn't have the drug."

Turning to another documentary— Youth and Narcotics, by the Los Angeles Police Department—we find a revealing, yet apparently typical, case of a young addict:

"The boy was 17 years of age. He had a pleasant way of talking, punctuating his remarks with an occasional smile. His excellent grammar and quiet manners indicated a good home and background; the curly, high-brown hair and healthy complexion well set off by neat sport clothes. He would be called a nicelooking boy. 'Likable' is the word that might come into mind.

"The illusion is spoiled by the fact that he is in police custody, the arrest report on the desk listing him as a dangerous repeater offender. The lettering on the door says, 'Narcotics Division, LAPD.'

"Gene R., the boy in custody, is a confirmed heroin addict, a 'mainliner' injecting heroin directly into the main blood vessels of his arm. His body requires five 'pops' every day, costing him from \$20 to \$25 every 24 hours. He has managed to earn this amount by 'introducing' other teenagers into the mysteries of marihuana smoking and, eventually, the use of heroin. The police report on the desk lists five separate cases where good-looking Gene R. has inflicted the dope habit upon 'girl friends.' all minors. Investigation indicates that four of these girls now pay for his, and their own, drug supply by means of prostitution.

"The average person would not suspect him of narcotic addiction. He does not have the 'furtive look,' the 'sallow complexion,' and other marks of physical and mental deterioration that are expected of the heroin addict. Except to prospective teenage 'customers,' he is not particularly dangerous, as long as he is able to maintain his daily heroin requirement."

This isn't a pretty picture, but it is something every person who goes to sea needs to know—both for his own safety and for the safety of those he

may be able to help.

A prerequisite to a narcotics problem is a narcotics supply. The dope racket cannot flourish without a steady stream of drugs being available to the illicit peddler and user. Occasional burglaries from drug establishments and thefts from doctors cannot supply the heavy demand of a great metropolis. Hence, these drugs must be brought into the country by illicit means, for the major supply of the world's narcotics is grown outside of the United States and legal imports are strictly limited.

Facts indicate most of the illicit traffic in narcotics is conducted by crews of merchant ships and personnel of commercial airlines. As long as individuals in the merchant marine are allowed to continue to deal in this illicit traffic, a number of shipmates will succumb to addiction through the greedy actions of those who sell their souls through desire for drugs or desire for the contaminated dollar, as will a number of innocent ashore.

R. I. P.

He brushed his teeth twice a day with a nationally advertised toothbrush. The doctor examined him twice a year. He slept with the windows open.

He stuck to a diet with plenty of fresh vegetables.

He golfed, but never more than 18 holes.

He never smoked, drank, or lost his temper.

He got at least 8 hours sleep each night.

The funeral will be held Wednesday. He is survived by 18 specialists, 4 health institutes, 6 gymnasiums, and numerous manufacturers of health foods and antiseptics.

He forgot about trains at grade crossings!

Side Lights on the Rules

In this, the seventh article in the Side Lights on the Rules series, we shall compare Rule 8, International Rules, with the equivalent provisions for pilot vessels in the rules applicable to inland waters, the Great Lakes, and the western rivers. Though at first glance it might appear that the respective requirements differ greatly, a close perusal of the pertinent rules reveals but minor differences in the lights that are prescribed.

Rule 8, International Rules, states:

LIGHTS FOR PILOT VESSELS

Rule 8 (a). (i) Sailing pilot-vessels, when engaged on their station on pilotage duty and not at anchor, shall not show the lights prescribed for other vessels, but shall carry a white light at the masthead visible all round the horizon at a distance of at least 3 miles, and shall also exhibit a flare-up light or flare-up lights at short intervals, which shall never exceed 10 minutes.

(ii) On the near approach of or to other vessels they shall have their sidelights lighted ready for use and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the green light shall not be shown on the port side, nor the red light on the starboard side.

(iii) A salling pilot-vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light instead of carrying it at the masthead and may, instead of the sidelights above mentioned, have at hand ready for use a lantern with a green glass on the one side and a red glass on the other to be used as prescribed above.

(b) A power-driven pilot-vessel when engaged on her station on pilotage duty and not at anchor shall, in addition to the lights and flares required for sailing pilot-vessels, carry at a distance of 8 feet below her white masthead light a red light visible all around the horizon at a distance of at least 3 miles, and also the sidelights required to be carried by vessels when under way. A bright intermittent all round white light may be used in place of a flare.

(c) All pilot-vessels, when engaged on their stations on pilotage duty and at anchor, shall carry the lights and show the flares prescribed in sections (a) and (b), except that the sidelights shall not be shown. They shall also carry the anchor light or lights prescribed in Rule

(d) All pilot-vessels, whether at anchor or not at anchor, shall, when not engaged on their stations on pilotage duty, carry the same lights as other vessels of their class and tonnage.

Inland Waters: Article 8, Inland Rules, contains many differences in terminology, but actually does not differ materially from Rule 8, International Rules.

Article 8, Inland Rules, states:

LIGHTS FOR PILOT VESSELS

Art. 8. Pilot vessels when engaged on their stations on pilotage duty shall not show the lights required for other vessels, but shall carry a white light at the masthead, visible all round the horizon, and shall also exhibit a flare-up light or flare-up lights at short intervals, which shall never exceed fifteen minutes.

On the near approach of or to other vessels they shall have their side lights lighted, ready for use, and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the green light shall not be shown on the port side nor the red light on the starboard side.

A pilot vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light

IT IS SUGGESTED THE READER REFER TO CG-169. "RULES TO PREVENT COL-LISIONS OF VESSELS AND PILOT RULES FOR CERTAIN INLAND WATERS OF THE ATLANTIC AND PACIFIC COASTS AND OF THE COAST OF THE GULF OF MEXICO;" CG-172, "PILOT RULES FOR THE GREAT LAKES AND THEIR CONNECTING AND TRIBUTARY WATERS AND THE ST. MARYS RIVER;" AND CG-184, "PILOT RULES FOR THE WESTERN RIVERS AND THE RED RIVER OF THE NORTH;" WHICH CONTAIN THE LOCAL RULES TO PREVENT COLLISIONS BETWEEN VES-SELS ON THE LOCAL WATERS OF THE UNITED STATES. REFERENCES TO RULES AND ARTICLES THROUGHOUT THIS SERIES MAY BE FOUND THEREIN.

instead of carrying it at the masthead, and may, instead of the colored lights above mentioned, have at hand, ready for use, a lantern, with a green glass on the one side and a red glass on the other, to be used as prescribed above.

Pilot vessels, when not engaged on their station on pilotage duty, shall carry lights similar to those of other vessels of their tonnage.

A steam pilot vessel, when engaged on her station on pilotage duty and in waters of the United States, and not at anchor, shall in addition to the lights required for all pilot boats, carry at a distance of eight feet below her white masthead light a red light, visible all around the horizon and of such a character as to be visible on a dark night with a clear atmosphere at a distance of at least two miles, and also the colored side lights required to be carried by vessels when under way.

When engaged on her station on pilotage duty and in waters of the United States, and at anchor, she shall carry in addition to the lights required for all pilot boats the red light above mentioned, but not the colored side lights. When not engaged on her station on pilotage

duty, she shall carry the same lights as other steam vessels.

It will be noted, aside from differences in terminology, the two rules differ as follows:

 Flareup lights are to be shown at 15-minute intervals.

(2) The minimum visibility of the white masthead light is not prescribed.

(3) The minimum visibility of the red masthead light is prescribed as 2 miles.

(4) No mention is made as to the use of a bright, intermittent, allaround white light in place of a flare.

(5) Pilot vessels engaged on station on pilotage duty and at anchor need not show anchor lights in addition to their special lights.

Great Lakes: The Great Lakes Rules do not provide for pilot vessels.

Western Rivers: Rule 11, Western Rivers Rules, is practically identical to Rule 8, International Rules. There is a slight difference in terminology; no provision is made for the use of a bright, intermittent, all-around white light in place of the flare; and anchor lights are not required when pilot vessels are on station on pilotage duty. Otherwise the requirements are the same.

Rule 11, Western Rivers Rules,

Rule Numbered 11. (a) Sailing pilot vessels, when engaged on their station on pilotage duty, and not at anchor, shall not show the lights required for other vessels, but shall carry a white light at the masthead, visible all around the horizon, at a distance of at least three miles, and shall also exhibit a flare-up light or flare-up lights at short intervals, which shall never exceed ten minutes.

On the near approach of or to other vessels, they shall have their side lights lighted, ready for use, and shall flash or show them at short intervals to indicate the direction in which they are heading, but the green light shall not be shown on the port side, nor the red light on the starboard side.

A sailing pilot vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light instead of carrying it at the masthead, and may, instead of the side lights above mentioned, have at hand, ready for use, a lantern with a green glass on the one side and a red glass on the other, to be used as prescribed above.

(b) A steam pilot vessel when engaged on her station on pilotage duty and not at anchor shall, in addition to the lights and flares required for salling pilot vessels, carry, at a distance of eight feet below her white masthead lights, a red light, visible all around the horizon at a distance of at least three miles, and also

the side lights required to be carried by

vessels when under way.

(c) All pilot vessels, when engaged on their stations on pilotage duty and at anchor, shall carry the lights and show the flares prescribed above, except that the side lights shall not be shown.

When not engaged on their stations on pilotage duty they shall carry the same lights as other vessels of their class and

tonnage.

General: This is one instance where the respective rules are quite similar. In the next issue we shall again find a great number of differences in requirements, and in the manner of stating them, when we discuss the lights and shapes required for fishing vessels.

NORWEGIAN VESSELS OF SPECIAL CONSTRUCTION

By Note No. 27, dated January 20, 1954, the Ambassador of Norway informed the Secretary of State that a new regulation exempting Norwegian naval vessels and other military vessels from carrying the two 20-point white range lights prescribed by rule 2 (a), International Rules, became effective on January 1, 1954.

The new regulations read as fol-

lows.

"Norwegian naval vessels and other military vessels are exempted from carrying the white light which is mentioned in rule 2 (a), item 2, in the Rules for Preventing Collisions at Sea (Rules of the Road at Sea) of March 21, 1952, when by reason of their special construction or purpose, they would thereby be hindered in carrying out their military functions."

PANAMA AND VENEZUELA ADOPT NEW INTERNA-TIONAL RULES

By Panamanian Executive Decree No. 490 of December 30, 1953, Panama adopted the International Regulations for Preventing Collisions at Sea recommended by the 1948 International Conference on Safety of Life at

Article 3 of this decree states that its provisions will be effective from the date of its sanction, December 30, 1953.

Similarly, by Presidential Decree No. 67 of December 19, 1953, published in Gaceta Oficial, No. 24,329 of December 29, 1953. Venezuela adopted the International Regulations for Preventing Collisions at Sea of 1948.

It will be noted that these regulations, commonly referred to as the International Rules, became effective insofar as American public and private vessels are concerned on January

1. 1954.

Q. Why should the windlass operator wear goggles when handling the brake in letting go the ship's anchor?

A. He should wear goggles to avoid eye injury from flying particles.

Q. If hawse pipes are not equipped with covers, what can be done to prevent men handling lines or on lookout from stepping or falling into the openings?

A. You can and should rig a guard rail forward of each hawse pipe.

Q. Why do mooring lines have a

becket at the eye?

A. The becket serves as a hand grip in placing mooring lines over bitts or bollards, and thereby helps to prevent hand injuries.

Q. If you find it necessary to use a blow torch, what safety equipment

should you have on hand?

A. A fire extinguisher. Q. What is the safest method of

topping or lowering booms?

A. The safest procedure is to take the topping lift fall to the winch drum, not to the niggerhead: if a bull rope is used, drill the niggerhead and shackle the bull rope to the head.

Q. Why is a lifebuoy with an attached lanyard usually kept available at or near the gangway?

A. For emergency use.

Q. What is the danger of entering tanks which have been closed for

any period of time?

A. Tanks that have been closed for some time may be deficient in oxygen. This is especially true of tanks that have carried latex, oils, or molasses. The residue of the latter cargoes ferments and evolves deadly carbon dioxide gas, which, being heavier than air, occupies the lower portions of the empty tank.

Q. Why should gangways be equipped with double manropes on both the outboard and inboard sides?

A. Single manropes are not always entirely adequate. The use of double manropes provides that extra ounce of precaution which may prevent a serious injury or a fatality.

Q. Why should open hooks be moused?

A. An open hook slips off very easily. If an open hook is used in holding a boatswain's chair or in handling stores or cargo, serious injuries or even fatalities may result. Where practicable, use shackles instead of open hooks.

Q. What is the required factor of safety for lifeboat falls?

A Six.

Q. What conditions in a wire rope make it unfit for further service as cargo gear?

A. Wire rope should not be used if in any length of eight diameters the total number of visible broken wires exceeds 10 percent of the total number of wires, or, if the rope shows signs of excessive wear, corrosion, or other defects which render it unfit for

service.

Q. What is the minimum size block you would use with a specified size of manila rope?

A. The length of the shell in inches should be three times the circumference of the rope: the diameter of the sheave should be twice the circumference of the rope.

Q. When a boatswain's chair is shackled to the rigging for work aloft, such as slushing down, what precaution must be taken if a screw pin

shackle is used?

A. The screw pin shackle should not be allowed to ride on the rigging on its pin due to the possible danger of its being unscrewed. Moreover a screw pin shackle should always have a wire seizing to prevent backing out.

Q. How can you test a block and gantline on the mast before sending

a man aloft?

A. A practical test is to secure one end of the gantline and then have several men heave down on the other end.

Q. What periodic care is necessary when wrought-iron chains, hooks, rings, links, shackles, and swivels, etc., are used for cargo gear?

A. Annealing.

Q. Does a knot in a manila line increase or decrease the breaking strength of the line?

A. A knot reduces the breaking

strength of manila line.

Q. When a tackle is rigged to lift a weight, does the greater weight come on the upper standing block or the lower moving block?

A. The upper standing block will receive the greater weight because it has not only the weight to hold but also the hauling stress that is applied.

Q. What weakens a manila line more, a knot or a splice?

A. A knot weakens a line more than a splice does: a splice keeps the efficiency of the line much closer to the original than a knot.

Q. When should you use an oxygen breathing apparatus?

A. It should be used when the oxygen content is less than 16 per-

LESSONS FROM CASUALTIES

ONE HAND FOR YOURSELF— ONE EYE ON THE CRANE!

Several months ago, a steam lumber schooner docked port side to at a West Coast port with a load of lumber. This vessel had four hatches (and was originally equipped with two sets of booms at each hatch). Until comparatively recently, lumber was loaded and stowed a stick at a time below decks or as deck cargo. It had always been the practice on the West Coast for the crew to load and discharge this type of vessel, and the sailors, aside from being seamen, were experienced lumbermen and stevedores.

With the advent of "packaged lumber," the use of the booms became impractical. Accordingly, structural alterations were effected whereby the booms were removed and two Diesel operated Unit Cranes installed to handle the cargo, one between No. 1 and No. 2 hatches, the other between No. 3 and No. 4 hatches. These cranes were installed on circular pedestals, 16.5 feet above the main deck, and were fitted with 40 foot booms. The operation of the crane allowed for simultaneous horizontal as well as vertical movement of the boom. The crane operator and the controls were located in a cab placed forward on the port side of the crane. The cab was fitted with two large windows on each side of the operator-the left window providing an unobstructed view-the view from the right window being partially obstructed by the boom topping lift and engine housing. Directly in front of the operator was

another large window and below that, in the direction of the foot pedals, a glass panel. All windows, except for the bottom glass panel, were hinged and could be swung out of the way.

When the vessel began to carry packaged lumber, it was no longer necessary to employ only seamen with lumbering experience. The lumber was banded or strapped in bundles and then stowed with the wire rope slings left around each individual load. All that was now required of a seaman was that he be able to hook the crane runner onto the slings, and then get out of the way.

During the vessel's trip north, the crew was lectured by the chief officer as to the proper manner of loading and discharging the lumber cargo and of the importance of standing clear of each sling load. Safety was repeatedly stressed

On the afternoon of the day following the vessel's arrival at her port of discharge, two seamen were assisting in the discharge of cargo from No. 1 hatch. Earlier the same day, the chief mate had observed one of them standing between a load of lumber and the dock side of the vessel and had cautioned him about this unsafe practice. The other man in the hatch had made several voyages on lumber vessels and was quite familiar with cargo operations. He had been designated as the man to give hand signals to the crane operator, when required.

After each load had been hooked on, both men would duck in under the hatch coaming and stand clear while it was being raised. By about

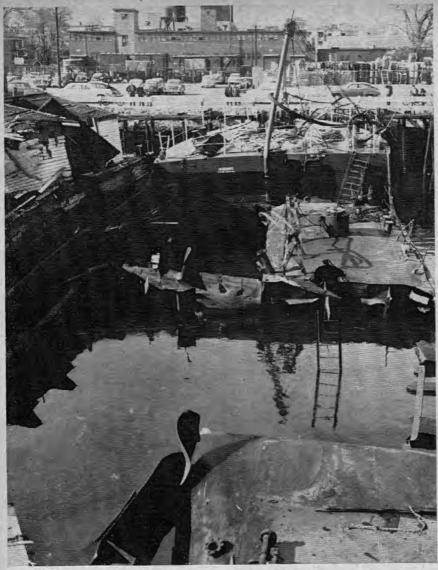
1500, the square of No. 1 hatch had been discharged to about three or four feet below the bottom of the hatch coaming, and loads were beginning to be snaked out from the wings. A long load, about 22 feet in length, was lying athwartships and forward in the square. The crane had been booked onto the starboard end of the load and the driver through various maneuvers of the crane boom, was attempting to work the load completely out into the square of the hatch. The load was first shifted to port, clearing the starboard end from under the coaming and bringing it out into the square. The starboard end of the load was then swung toward the starboard after corner of the square.

Up until this time, the two men were underneath the hatch coaming, standing clear of all operations. One now moved out into the square of the hatch in order to help steady the load. The load was brought to rest in a diagonal position, the forward end still under the port forward corner of the coaming, and the man moved over and against the after side of the port fore and aft coaming, on the port side of the load.

When the crane operator next took a strain on the runner, the load swung fore and aft, pivoting on the forward end. The after end swung to port, pinning the said seaman against the hatch coaming. The injured man suffered a dislocated right hip, broken right thigh, and broken left wrist. He was removed by ambulance and admitted to a local hospital.

While it is tempting to blame such accidents at least partly on the operator of the machinery, it must never be forgotten that an operator cannot always control the movements of heavy weights once they are in motion, and particularly when the weights are as bulky and awkward as a bundle of lumber. It behooves the officers of a vessel (or any other supervisory personnel) to indoctrinate crew members or other employees endlessly and repetitiously in the simple lesson: "Look out for yourself." The man working near heavy weights being moved, who always assumes the operator cannot see him. who assumes that he will be hurt unless he looks out for his own safety. who assumes that every suspended weight is aimed at him, and who anticipates trouble, will live long and safely. The man who assumes someone else is looking out for his personal safety should take out heavy insur-





HIGH OCTANE

A small tanker met disaster last year in an East Coast port when three cargo tanks which had contained high octane Avgas exploded with terrific force, damaging the work barge alongside, injuring three men, and immediately sinking the vessel in badly damaged condition (see picture above). That there were no deaths was due only to the most fortunate of circumstances, as sheets of steel decking and other structural parts flew through the air, striking the work barge, and landing in the nearby street and on the adjacent harbor surface.

This tanker, a small coastal type of about 800 gross tons, was fitted with 4 cargo tanks, each divided longitudinally on the centerline by a tight bulkhead, the effect being the creation

of 8 separate cargo tanks. Aft of No. 4 tank was the raised superstructure and navigating bridge.

On the day of the explosion the vessel arrived at her home port and was tied up alongside a work barge which contained a machine shop, welding, burning, and other repair equipment, for the purpose of renewing and fairing a section of plating on the forward bulwark of the port wing of the bridge.

A day and a half before, a cargo of 110/145 octane aviation gasoline had been discharged from all 4 cargo tanks at a nearby port. However, none of the tanks had been gas freed before repair work was started. While en route to the home port, the cargo tanks were rinsed out with cold salt water, but none of the tanks were more than partially filled with water before they were pumped dry. The

sides of the tanks were not washed down.

Before beginning repair work, No. 4 cargo tank, the one nearest the bridge bulwark to be repaired, was completely filled with sea water on orders from the Marine Superintendent. After this tank was filled to overflowing, all tank domes were dogged down hand tight and all valves on connecting pipelines were checked for tight closure. Nos. 1, 2, and 3 cargo tanks remained as they were, not gas free and obviously gaseous from high octane aviation gasoline. No notification was made to the local Officer in Charge of Marine Inspection that alterations or repairs were to be undertaken, as required by 46 CFR 30.01-10. An inspection to ascertain whether "hot work" could be accomplished safely in spaces adjacent to bulk cargo spaces, as required by 46 CFR 35.01-1, was not made. There were, however, two vertical noncargo spaces between the site of repairs and the nearest cargo space.

On the morning of the disastrous day, staging and ladders were set up on the port side of the bridge and oxy-acetylene burning and electric welding equipment was placed on the bridge. Oxy-acetylene hoses led to the bridge from bottles on the barge. The welding cable (hot wire) led to the bridge from the generator on the barge but this cable came aboard the tanker in the vicinity of No. 1 cargo tank, port, and there were several points on it where the insulation was questionable and had been taped. The ground wire of the welding circuit was secured by a C .- clamp to a stanchion socket near the after part of No. 2 port cargo tank and thence led to a ground strap installed all around the work barge, to which the welding generator was grounded. As a security measure the port wing of the bridge was wet down and a fresh water hose was kept running on deck in the vicinity of No. 4 tank, where hot sparks might be expected to fly from the repair work. At the time there was a fresh breeze of 25 to 35 m. p. h. blowing approximately onto the vessel's port beam.

About mid-morning a damaged section of plating on the port wing of the bridge was cut out with the oxyacetylene torch. During the early afternoon, while a new piece of plating was being shaped for installation, a vertical piece of angle iron was tackwelded on the corner of the port wing. At mid-afternoon two men were working on the port wing, the master was in the machine shop of the barge alongside; and the chief mate and another man were in the office at the after end of the barge. Suddenly a terrific blast rent the air, followed

closely by two more detonations. The tank vessel seemed to expand like a balloon. Pieces of deck plating flew in all directions. The vessel's sides were sprung out and she quickly filled with water and sank, in shallow water, fortunately. A section of 8" rubber discharge hose flew over and landed on the after end of the work barge. crushing the office space and seriously injuring the Chief Mate and a shore worker. One of the men on the wing of the bridge was thrown down by the blast and received a badly lacerated face and punctures about the face from flying scale. The barge did not sink and the after superstructure of the tanker remained above water, so that rescue of the wounded men took place at once. It was indeed a blessing that there was no fire following the blasts.

As closely as could be determined upon later analysis, the initial detonation took place in either port No. 3 tank or port No. 1 tank, followed closely by detonations in No. 2 port and starboard, and there was no actual burning or welding carried on for approximately 15 minutes before the explosion. However, smoking and other spark-producing activities took place on the work barge alongside. which was to windward on that day. The fresh breeze sweeping across the decks of the tanker from the port beam, while it probably prevented the accumulation of any gaseous fumes on deck, could easily have carried a spark of some sort aboard from the barge to lodge in some spot where it would reach an explosive mixture. It was developed that the ship's pressure vacuum relief valves had not been regularly inspected by the ship's force. A broken or defective relief valve on



No. 1, 2, or 3 tank could have been the avenue of a spark to explosive fumes.

The nature of the repair operations underway leads to the conclusion that ignition was caused by one of these operations. However no sparks were noticed by anyone as far forward as No. 3 tank and the prevailing breeze, plus the time interval of 15 minutes, plus the stream of water on deck. would tend to rule out this source. A more likely point of ignition would seem to be the defective hot welding lead coming aboard near No. 2 tank. Although there were no witnesses to prove it, a spark resulting from contact of a bare spot on this cable with any of the metallic ship's structure could well have provided the source of ignition. Three other less likely but possible sources of ignition also existed. These were:

 a carelessly tossed cigarette which could have been carried aboard by the prevailing breeze from the shore near the ship;

(2) sparks due to the loosening of the C.-clamp at the vessel's connection with the welding ground cable; and

(3) a spark caused by friction of metallic parts such as a gusset or other member carrying away in an empty tank, as the vessel was then surging in the gusts of wind. The exact cause of ignition will

probably never be known.

The failure of the Master and/or the owners to carry out the provisions of 46 CFR 30.01-10 in notifying the Officer in Charge of Marine Inspection of the proposed repair work was a technical violation of regulations which did not actually contribute to the causes of the casualty. Action was taken against the license of the Master for failing to have an inspection made to determine whether the repair operations could be safely undertaken, as required by 46 CFR 35.01-1, but this action was later reversed upon the decision that, since there were two vertical noncargo spaces between the port wing of the bridge and the boundary of No. 4 tank, the port wing should not have been construed as "adjacent" to any cargo space. It is clear that the basic errors leading to the casualty were not in noncompliance with law or regulation but in misconception of the entire problem of "hot work" on a nongas free tankship. Ohviously it was not safe to perform "hot work" on this vessel. Measures taken in partially washing out Nos, 1, 2, and 3 tanks and in filling No. 4 tank with water were entirely inadequate. All tank domes should have been dogged down hand tight and set up with nonsparking wrenches. Leading welding cables aboard in the vicinity of nongas

free tanks when they could have been led aboard near the stern was inviting disaster. It goes without saying that continued neglect of the vessel's pressure vacuum relief valves would sooner or later have led to grief.

Just prior to the explosion, the above tanker was indeed like a loaded gun with numerous fingers tickling the trigger. The element of doubt as to the loaded gun going off was not whether, but when.

GIVE THE ALARM

A Chief Engineer tells the story.

"One of my oilers was coming back to the ship at night in an Alaskan port. Well, the oiler fell into the water. Water's cold. Fortunately he had had sufficient foresight to fortify himself against chance immersion, so all the shock did was to stimulate him. He raised his voice, loud and clear, 'Help! Help!' In due time an ordinary seaman appeared at the ship's rail and peered underneath the wharf and said, 'What do you want?'

"'Get me out of here. I'm drowning. Throw me a line,' was the frantic

reply.

"The ordinary seaman disappeared for what seemed centuries. Finally he reappeared, stuck his head over the side and informed the oiler that he could not find a line.

"The oiler's response was vehement. He promised to throttle the ordinary just as soon as he got aboard, and told him to call the mate.

"By this time help had arrived and the man was yanked out. He was a little worn around the edges, but soon

recovered."

Now the moral of this yarn is, in an emergency, give the alarm. Among the ordinary seaman's first actions should have been to give the alarm by singing out 'Man overboard.' At the same time he should have located a lifering and thrown it to the man. Company practice requires a lifering be kept ready at hand at the head of the gangway and men on deck should know where the ring is located.

In the case of fire the first thing is to give the alarm and at the same time to lead out fire hose or take other

appropriate action.

Should a person be found asphyxiated in a compartment, the first action is to sound the alarm, not to attempt rescue. More than one man in industrial history has paid with his life through failure to follow this rule.

The alarm may be given by voice, by the general alarm from any of three control stations, by the ship's whistle, or other expedient means, dependent upon circumstances.

-Standard of California Safety Bulletin

"o. Fire extinguishers, portable, hand, carbon dioxide (46 CFR 25.30, 34.25, 76.50, 95.50): \$54.

"p. Fire extinguishers, portable, hand, carbon tetrachloride (46 CFR 25.30, 34.25, 76.50, 95.50); \$54.

"q. Fire extinguishers, portable, hand, chemical foam (46 CFR 25.30, 34.25, 76.50, 95.50): \$54.

portable, "r. Fire extinguishers, hand, dry chemical (46 CFR 25.30,

34.25, 76.50, 95.50): \$54.

portable, "s. Fire extinguishers, hand, mechanical foam (46 CFR 25.30, 34.25, 76.50, 95.50): \$54.

"t. Fire extinguishers, portable, hand, pump tank (46 CFR 25.30, 34.25,

76.50, 95.50): \$54.

"u. Fire extinguishers, portable, hand, soda acid (46 CFR 25.30, 34.25, 76.50, 95.50): \$54.

"v. Fire extinguishers, portable, hand, water, cartridge-operated (46 CFR 25.30, 34.25, 76.50, 95.50): \$54.

"w. Fire extinguishing systems, fixed (46 CFR 25.30, 34.15, 34.20, 76.05, 95.05): \$138.

"x. Fire extinguishing systems, portable (46 CFR 25.30, 34.15, 34.20, 76.05, 95.05); \$138.

y. Fire extinguishing systems, semiportable (46 CFR 25.30, 34.15, 34.20, 76.05, 95.05): \$138.

"z. Fire indicating and alarm systems (46 CFR 76.05, 95.05): \$378.

"aa. Fire patrol systems, supervised (46 CFR. 76.05-10): \$27.

"ab. Flame arresters, backfire (for carburetors) (46 CFR 162.015): \$27. "ac. Flame arresters for tank vessels (46 CFR 162.016): \$45.

"ad. Flashlights, electric, hand (46

CFR 161.008); \$54.

"ae. Fusible plugs (46 CFR 162.014):

"af. Gas masks, self-contained breathing apparatus, and supplied air containers (46 CFR 160.011): \$24.

"ag. Gaging devices, liquid level, liquefied compressed gas (46 CFR 38.10-20): \$27.

"ah. Hand propelling gear, lifeboat

(46 CFR 160.034): \$210.

"ai. Hatchets, lifeboat and life raft (46 CFR 160.013): \$21.

"aj. Incombustible materials (46

CFR 164.009): \$42.

"ak. Indicators, boiler, water-level, secondary type (46 CFR 52.70-50): \$36.

"al. Jacknife, with can opener (46 CFR 160.043): \$24.

"am. Kits, first-aid (46 CFR 160.041): \$48.

"an. Ladders, embarkation-debarkation (flexible) (46 CFR 160.017):

"ao. Lamps, safety, flame (46 CFR 160.016): \$24.

"ap. Lifeboats (46 CFR 160.035): \$178.

"aq. Life floats (46 CFR 160.027):

"ar Life preservers, balsa wood, Models 42 and 46 (46 CFR 160.004):

"as. Life preservers, cork, Models 32 and 36 (46 CFR 160.003): \$56.

"at. Life preservers, fibrous glass, Models 51, 52, 55, and 56 (46 CFR 160.005): \$56.

"au. Life preservers, kapok, Models 2, 3, 5, and 6 (46 CFR 160.002): \$56.

"av. Life preservers, repairing, and cleaning (46 CFR 160.006): \$37. "aw. Life rafts (46 CFR 160.018):

\$114.

"ax. Lights, water, electric, floating, automatic (with bracket for mounting), for merchant vessels (46 CFR 161.001): \$108.

"ay. Lights, water, self-igniting (calcium carbide-calcium phosphide type), for merchant vessels (46 CFR 160.012): \$66.

az. Line-throwing appliance, impulse-projected rocket type (and equipment), for merchant vessels (46 CFR 160.040): \$102.

appliance, "ba. Line - throwing shoulder gun type (and equipment), for merchant vessels (46 CFR 160.031): \$102.

"bb. Loadspeaker system, emergency (46 CFR 113.50-5): \$378.

bc. Mechanical disengaging apparatus, lifeboat, for merchant vessels (46 CFR 160.033): \$210.

"bd. Mirrors, signaling (emergency) (46 CFR 33.15, 75.20, 95.20): \$30.

be. Nozzles, fire hose, combination solid stream and water spray (11/2inch and 21/2-inch), for merchant vessels (46 CFR 162.027): \$36.

"bf. Nozzles, water spray (11/2-inch fixed type) (46 CFR 34.10, 76.10, 95.10): \$36.

"bg. Pumps, bilge-lifeboat (46 CFR 160.044): \$62.

"bh. Regulators and low water alarms, hoiler feed (46 CFR 52.70-50): \$36.

"bi. Sea anchors, lifeboat (46 CFR 33.15, 75.20, 94.20); \$27.

"bj. Searchlights, motor lifeboat (46 CFR 161.006): \$54.

"bk. Signal pistols for parachute red flare distress signals (46 CFR 160.028); \$58.

"bl. Signals, distress, combination flare and smoke, hand (46 CFR 160.023): \$58.

THERE ARE FIVE WAYS TO GET ASHORE: YOU CAN USE THE LANDING GEAR OR LADDER, OR YOU CAN JUMP, FALL OR RE THROWN. THE FIRST TWO METHODS MAKE SENSE; THE OTHER THREE MAKE BASKET CASES. IF YOU WANT TO BE AN ACROBAT, JOIN THE CIRCUS.

-SAFETY LOG

NEAR ACCIDENTS ARE WARNINGS!

"bm. Signals, distress, flare, red, hand (46 CFR 160.021): \$58.

"bn. Signals, distress, hand-held rocket-propelled parachute red flare (46 CFR 160.036): \$58.

"bo. Signals, distress, pistol-projected parachute red flare (46 CFR 160.024): \$58.

"bp. Signals, distress, smoke, orange, floating (46 CFR 160.022): \$58. "bq. Signals, distress, smoke, or-

ange, hand (46 CFR 160.037): \$58. "br. Structural insulation (46 CFR

72.05, 92.05): \$42. "bs. Telephone systems, soundpowered (46 CFR 113.30-25): \$100.

"bt. Valves, pressure-vacuum, relief and spill, for tank vessels (46 CFR 162.017): \$54.

"bu. Valves, relief, hot water heating boilers (46 CFR 162.013); \$45.

"by. Valves, safety, power boilers (46 CFR 162.001): \$54.

"bw. Valves, safety, steam heating boilers (46 CFR 162.012); \$45.

"bx. Valves, safety relief, liquefied compressed gas (46 CFR 162.018):

"by. Welding electrodes (46 CFR 56.01-20): \$10.

"bz. Winches, lifeboat (46 CFR

160.015): \$258. "12. Renewal of a certification or the approval of an alteration of an item of equipment or material. The fee for the renewal of a certification or the approval of an alteration of an item of equipment or material listed in paragraph 11 is to be \$10.

"13. Certificate of award of number for an undocumented vessel (46 CFR Part 172). The fee is to be \$5.00 for each certificate, for each duplicate certificate issued in lieu of lost original certificate, and for each certificate reissued because of change in address of owner or change of name, service, or engine number."

After this proposed schedule of fees is made effective, each application or request (formal or informal) for any permit, certificate, or other document described in paragraphs 6 to 13, inclusive, quoted above, must be accompanied by a remittance in full amount of the fee. An application accompanied by an insufficient amount will not be accepted for processing and may be returned to the applicant. No refund of fees will be made except in the case of a payment in excess of the fee prescribed.

It is contemplated that the schedule of fees will be revised biennially, and adjustments made where necessary to conform the fees charged to actual experience in the light of new or changed circumstances.

The schedule of fees as it is finally determined, together with notice of its effective date will be published in the FEDERAL REGISTER.

APPENDIX

AMENDMENTS TO REGULATIONS

I EDITOR'S NOTE.—The material contained herein has been condensed due to space limitations. Copies may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.]

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

CHAPTER I—COAST GUARD, DE-PARTMENT OF THE TREASURY

Subchapter K-Security of Vessels

[CGFR 54-4]

PART 121—SECURITY CHECK AND CLEAR-ANCE OF MERCHANT MARINE PERSONNEL

APPEAL AND REVIEW PROCEDURES FOR PER-SONS DENIED SECURITY CLEARANCE

The purpose for amending 33 CFR 121.21 (a) (3) (i) is to announce and state that the written statement or bill of particulars furnished to persons denied security clearance in appeal and review procedures will be prepared by the Commandant, United States Coast Guard, and that such statement or bill of particulars will be furnished by him to the Chairman, Local Appeal Board, for inclusion in the written notification required by 33 CFR 121.21 (a) (3).

TITLE 46-SHIPPING

CHAPTER !—COAST GUARD, DE-PARTMENT OF THE TREASURY

Subchapter F-Marine Engineering

[CGFR 54-2]

MATERIALS, CONSTRUCTION, UNFIRED PRESSURE VESSELS, AND PIPING FOR MERCHANT VESSELS

A notice regarding proposed miscellaneous changes in the Marine Engineering Regulations for merchant vessels was published in the FEDERAL REGISTER dated September 9, 1953, 18 F. R. 5433, as items LX, X, and XI on the agenda to be considered by the Merchant Marine Council, and a public hearing was held by the Merchant Marine Council on September 29, 1953, at Washington, D. C. All comments, views, and data submitted were considered and where practicable were incorporated into the regulations.

The amendments to 46 CFR 51.04—1, 51.07—1, 51.13—1, 51.22—1, 51.25—1, 51.34—1, 51.46—1, 51.49—1, 51.58—1, 51.61—1, 51.67—1, 51.70—1, 51.73—1, and 51.76—1 revise and bring up to date the requirements with respect to standard specifications issued by the American Society for Testing Materials. These amendments are based on item IX of the agenda.

The cancellation of 46 CFR 52.01-80, regarding boilers on barges, and 46 CFR 52.20-10 (i), regarding detailed requirements for manhole and handhole openings in externally fired boilers, is because these regulations are no longer necessary. These changes are based on item IX of the agenda.

Table 52.05-10 (a) in 46 CFR 52.05-10 is amended by adding maximum allowable stress values for steel forgings (ASTM designation A182-52aT) and steel castings (ASTM designation A351-52T), and by revising the maximum allowable stresses for certain other ferrous materials. This change is based on item IX of the agenda.

The amendments to 46 CFR 52.05-5 (a), 52.05-12 (g), 52.15-5 (a), 52.20-5 (a), and 52.22-5 (a) clarify the intent of the regulations with respect to the materials to be used in the shells and heads of boilers. These changes are based on item LX of the agenda.

The amendment to 46 CFR 52.35-20 (f) permits stays and staybolts in fire tube boilers to be attached by welding in addition to the methods previously permitted. This change is in substantial agreement with the requirements of the American Society of Mechanical Engineers' boiler code. This amendment is based on item IX of the agenda.

Table 52.55-10 (a2) in 46 CFR 52.55-10 (a) (2) is made applicable to seamless low carbon steel tubes subject to internal pressure where expanded into drums or headers. The values set forth in this table may be used in the computations to determine the maximum allowable pressures for electric-resistance-welded low carbon steel tubes when used as either boiler, waterwall, economizer, or superheater tubes when fully enclosed within the boiler setting. When such tubes are to be used outside the boiler casing the maximum allowable pressure; shall not exceed 85 percent of the values set forth in table 52.55-10 (a2). This amendment is based on item IX of the agenda.

The amendments to 46 CFR 54.03-15, 54.03-20, and 54.03-35, regarding the design and construction of unfired pressure vessels, are intended to bring Coast Guard requirements into closer agreement with the standards of the Tubular Exchangers Manufacturers Association and to clarify the intent of the regulations. The amendment to 46 CFR 54.03-35, regarding access and inspection openings, will bring Coast Guard requirements into closer agreement with the requirements of the American Society for Mechanical Engineers. These changes are based on item X of the agenda.

The amendments to 46 CFR 55.07-1 and 55.07-5 revise the requirements regarding seamless alloy steel pipe and will require that alloy steel bent pipe should be heat treated in order to remove locked up stresses as well as to refine the grain structure. The specification references and grade designations have been revised and brought up to date. These changes are based on item XI of the agenda.

TITLE 46-SHIPPING

CHAPTER I—COAST GUARD, DE-PARTMENT OF THE TREASURY

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

[CGFR 53-54]

PART 146-TRANSPORTATION OR STOW-AGE OF EXPLOSIVES OR OTHER DANGER-OUS ARTICLES OR SUBSTANCES AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

MISCELLANEOUS AMENDMENTS

The purpose of the amendments in this document is to correct and to clarify certain dangerous cargo requirements contained in Coast Guard Document CGFR 53-54, Federal Register Document 53-10446, which was published in the Federal Register dated December 16, 1953, and Coast Guard Document CGFR 53-26, Federal Register Document 53-7628 which was published in the Federal Register dated September 1, 1953.

EQUIPMENT APPROVED BY THE COMMANDANT

[Editor's Note: Due to space limitations, it is not possible to publish the documents regarding approvals and terminations of approvals of equipment published in the Federal Register dated February 16, 1954 (CGFR 54-6). Copies may be obtained upon request from the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.1

Articles of ships' stores and supplies certificated from January 30, 1954 to March 1, 1954, 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:

CANCELED

(Failed to renew in accordance with 46 CFR 147.03-9)

Pictrebor Chemical Co., Bellport, N. Y. Certificate No. 118, dated March 1, 1954. "PICTREBOR DECK CLEANSER."

International Metal Polish Co., Inc., 1910 Quill St., Indianapolis 7, Ind. Certificate No. 171, March 1, 1954. "BLUE RIBBON PASTE METAL POLISH."

Knapp-Monarch Co., Bent & Potomac St., St. Louis 16, Mo. Certificate No. 208, dated March 1, 1954. "MAGIK MIST AEROSOL INSECTICIDE DISPENSER."

Rex-Cleanwall Corp., 126 South Murphy Ave., Brazil, Ind. Certificate No. 211, dated March 1, 1954. "REXGLO-X."

Rex-Cleanwall Corp., 126 South Murphy Ave., Brazil, Ind. Certificate No. 212, dated March 1, 1954. "REXGLO CONCENTRATE."

Elraco Engineering Co., 14th & Garden Sts., Hoboken, N. J. Certificate No. 264, dated March 1, 1954. "ELRACO DEGREASER."

Deco Products Co., Inc., 421 West 126th St., New York 27, N. Y. Certificate No. 274, dated March 1, 1954. "CRESOLENE DISINFECTANT."

Deco Products Co., Inc., 421 West 126th St., New York 27, N. Y. Certificate No. 290, dated March 1, 1954. "COAL TAR DISINFECTANT."

The Enequist Chemical Co., Inc., 255 Freeman St., Brooklyn, N. Y. Certificate No. 311, dated March 1, 1954. "ULTREX #725."

S. C. Johnson & Son, Inc., Racine, Wis. Certificate No. 322, dated March 1, 1954. "NO BUFF FLOOR FINISH (BROWN LABEL)."

S. C. Johnson & Son, Inc., Racine, Wis. Certificate No. 323, dated March 1, 1954. "NO BUFF FLOOR FINISH (GREEN LABEL)."

Chemical Detergents Co., Inc., 27 William St., New York 5, N. Y. Certificate No. 327, dated March 1, 1954. "PLANISOL."

Standard Oil Co. (ESSO), 15 West 51st St., New York 19, N. Y. Certificate No. 330, dated March 1, 1954. "FLIT." Standard Oil Co. (ESSO), 15 West 51st St., New York 19, N. Y. Certificate No. 331, dated March 1, 1954. "FLIT AEROSOL INSECT SPRAY."

E. F. Houghton & Co., 303 Lehigh Ave., Philadelphia 38, Pa. Certificate No. 352, dated March 1, 1954. "VIM-SOLV 'M'."

AFFIDAVITS

The following affidavits were accepted during the period from 15 December 1953 to 15 January 1954:

The Klinger Corporation of America, 95 River Street, Hoboken, N. J., a Valves.

United Conveyor Corporation, 37 W. Van Buren Street, Chicago 5, Ill. Valves and Fittings.

The following affidavits were accepted during the period from 15 January to 15 February 1954:

Western Sales & Supply Co., 420 Market St., San Francisco, Calif. Flanges.

Sharvania Oil & Grease Corp., P. O. Box 1550, Memphis 1, Tenn. Pipe fittings.

Berkeley Forge & Tool Co., Berkeley, Calif. Forgings.

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 15 January to 15 February 1954, is as follows:

The Lunkenheimer Co., Cincinnati 14. Ohio. Heat No. 477.



Courtesy Maritime Reporter

ments clearly indicates their complete lack of acquaintance with or knowledge about any or all rudiments of boat safety or safety afloat. In a word, ignorance was the cause of the casualty in which they were involved. A review of the record indicates that this is true of virtually all outboard motorboat accidents involving loss of life. The cause for the appalling loss of life in outboard motorboat accidents in their order of importance may be classified as follows:

Irresponsibility and overloading.

Operation under bad weather conditions.

Failure to carry required United States Coast Guard approved lifesaving devices for each person on board.

Failure to become indoctrinated with or make provision for the use and availability of lifesaving devices under emergency conditions.

Reckless navigation, i. e., no lookout, following other vessels' wakes, etc. Speed.

Lack of knowledge of basic seamanship.

Indications are that operation of outboard motorboats is on an upward surge so that an increase of accidents of such motorboats involving loss of life may be expected unless energetic preventative action is instituted.

We all know that outboard motorboat operators require no licensing and that the boat itself is subject to only the minimum legal safety requirements. Some action which is at least a wedge of common sense into the ignorance and irresponsbility of outboard motorboat operators is strongly indicated in the interests of preventing needless loss of life.

To create such a wedge, consideration should be given to the following suggestions:

1. Furnish each purchaser or lessee of an outboard motor or boat with a pamphlet pertaining to the elements and rudiments of safe motorboat operation and safety affoat.

 Permanently indicate on each outboard motor the legal and real necessity for carrying approved lifesaving devices, including methods of use and availability.

3. Construct boats intended for use with outboard motors with built-in air tanks filled with a suitable buoyant agent such as kapok, balsa wood, cork, etc.

4. In each boat, attach a permanently legible plate clearly setting forth the maximum capacity of the boat; the minimum freeboard of the boat, and the weather conditions under which the boat may be safely operated.



This is ABMcGoofus-on his face is a well.

He worked aloft without a safety belt.