

# ***PROCEEDINGS***

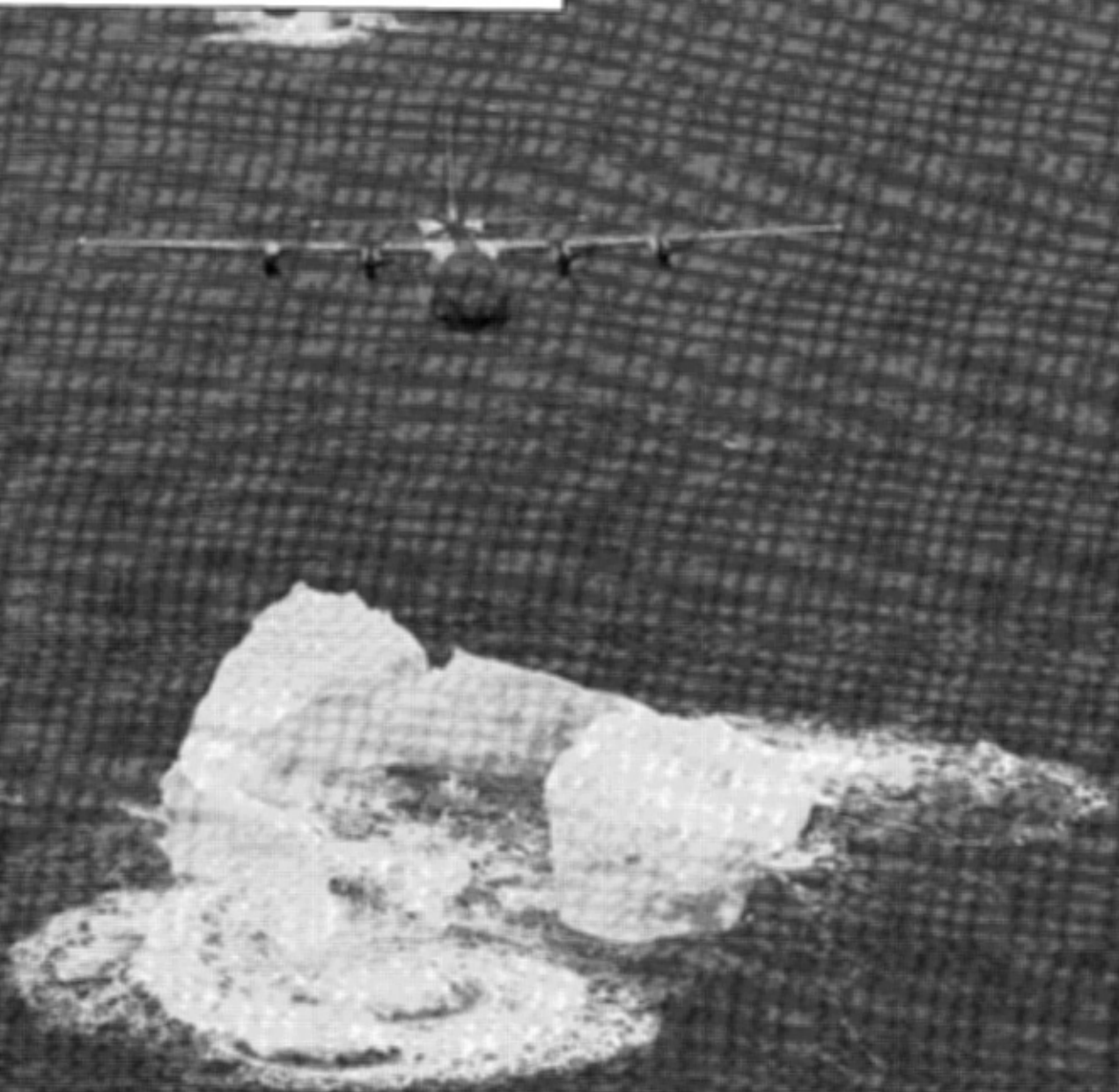
**OF THE MERCHANT MARINE COUNCIL**



**UNITED STATES COAST GUARD**

**Vol. 24, No. 2 \* February 1967**

CG-129



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#### COVERS

**FRONT COVER:** Head on view of U.S. Coast Guard HC 130-B ice patrol plane berg-hopping off the coast of Labrador.

**BACK COVER:** The highest iceberg ever recorded. Sighted in Melville Bight, Greenland, by the Coast Guard Icebreaker *Eastwind* in summer 1958. The berg measured 550'!

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# PROCEEDINGS

OF THE

MERCHANT MARINE COUNCIL

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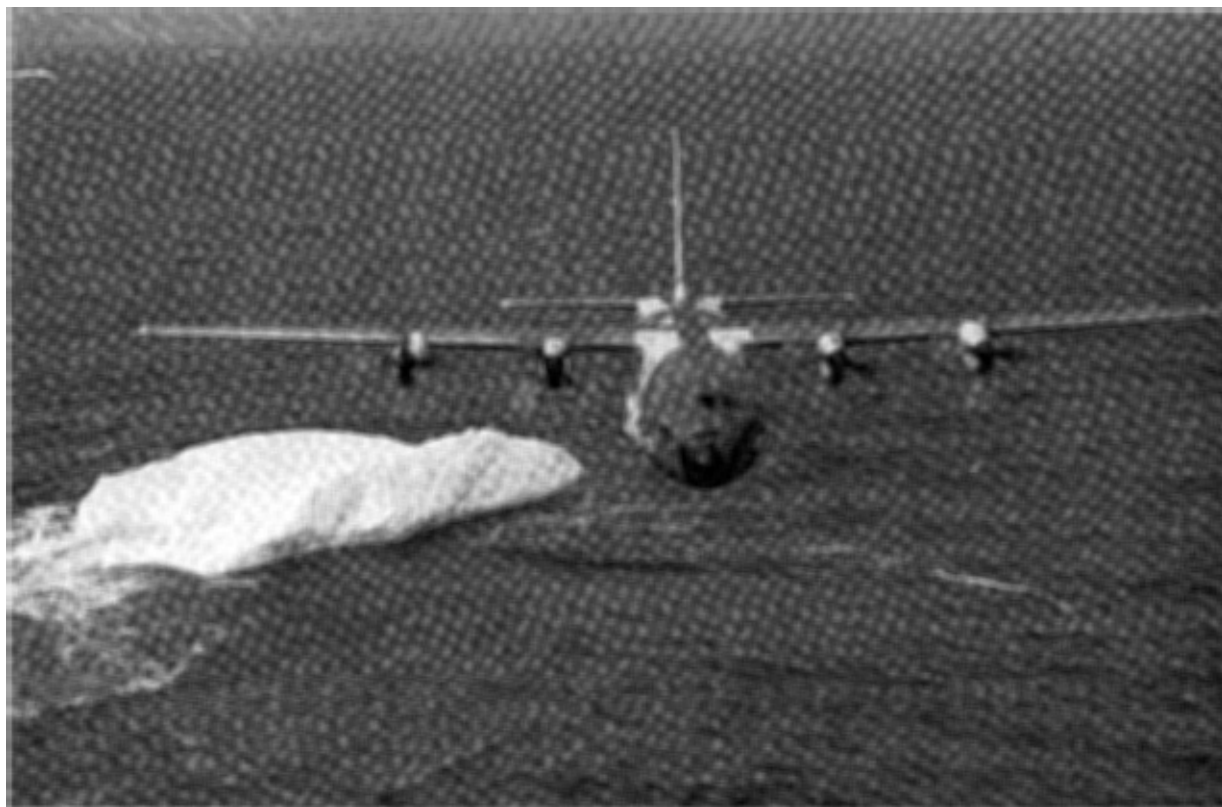
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# Ice Patrol '67



*The "New Look" International Ice Patrol. U.S. Coast Guard C-130 patrol planes now quickly and thoroughly search for icebergs from aloft.*

THE U.S. COAST GUARD will commence the International Ice Patrol services to shipping in early March 1967. The primary objective of the International Ice Patrol is to provide timely information and advance warning to shipping of the extent of the limits of icebergs and sea ice in the North Atlantic Tracks in the vicinity of the Grand Banks.

An organizational change has occurred within the Coast Guard forces operating the Ice Patrol. Com-

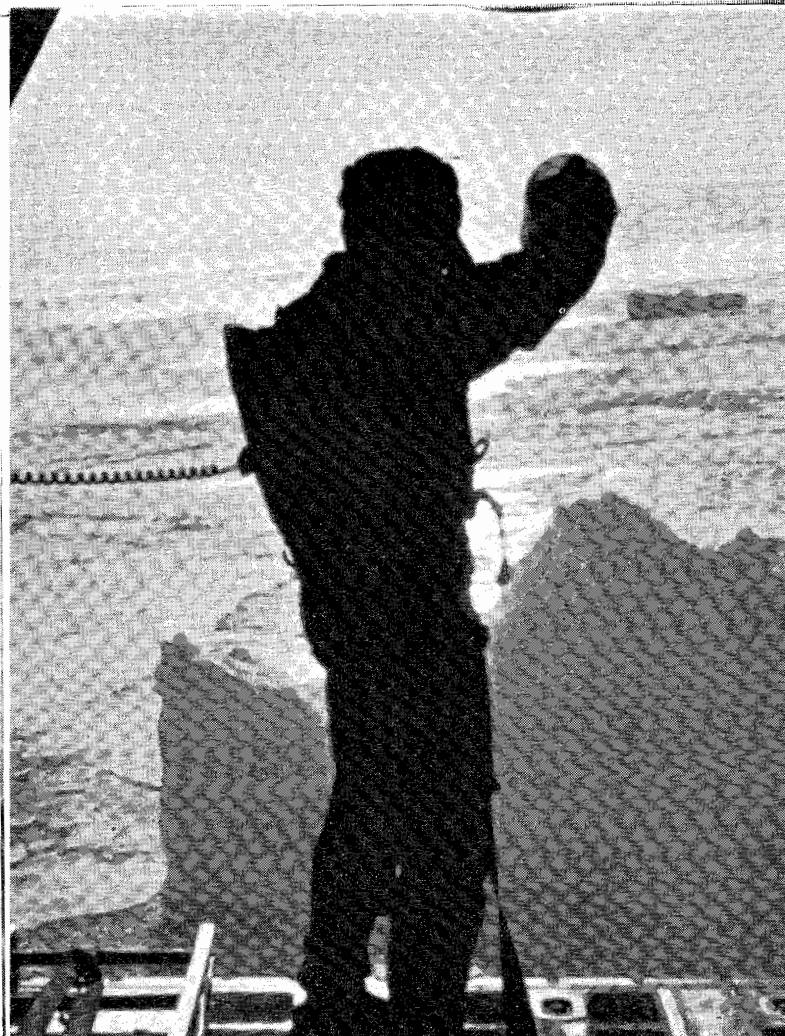
mander, Eastern Area, U.S. Coast Guard, has been designated Commander, International Ice Patrol and all forces have been placed under his operational command. The International Ice Patrol will be permanently stationed at the U.S. Coast Guard Base, Governor's Island, N.Y. During the Ice Patrol Season, ice reconnaissance aircraft and personnel will be deployed to Argentina, Newfoundland to conduct ice observations. U.S. Coast Guard Radio Station Argentina

(NIK) will continue in operation, and improved ice season services are expected.

To accomplish the objectives of the International Ice Patrol, the Coast Guard forces will maintain a central Ice Patrol Office in New York to:

a. Evaluate and analyze all data collected;

b. Forecast ice conditions based on latest observed data, as affected by meteorological and oceanographic factors:



*A crewman, silhouetted in the rear cargo doorway of a Coast Guard Ice Patrol plane, drops a dye bomb on an iceberg in a field of ice in Davis Strait off Baffin Island for future identification and tracking.*

*The bomb is a mixture of calcium chloride pellets and rhodamine "B" dye that does not wash away with melting. A berg marked by this method, used for the first time on the 1966 Ice Patrol, enables Coast Guard observers to more accurately determine rate of drift and measure rates of ice deterioration over long periods.*

c. Disseminate ice conditions via Naval Radio Station Washington (NSS) and Radio Halifax (CFH).

The Coast Guard will also deploy ice observation forces to Argentina, Newfoundland for the:

a. Collection of ice, weather, and sea temperature reports from shipping and aircraft traversing the Grand Banks area;

b. Operation of the ice reconnaissance aircraft; and

c. Dissemination of observed and forecast ice conditions by means of

U.S. Coast Guard Radio Argentina (NIK).

A Coast Guard oceanographic vessel will be deployed to the Grand Banks to collect oceanographic and meteorological data and the service will order a surface patrol craft into the ice patrol region when required.

**COMMUNICATIONS** Ice broadcasts will be made twice daily, at 0048 and 1248 GMT, by U.S. Coast Guard Radio Argentina (NIK) on 155, 5320, 8502, and 12880.5 kc/s. Each broadcast will be preceded by a general call

CQ on 500 kc/s, with instructions to shift to receive on 155, 5320, 8502, or 12880.5 kc/s. After shifting to these frequencies, NIK will transmit a test signal and the International Ice Patrol call sign NIK for about 2 minutes to facilitate tuning. The ice broadcast will follow immediately at 15 words per minute and then will be repeated at 25 words per minute. Prescribed radio silent periods will be observed. Special notices will be published in the event any changes occur in transmission of the Ice Broadcasts.

When deemed advisable, special ice broadcasts may be made in addition to those regularly scheduled. Such special ice broadcasts will be preceded by the International Safety Signal TTT.

Ice conditions will be transmitted daily by facsimile at 1330 GMT on 5320, 8502, and 12880.5 kc/s at a drum speed of 60 RPM. All ships receiving those transmissions are requested to mail the facsimile chart copies, with notations of date received and ship's location, to Commander, International Ice Patrol Governor's Island, New York, N.Y. 10004, for evaluation of effectiveness.

Duplex operation will be used between NIK and merchant ships for general radio communications, such as requests for special information, reports made by merchant ship of ice sighted, sea temperatures, visibility, and weather conditions.

Merchant ships may call NIK on 500 kcs, 8 mc/s, and 12 mc/s maritime calling band at any time. Ships will shift to their assigned HF working frequency. NIK will work 427 kc/s, 8650 kc/s, or 12889.5 kc/s. The surface patrol vessel, radio call sign NIDK when on station, will relay between NIK and ships when necessary. There is no charge for these services.

Throughout the ice season, U.S. Navy Radio Washington (NSS) and Radio Halifax (CFH) will broadcast twice daily ice reports as furnished by Commander, International Ice Patrol at 0430 and 1530 GMT and 0130 and 1330 respectively. Further notice will be given in the Notice to Mariners as to the exact date when the ice broadcasts and the operations of the International Ice Patrol will commence.

Until the inauguration of the International Ice Patrol services, all reports of ice sightings should be addressed to the U.S. Naval Oceanographic Office, Washington, D.C., and thereafter to Commander, International Ice Patrol (NIK).



**IMPORTANCE OF REPORTS** The ice broadcasts by NIK will contain a request for shipping to report any ice sighted. Ship reports of ice and weather in the Grand Banks area are an indispensable source of ice, oceanographic and meteorological data. They materially assist the International Ice Patrol in determining ice conditions and in disseminating ice information to shipping. When reporting icebergs, ships are requested to describe the shape and provide an estimate of size. The berg description is required to identify and track the individual bergs, while the size assists in determining their eventual deterioration.

In addition to ice sighting reports during the ice season, all ships are urged to make regularly 4-hour reports to Radio Station NIK during the ice season when within latitudes 40° N. and 50° N. and longitudes 42° W. and 60° W., including ship's position, course, speed, visibility, sea temperature, and wind. The importance of these reports cannot be overemphasized. The visibility reports are especially valuable in planning ice observation flights. Sea temperatures are used to construct isotherm charts employed in estimating ice deterioration and detecting shifts in branches of the Labrador Current. Wind data is useful in estimating set and drift of ice and in forecasting weather for the purpose of planning ice observation flights. An up-to-date plot is maintained on all reporting ships. These ships can be warned directly when approaching dangerous ice.

It is realized that ships with but one radio operator may find it impractical to report every 4 hours. It is therefore suggested that the reports be prepared every 4 hours as requested and held in abeyance until the single radio operator is on watch.

**GULF OF ST. LAWRENCE** Aerial ice reconnaissance and dissemination of ice information is also performed for shipping by the Canadian Department of Transport. Ships may obtain ice information about this area by contacting Ice Information Officer, North Sidney Radio (VCO). This organization during the period from mid-December 1966 to 30 June 1967, will mainly operate in the Gulf of St. Lawrence and approaches and the coastal waters of Newfoundland and Labrador to the entrance of Hudson Bay. Details of these services are available in the publication "Guidance to Merchant Ships Navigating in the Gulf of St. Lawrence in Winter" pub-

lished annually by the Marine Operations Branch, Department of Transport, Canada.

**SEARCH AND RESCUE** International Ice Patrol aircraft and vessels will render assistance to persons and property within the limits of operations.

**WARNING** Carefully conducted tests by the International Ice Patrol have proven that radar cannot provide positive assurance of iceberg detection. As sea water is a better reflector of radar signals than ice, a berg of growler size inside the area of sea "return" or "clutter" of the radar

scope may not be detected. Furthermore, it was determined that the average maximum range of radar detection of a dangerous size growler is only 4 miles. While radar remains a valuable aid to ice detection, its use cannot replace the traditional caution exercised in a passage across the Grand Banks during the ice season.

**ICE PATROL LOCATION** The International Ice Patrol is now located on the U.S. Coast Guard Base, Governor's Island, N.Y. Its offices are opposite the AMVER Center. Visitors are welcomed. ‡

*An iceberg is labeled with large streaks of bright vermilion dye imbedded between its two peaks for future identification and tracking.*

*Though sometimes more than two weeks lapsed between the "Bombing" of a berg target and the first aerial tracking, the vermilion dye on the berg was readily identifiable.*





## MARITIME SIDELIGHTS

### ABS HONORS HERO OF ALVA CAPE CASUALTY

Captain George Sahlberg, of Brielle, N.J., master of the Motor Tug *Julia C. Moran*, has been awarded the American Bureau of Shipping Valor Medal, the fourth such award presented in 36 years. The presentation was made at the 45 Broad Street headquarters of the American Bureau. Admiral Willard J. Smith, Commandant, represented the Coast Guard at the presentation ceremony.

Captain Sahlberg was honored for his heroism and skill in directing the rescuing of 23 survivors from the Motor Tanker *Alva Cape* which collided with the Steam Tanker *Texaco Massachusetts* on June 16 of this year in the Kill Van Kull, the narrow waterway separating Staten Island from Bayonne, N.J. The collision and explosion and fire that followed took 33 lives.

Andrew Neilson, Chairman and President of the American Bureau made the presentation of the medal and of an illuminated scroll at a special meeting of the Board of Managers of the Bureau. He detailed the story of the tragedy and of the heroic feat of Captain Sahlberg, lauding the tug master and his crew.

Mr. Neilson pointed out that the *Julia C. Moran* was "the first rescue vessel to arrive" at the scene of the crash, noting that the tug was alerted and proceeding toward the two oil tankers and had them in sight before the explosion and fire engulfed the area.

"When the tug was about 400 yards from the tankers a violent explosion took place accompanied by flames," he added.

"Captain Sahlberg could see men running on the decks of the *Alva Cape* and jumping overboard. He proceeded to their rescue in spite of the dangers that lay ahead. At one stage his tug was totally engulfed in flames. In preparation for the rescue work, Captain Sahlberg had his full crew on deck and had lines dropped over the side that could be reached by men in the water to hold on until they could be lifted from the water. . . ."



Andrew Neilson, Chairman and President of the American Bureau of Shipping, presenting the Valor Medal to Captain George Sahlberg of the Motor Tug *Julia C. Moran*, December 12, 1966.

Mr. Neilson called attention to the significance of Captain Sahlberg's acts of preparation for the rescue and to his heroism and that of his crew.

"In awarding Captain Sahlberg this medal I do not in any way wish to diminish for a moment the other acts

of heroism performed by other vessels," he added.

After making the medal presentation, the American Bureau chief executive read the illuminated citation and formally presented it to Captain Sahlberg; Captain Sahlberg began his career at sea at the age of 17. His career to date covers 45 years.

The American Bureau of Shipping's Valor Medal has been presented only three other times since its creation in 1928.

The Board of Managers of the American Bureau of Shipping at its Annual Meeting in 1928 established the Valor Medal to be awarded by the Bureau for acts or deeds of valor beyond the call of duty when an American vessel renders such service or is rendered such service by a vessel of another nationality.

At the time of the establishment of this award it was recognized that in any major casualty there would be many acts of heroism but it was felt that this award should be given only to a master in recognition of extreme cases of valor. It was the idea of the Bureau to make this a rare award which will be particularly valuable and highly prized.

Previous recipients of the medal were:

Captain George Fried of the *SS America* in recognition of his extraordinary deeds of valor on the high seas and for the rescue of the crew of the *SS Florida* on January 22, 1929.

Captain Giles C. Stedman of the *SS American Merchant* in recognition of his extraordinary deeds of valor on the high seas and for the rescue of the crew of the *SS Exeter City*, January 1933.

Captain Henrik Kurt Carlsen of the *SS Flying Enterprise* for his gallant efforts to save his ship in January 1952. ⚓

## WORLD SHIP LOSSES INCREASE

Lloyd's Register of Shipping discloses that more merchant ships were lost in 1965 than in any year of peace since records were first kept. The loss throughout the world was 273

ships of 739,000 tons wrecked, burnt out or otherwise destroyed. In 1964, the worst year previously, 249 ships of 558,000 tons were lost.

The increase cannot be attributed to the growth in the world merchant fleet: tonnage lost as a percentage of the total, 0.46 percent, was also a record, comparing with 0.36 percent in 1964.

Stranding or running aground were the most important causes of total loss. For every ship of over 400 tons lost by collision throughout the world between 1960 and 1964, 2 were lost by fire, 2 by abandonment or sinking at sea and 10 by stranding or running aground. It remains as true as ever that the most dangerous place for seamen is the shore.

Last year's statistics broadly bore out these comparisons. Of 270 ships lost (out of about 42,000) 117 were wrecked, 81 foundered (an unusually large number), 31 burnt out and 25 collided. More smaller ships were lost than larger ones: 0.65 of the total number of ships afloat were lost, but only 0.46 of the total tonnage. ⚓

From: *Journal of the Honourable Company of Master Mariners*

## COAST GUARD HEARINGS PROCEDURES DRAW SENATORS PRAISE

Senator Edward V. Long (D.-Mo.), the Chairman of the Senate Subcommittee on Administrative Practice and Procedure, has released two important subcommittee publications relating to the problem of reducing delay in administrative proceedings. These proceedings are usually handled by the independent regulatory agencies whose combined powers over certain aspects of the economy are vast indeed.

Long, whose subcommittee is charged with finding ways to speed up the bureaucracy, said that "he hoped the publications would be widely studied by officials at all levels of the many Federal agencies involved. This in itself might result in a slight reduction of delay."

There were 61 distinct types of proceedings studied. Senator Long praised the AEC, NLRB, and the Coast Guard for having the three types of hearings with the least "unnecessary delay." ⚓

## COAST GUARD SEEKS OFFICERS OF THE MERCHANT MARINE

The Commandant of the Coast Guard has announced a change in the requirements for a licensed officer of the Merchant Marine to obtain a Coast Guard commission.

Qualified licensed officers of the Merchant Marine who have served 2 years on board vessels of the United States are now eligible for careers in the U.S. Coast Guard. Formerly this requirement was 4 years.

Appointments are being tendered as lieutenant (junior grade), or lieutenant depending on the age, license, and experience of the applicant.

Those applicants selected will have all the benefits of members of the Armed Forces as well as the opportunity to continue working with the maritime industry primarily in connection with the Coast Guard's Merchant Marine safety functions.

For further information, interested persons should write to Commandant (PTP-2), U.S. Coast Guard, Washington, D.C., 20226, or contact the nearest Coast Guard Marine Inspection Office. ⚓

## MARAD PUBLISHES FILM CATALOG

A "Merchant Marine Film Catalog" has been published by the Maritime Administration. The 20-page pamphlet details films available to the public which deal with subjects related to merchant shipping, such as shipbuilding, ports, seafaring unions, and oceanborne trade. Each film is listed according to subject matter. Its time, type, and availability is given briefly in each case, and in most instances a brief summary of the film's coverage is furnished.

The brochure was designed for two purposes. First, to develop public interest in the American Merchant Marine by circulation to civic organizations and schools; second, to answer the many requests for films on the merchant marine received by the Maritime Administration.

All of the films are suitable for a wide variety of audiences and would make an interesting as well as educational presentation for organizations, clubs, and schools. The brochure will be distributed by the Office of Public Information, Room 3037, Maritime Administration, GAO Building, 441 G Street NW., Washington, D.C. 20235. ⚓

# Public Hearing '67 Proposals

THE MERCHANT MARINE COUNCIL will hold a hearing on Monday, March 20, 1967, commencing at 9:30 a.m. in the Departmental Auditorium, between 12th and 14th Streets on Constitution Avenue NW., Washington, D.C., for the purpose of receiving comments, views and data on the proposed changes in the navigation and vessel inspection rules and regulations.

These proposals are set forth in the Merchant Marine Council Public Hearing Agenda, CG-249 dated March 20, 1967. The agenda contains the specific changes being proposed to the navigation and vessel inspection regulations, and for certain items the present and proposed regulations are set forth in comparison forms, together with reasons for the changes.

These proposals are set forth officially in the Federal Register which contains general descriptions of the proposed changes in the regulations together with appropriate references to statutes authorizing such requirements.

Copies of this Agenda have been mailed to persons and organizations who have expressed a continued interest in the subjects under consideration and have requested that copies be furnished them. Copies of the Agenda will be furnished, upon request to the Commandant (CMC), U.S. Coast Guard, Washington, D.C. 20226, so long as they are available. After the supply of extra copies is exhausted, copies will be available, for reading purposes in Room 4211, Coast Guard Headquarters, or at the offices of the various Coast Guard District Commanders.

Comments on the proposed regulations are invited. Written comments containing constructive criticism, suggestions, or views are welcomed. However, acknowledgment of the comments received or reasons why the suggested changes were or were not adopted cannot be furnished since personnel are not available to handle the necessary correspondence involved. The public hearing held by the Merchant Marine Council is informal and intended to obtain views and information from those who will be directly affected by the proposals under consideration. Each oral or written comment is considered and evaluated. If it is believed the comment, view or suggestion clarifies or improves a proposed regulation or amendment, such proposal is changed accordingly and, after adoption by the Commandant, the regulations as revised are published in the Federal Register. If a proposal under consideration is not accepted by the Commandant, the proposal is rejected and withdrawn.

Each person or organization who desires to submit comments, data or views in connection with the proposed regulations set forth in the Merchant Marine Council Public Hearing Agenda should submit them in triplicate so that they will be received by the Commandant (CMC), U.S. Coast Guard Headquarters, Washington, D.C. 20226, prior to March 17, 1967. Comments, data or views may be presented orally or in writing at the Public Hearing before the Merchant Marine Council on March 20, 1967. In order to insure consideration of written comments and to facilitate checking and recording, it is essential that each comment regarding a section or paragraph of the proposed regulations be submitted on Form CG-3287, showing the section number (if any), the subject, the proposed change, the reason or basis, and the name,

business firm or organization (if any), and the address of the submitter. A small quantity of Form CG-3287 is attached to this Agenda. Additional copies may be reproduced by typewriter or otherwise.

Each item in the Agenda has been given a general title intended to encompass the specific proposals presented thereunder. It is urged that each item be read completely because the application of proposals to specific employment or types of vessels may be found in more than one item.

On the following pages the *Proceedings* presents only the most succinct synopses of the proposed items of revision approved to press time for proposal at the hearing. The Agenda must be consulted for full particulars.

## ITEM PH 1-67—DANGEROUS CARGO REGULATIONS

Various amendments to the Dangerous Cargo Regulations in 46 CFR Part 146 have been necessitated by corresponding changes made in the regulations of the Interstate Commerce Commission governing land transportation of the same commodities. R.S. 4472, as amended (46 U.S.C. 170), requires that the Coast Guard accept and adopt such definitions, descriptions, descriptive names, classifications, specifications of containers, packing, marking, labeling and certification of explosives or other dangerous articles or substances to the extent as are or may be established from time to time by the Interstate Commerce Commission insofar as they apply to shippers by carriers engaged in interstate and foreign commerce by water. Therefore, amendments applying only to shippers' requirements upon which the Interstate Commerce Commission has already complied with the Administrative Procedure Act are not included in the 1967 Merchant Marine Council Public Hearing but will be published as a separate document in the Federal Register.

Interstate Commerce Commission Order No. 70 made significant changes to Interstate Commerce Commission regulations for land transportation of radioactive materials, made necessary by the increasing frequency and diversity of radioactive shipments. Order No. 74 made additional changes to these regulations, chiefly for the sake of clarity, and corrected some errors or omissions in Order No. 70. For the sake of compatibility between land and water transport, the changes made by these orders are reflected in changes to Subpart 146.25—Detailed Regulations Governing Poisonous Articles.

Regulations setting forth certain basic standards for power-operated industrial trucks to be used on board vessels for handling various classes of dangerous cargo were published in the Federal Register of November 23, 1961. The Commandant was petitioned to delay the mandatory compliance with these regulations due to practical difficulties anticipated by the industry in bringing existing equipment into compliance with the published regulations. In response to this petition interim measures were instituted whereby the Captains of the Port could grant special permissions to take care of special local circumstances. The 1967 Agenda contains proposed amendments to provide for the use of industrial trucks which are certified by the owner as meeting the safety standards of the Under-



writers' Laboratories or the Factory Mutual Laboratories for specific designations in addition to the equipment specifically designated by these laboratories as E, EE, EX, G, GS, LP, LPS, D, and DS. The owner's certification must be supported by an inspection report of inspections made by a cargo inspection bureau or a qualified inspector acceptable to the Captain of the Port.

The Rules and Regulations for Military Explosives and Hazardous Munitions contained in 46 CFR 146.29 apply to those dangerous cargoes shipped by, for, or to the Departments of the Army, Navy, and Air Force of the United States or similar types shipped by, for or to the government of any country whose defense is deemed vital to the defense of the United States. In order to bring these regulations up to date, a conference composed of representatives of responsible government agencies and private organizations concerned with the safe transportation of military explosives and hazardous munitions was convened on June 21 and 22, 1966. The Agenda includes proposed amendments to 46 CFR 146.29 which represent the cooperative effort of that meeting.

Proposed amendments to 46 CFR Part 147—Detailed Regulations Governing Certification of Ships' Stores and Supplies—are included to provide the means for withholding a certification or renewal of a certification when changes or additional information is required and for cancellation of a certificate when false information is supplied.

The following changes to the regulations are being proposed to accomplish these ends:

a. 46 CFR 146.02-10 and 146.02-11 are amended to make editorial changes to incorporate the proposal creating a new Group IV for radioactive materials.

b. 46 CFR 146.03-4 is amended to define the term "carfloat" used, but not defined, in the Dangerous Cargo Regulations.

c. 46 CFR 146.04-5 is amended to incorporate in the Commodity List additions and changes made in ICC regulations by Order Nos. 70 and 74.

d. 46 CFR 146.05-17 is amended to require use of existing Class D Poison Group I or II red label for Group IV radioactive materials by overstriking, as required by ICC regulations.

e. 46 CFR 146.06-14 is amended to authorize the master of a vessel to permit licensed officers to sign the dangerous cargo manifest in his stead.

f. 46 CFR 146.09-15, 146.20-35, 146.21-57, 146.22-7, 146.23-13, 146.24-27, 146.25-43, 146.26-35, and 146.27-35 are amended to permit the use of forklift trucks certified by the owner as meeting the requirements of a recognized testing laboratory for a specific designation, as well as trucks presently approved for use by the regulations.

g. 46 CFR 146.21-15 is amended to require "on deck" stowage of vented flammable liquid containers.

h. 46 CFR 146.22-100 is amended to permit 350-pound gross weight containers for coal facings and ground bituminous coal.

i. 46 CFR 146.23-100 is amended to permit under deck stowage for ethyl chloroformate, methyl chloroformate, and hexamethylene diamine solution, require highway vehicle cargo tanks transporting hydrogen peroxide to be ICC specification tank truck tanks and forbid carriage of highway cargo tanks on passenger vessels.

j. 46 CFR 146.25-20, 146.25-21, 146.25-25, 146.25-30, 146.25-35, and 146.25-400 are amended to make the regulations for radioactive materials consistent with Interstate Commerce Commission regulations for these materials. The principal effects for these changes are to establish a new Group IV for fissile materials, to clarify the definitions of Groups I, II, III, and IV radioactive materials, to clarify the list of exemptions from prescribed packaging and labeling, to clarify packing and shielding

requirements, to recognize a change from the Bureau of Explosives to the ICC as the agency approving containers, and to clarify the definition of "radioactive unit." For consistency with ICC regulations, a new section, 146.25-23 is added to define "low specific activity material." These changes in terminology are reflected in editorial changes. Section 146.25-50 has been reworded to incorporate changes in terminology and to clarify accident procedures. In section 146.25-400 a new entry has been added for fissile materials and ICC Specification 6L container is added to the list of authorized containers.

k. 46 CFR 146.29-5 is amended to make the list consistent with the inclusion of dangerous cargo requirements in a new section proposed in paragraph n below.

l. 46 CFR 146.29-11 is amended to define "cargo transporter," guided missile ammunition, JATO components, rocket motors and engines, and "superstructure," and make editorial changes in numbering.

m. 46 CFR 146.29-13 is amended to require a permit for handling of explosives in a port whenever explosives are restowed without actual loading or discharge.

n. 46 CFR 146.29-14 is amended to require a dangerous cargo manifest, list, or stowage plan on board vessels transporting military explosives and hazardous munitions.

o. 46 CFR 146.29-29 is amended to remove the requirement for porthole, vent and door screens to be made of only copper or brass screening when special spaces for smoking on board ship are designated.

p. 46 CFR 146.29-35 is amended to clarify the protection requirements for portable lights used in holds of vessels loading and discharging military explosives.

q. 46 CFR 146.29-39 is amended to require a mattress only for the more sensitive military explosives and to clarify bomb handling procedure.

r. 46 CFR 146.29-45 is amended to permit the working of two holds in the same hatch, containing military explosives, under controlled conditions.

s. 46 CFR 146.29-51 is amended to clarify the stowage requirements for military explosives and hazardous munitions being transported in vans or cargo transporters.

t. 46 CFR 146.29-57 is amended to clarify the requirements for separation of incompatible explosive cargoes stowed on deck.

u. 46 CFR 146.29-59 is amended to allow the stowage of completely processed privately owned vehicles shipped by, for, or to the Department of Defense in the same hold with military explosives, as is now permitted for military vehicles.

v. 46 CFR 146.29-61 is amended to make editorial change consistent with the proposal in paragraph u above.

w. 46 CFR 146.29-73 is amended to specify what constitutes a "short stoppage."

x. 46 CFR 146.29-75 is amended to eliminate the requirement for a heat bulkhead between the relatively safe Class I ammunition and engine rooms, boiler rooms, etc.

y. 46 CFR 146.29-81 is amended to allow nonferrous dunnage systems to be used without wood sheathing.

z. 46 CFR 146.29-85 is amended to reflect organization changes within the Department of Defense.

aa. 46 CFR 146.29-90 is added to provide for the use of cargo transporters for military explosives under some circumstances.

bb. 46 CFR 146.29-93 is amended to reduce separation requirements between certain classes of explosives when substantial ship's structure is intervening.

cc. 46 CFR 146.29-100 is amended to reflect changes in military classification, to add new items of explosives, to clarify stowage requirements and to define a new class "XE" of military explosives.

dd. 46 CFR 147.03-8 is amended to permit the Com-mandant to withhold certification while label changes are

being made or additional information is being submitted pursuant to his requirement for same.

ee. 46 CFR 147.03-10 is amended to permit the Commandant to cancel ships' stores certification when false information is furnished in the manufacturer's original or renewal application.

ff. 46 CFR 147.05-100 is amended to provide for the carriage of gaseous nitrogen aboard ship as an item of ships' stores and supplies.

#### **ITEM PH 1a—RADIOACTIVE MATERIALS: EXPORT—IMPORT SHIPMENTS**

Amending of 46 CFR 146.02-10 and 146.02-11, regarding import and export shipments of commercial Class A explosives and radioactive materials is proposed to include the new Group IV for radioactive materials. These changes incorporate requirements of ICC Order No. 70.

#### **1b—CARFLOAT—DEFINITION**

Regulations designated 46 CFR 146.03-4, which will define the term "carfloat" are proposed to be added. This term has been used in the Dangerous Cargo Regulations, but was not previously defined.

#### **1c—LIST OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES AND COMBUSTIBLE LIQUIDS**

Amending of 46 CFR 146.04-5 is proposed to incorporate changes and additions in the commodity list, which have been made in the ICC regulations by ICC Order Nos. 70 and 74.

#### **1d—LABELS: RADIOACTIVE MATERIALS**

Amending of 46 CFR 146.05-17(q), regarding the labels used for radioactive material is proposed.

#### **1e—MANIFESTS: GENERAL REQUIREMENTS**

Amending of 46 CFR 146.06-14(c), regarding source of information shown on manifests, list or stowage plan is proposed to authorize the master to permit licensed deck officers to sign the dangerous cargo manifest for the master.

#### **1f—POWER-OPERATED INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.09-15 (b) and (d) as well as other sections in Part 146 regarding the use of power operated industrial trucks is proposed to permit the use of forklift trucks certified by the owner as meeting the requirements of a recognized testing laboratory for a specific designation. The certification will be filed with the Captain of the Port and shall identify each piece of equipment. In addition, the Captain of the Port shall require an inspection report of a qualified inspector regarding the equipment.

#### **1g—HANDLING EXPLOSIVES: USE OF INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.20-35(e) is proposed to permit the use of forklift trucks with respect to handling explosives certified by the owner as meeting certain requirements of a recognized testing laboratory.

#### **1h—FLAMMABLE LIQUIDS: STOWAGE—USE OF INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.21-15, regarding stowage of flammable liquids on board vessels by adding a new paragraph (c) is proposed which will restrict the stowage of vented containers of flammable liquids to "on deck" only.

With respect to the use of industrial trucks, it is proposed to amend 46 CFR 146.21-57(a), to permit the use of forklift trucks certified by the owner as meeting certain requirements of a recognized testing laboratory.

#### **1i—FLAMMABLE SOLIDS AND OXIDIZING MATERIALS: USE OF INDUSTRIAL TRUCKS—CONTAINERS**

Amending of 146.22-7 (a) and (c) is proposed to permit the use of forklift trucks, certified by the owner as meeting certain requirements of a recognized testing laboratory.

It is proposed to amend 46 CFR 146.22-100, regarding coal facings to permit metal containers of 350 pounds gross weight in lieu of 300 pounds on cargo vessels and railroad car ferry, passenger or vehicle vessels.

#### **1j—CORROSIVE LIQUIDS: USE OF INDUSTRIAL TRUCKS—STOWAGE—CONTAINERS**

Amending of 46 CFR 146.23-13, regarding use of industrial trucks is proposed to correct the section reference.

It is proposed to amend 46 CFR 146.23-100, regarding Table F—Classification: Corrosive Liquids, to permit stowage under deck on cargo vessels of ethyl chloroformate and methyl chloroformate; to permit stowage under deck on cargo vessels for hexamethylene diamine solutions; and to require motor vehicle tank trucks to comply with ICC regulations for corrosive liquids when carrying hydrogen peroxide, etc.

#### **1k—COMPRESSED GASES: USE OF INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.24-27 (a) and (b), regarding the use of power operated industrial trucks is proposed to permit the use of forklift trucks certified by the owner as meeting certain requirements of a recognized testing laboratory.

#### **1l—POISONOUS ARTICLES: RADIOACTIVE MATERIALS—USE OF INDUSTRIAL TRUCKS—BREAKAGE OF CONTAINERS**

Amending of 46 CFR 146.25-20, 146.25-21, 146.25-25, 146.25-30, 146.25-35, and 146.25-400 and the addition of 146.25-23 (low specific activity material) are proposed to make the regulations for radioactive materials consistent with the ICC regulations in ICC Order Nos. 70 and 74.

With respect to use of industrial trucks, it is proposed to correct the references in 46 CFR 146.25-23.

It is proposed to revise 46 CFR 146.25-50, regarding care following leakage or sifting of poisonous articles, to include cases involving fire or collisions, to clarify accident procedures and to incorporate desired changes in terminology. It is also proposed to require any incident in which radioactive materials are involved in fire or are damaged that the shipper and the District Commander having supervision over the port or place where the vessel is located will be notified immediately.

Also proposed is an amendment to 46 CFR 146.25-400, Table H—Classification, Class D; radioactive materials, to provide for radioactive materials, Group IV and fissile radioactive materials, N.O.S., as well as to provide for the use of ICC specification 6L container.

#### **1m—COMBUSTIBLE LIQUIDS: USE OF INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.26-35(a) is proposed to correct references regarding use of power-operated industrial trucks.

#### **1n—HAZARDOUS ARTICLES: USE OF INDUSTRIAL TRUCKS**

Amending of 46 CFR 146.27-35 (a) and (c), regarding use of industrial trucks is proposed to permit the use of

fork-lift trucks certified by the owner as meeting certain requirements of a recognized testing laboratory.

**10—MILITARY EXPLOSIVES: MANIFESTS—DEFINITIONS AND ABBREVIATIONS — PERMITS — SMOKING — PORTABLE LIGHTS — HANDLING—LOADING—UNLOADING—STOWAGE—USE OF CARGO TRANSPORTERS—NEW CLASS OF MILITARY EXPLOSIVES**

Amending of 46 CFR 146.29-5 is proposed to state that the regulations in 46 CFR 146.06-12 to 146.06-15, regarding dangerous cargo manifests will not apply to vessels carrying military explosives, but will be covered by a proposed section designated 46 CFR 146.29-14.

With respect to definitions and abbreviations used in regulations regarding military explosives and hazardous munitions, it is proposed to amend 46 CFR 146.29-11(c), to provide descriptions for cargo transporters, guided missile ammunition, jet thrust units (jato), rocket motors, and rocket engines, and to clarify requirements regarding superstructures, type A dunnage floors, and vans.

It is also proposed to amend 46 CFR 146.29-13, regarding permits for handling military explosives to require a permit when explosives on a vessel are restowed without actual loading or discharging such explosives.

It is proposed to add 46 CFR 146.29-14, regarding dangerous cargo manifest list of stowage plan to cover special requirements for vessels transporting military explosives and hazardous munitions.

With respect to smoking on board vessels, it is proposed to amend 46 CFR 146.29-29(c), to require approved screening of portholes, vents and doors, but to remove the requirement that such screening be made only with copper or brass for the room designated as a "smoking room."

With respect to lights, tools, and portable equipment, it is proposed to amend 46 CFR 146.29-35(b), to clarify the protection requirements for portable lights permitted to be used in the holds of vessels loading and discharging military explosives.

With respect to handling, loading or unloading military explosives and other cargo, it is proposed to amend 46 CFR 146.29-29(c), (m), and 146.29-45(c), to require a mattress for only specific types of explosives required as shock sensitive, to state that bombs are not to be handled by lifting lugs, and to provide for the working of two holds simultaneously in the same hatch under controlled conditions.

With respect to stowage of military explosives and hazardous munitions, it is proposed to amend 46 CFR 146.29-51, 146.29-57, 146.29-59, 146.29-61, and 146.29-73. These proposals will clarify the stowage compatibility requirements for military explosives and hazardous munitions being transported in cargo vans for cargo transporters: will allow incompatible explosives to be stowed on deck under certain conditions; will allow for the stowage of privately owned vehicles shipped by, for, or to the U.S. Department of Defense; and specify more precisely the meaning of short work stoppages.

With respect to location of magazines and ammunition stowage, it is proposed to amend 46 CFR 146.29-75, 146.29-81, 146.29-85, 146.29-93, and 146.29-100 and to add 46 CFR 146.29-90, regarding the use of cargo transporters. One proposal will eliminate the requirement for a heat bulkhead when stowing relatively safe explosives, ICC Class C in holds adjacent to engine rooms, boiler rooms, etc. A proposal will allow the use of nonferrous dunnage system without wood shielding. A proposal will editorially correct various organization references within the Department of Defense. One proposal will add requirements to provide for the use of cargo transporters (Conex boxes) for the carriage of military explosives under certain confined conditions. With respect to stowage of blasting caps, etc., it is proposed to reduce the distance requirements between

certain classes of explosives when substantial ship's structure is intervening. The proposals also clarify the stowage conditions for certain classes of military explosives as well as add requirements for rocket engines.

**11—SHIPS' STORES AND SUPPLIES: CERTIFICATION—NITROGEN**

Amending of 46 CFR 147.03-8, regarding refusal to certify, is proposed to permit the withholding of a certification while changes on the label or additional information are being required.

With respect to false statements by the manufacturer or his agent, it is proposed to amend 46 CFR 147.03-10 to provide for refusal for certification and for cancellation of certification when false information is supplied.

It is proposed to amend 46 CFR 147.05-100, Table S—Classification: ships' stores and supplies of a dangerous nature, to provide for the carriage of gaseous nitrogen in cylinders.

**12—PERMITS FOR HANDLING OR RESTOWING EXPLOSIVES**

Amending of 46 CFR 146.20-85 and 146.20-87, regarding permits for explosives is proposed to extend the coverage of the authorization to include explosives that are being handled aboard ship in a port without actually being loaded or discharged.

**ITEM PH 2-67—BULK DANGEROUS CARGO REGULATIONS**

At present the regulations for various bulk dangerous cargoes may be in the Tank Vessel Regulations (Subchapter D), or in the Cargo and Miscellaneous Vessel Regulations (Subchapter I, Part 98), or in the Dangerous Cargo Regulations (Subchapter N). These regulations may apply in varying degrees depending on the type of dangerous commodities being transported in bulk.

During a recent casualty involving a fire on a barge in a fleet of barges being towed, the firefighters were not able to determine very quickly the type of dangerous cargo being carried in the burning tank nor the types of cargo in adjacent tanks. It was necessary for the firefighters to contact the shipping company who was situated some distance from the location of the burning barge to ascertain what the cargo was in the burning tank and in adjacent tanks. While in this instance the fire was extinguished without serious injury to adjacent property and firefighters, the lack of information regarding the cargoes being transported in the fleet of barges hampered the firefighters and other officials whose duties required decisions involving the minimizing of fire, explosion, and health hazards involved in this casualty.

The Tank Vessel Regulations (Subchapter D) now contains 46 CFR 35.01-10, regarding "shipping papers," which requires tank barges to have on board a bill of lading giving the kind, grade and approximate quantity of each kind and grade of cargo. If the barge is not manned and shipping papers are not available, an entry is required in the towing vessel's logbook which sets out this information. In addition, those barges carrying bulk cargo that have dangerous characteristics in addition to flammability or combustibility require warning signs to be posted, and information cards to be carried on the towboat.

The Cargo and Miscellaneous Vessel Regulations (Subchapter I) requires warning signs to be posted on the barge and information cards to be carried on towboats when any of the dangerous cargoes specifically noted in Part 98 are carried in bulk, but shipping papers are not required nor are logbook entries required for the kind, grade and quantity of cargo carried.

## **2a—SHIPPING PAPERS FOR CARGO BARGES CARRYING CERTAIN DANGEROUS CARGOES**

Amending of Subchapter I is proposed by adding 46 CFR 98.03-5(b) to require shipping papers on barges carrying dangerous cargoes and when such barges are not manned it is proposed to require either a copy of the shipping papers to be placed on the towing vessel or the master to make an appropriate entry in the towing vessel's logbook.

## **2b—LIMITING DRAFT MARKS PLACED ON CARGO BARGES CARRYING CERTAIN DANGEROUS CARGOES**

Amendment designated 46 CFR 98.03-20(b) (5), (6), and (7) are proposed to establish limiting draft marks for certain cargo barges. The present regulations lead to establishment of such draft marks, but do not contain provisions for requiring marks to be placed on the sides of the barge to show the depth to which the barge may be loaded. It is also proposed to require that the draft marks established by these regulations shall not be submerged.

## **2c—BARGES CARRYING LIQUID CHLORINE IN BULK: CARGO PIPING—VENTING—FILLING AND DISCHARGE OPERATIONS**

Amending of 46 CFR Subpart 98.20 governing liquid chlorine in bulk is proposed to better define (1) the limitations on manifolding lines on barges during cargo transfer; (2) the safety relief valve and protective housing requirements; (3) the vent riser requirements; and (4) certain volume measurements by revising 46 CFR 98.20-40(c), 98.20-55, and 98.20-60.

The Chlorine Institute has proposed that 46 CFR 98.20-60(f) regarding the discharge of chlorine tanks be amended to permit the maximum air pressure used to be increased from 70 percent to 75 percent of the allowable pressure of the tank. For a 300 pounds per square inch gage (p.s.i.g.) tank this proposal would allow the use of the standard chlorine tank car safety valve, set to relieve at a pressure of 225 p.s.i.g., in lieu of the 210 p.s.i.g. relief valve presently being used in the compressed air system. This proposal would permit the use of the 225 p.s.i.g. relief valve, which is considered desirable in the standardization of equipment on chlorine barges, and its use should reduce the time required for valve testing, maintenance, and replacement.

## **2d—BARGES CARRYING ANHYDROUS AMMONIA IN BULK**

The tests and inspections of tanks containing anhydrous ammonia in 46 CFR 98.25-95(a) are proposed to be amended so that the wording will be in accord with practices under 46 CFR 38.25-1(a). These changes will clarify the intent of the regulations so that removal of lagging will be of sufficient amount to determine the external condition of the tank to the satisfaction of the Officer in Charge, Marine Inspection.

## **2e—VENTING OF TANK BARGES CARRYING LIQUIDS HAVING LETHAL CHARACTERISTICS**

It is proposed to amend 46 CFR 39.20-1 and 39.20-2 regarding venting of tank barges carrying liquids having lethal characteristics. It is proposed to separate the requirements for unmanned tank barges from tankships and manned barges.

The present requirement for a vent riser extending to a height of one-third of the beam of the vessel, attached to each pressure vacuum relief or safety valve has several undesirable aspects when applied to barges. The basic reason for the requirement was to protect personnel in the event vapors escape from the relief or pressure vacuum valve. Information from barge operators indicates the arrangement is generally unsatisfactory and that an additional hazard is created.

The nature of barge operations is such that high structures on barges are vulnerable to damage both from low clearances on the waterways and from lines being dragged

across the barge. In addition, anything which can be used to secure a line may sometimes be improperly used in an attempt to check barge movement. This means that any fitting, valve or vent riser is subject to possible damage, with the chance of damage being greater with height. Particularly vulnerable are safety or pressure vacuum relief valves which have high vents rigidly attached to them. Particularly ineffective are vents on unmanned barges which are extendable, as there has been no way to insure that operating personnel take the time to get ahead and extend the vent risers when in clear operating areas.

Safety valves are not expected to relieve under normal operating conditions. Pressure vacuum relief valves are also not expected to relieve under normal conditions. It would appear then, that our requirement for vent risers to a height of one-third of the beam for unmanned barges results in little, if any, increase in personnel safety, and perhaps has the opposite effect if the likelihood of damage is considered.

The requirements for manned barges are left the same as for tank vessels, which is no change from the present regulation. The requirement for high vent risers connected to each pressure relief or pressure vacuum relief valve is dropped for unmanned barges. A means for the reclamation or safe venting of vapors during loading and unloading is required.

## **ITEM PH 3-67—PORT SECURITY AND WATERFRONT FACILITIES**

### **3a—UNITED STATES AND FOREIGN VESSELS CARRYING BULK CARGOES HAVING POTENTIAL UNUSUAL RISKS: ADVANCE NOTICE TO CAPTAINS OF THE PORT**

Additions to 33 CFR 124.14 (a), (c), and (d) are proposed to provide for all foreign and U.S. vessels carrying cargoes of potential unusual risks to notify the Captain of the Port or the District Commander of the port to which destined, at least 24 hours prior to arrival, of the name, amount of cargo, and its location on board the vessel. By using this 24-hour advance notice requirement, the Captain of the Port will be kept knowledgeable of highly hazardous operations. The specific cargo items considered to be meeting these criteria are described in the enclosure to Navigation and Vessel Inspection Circular No. 13-65, dated September 30, 1965, and may be obtained upon request from the Commandant (CHS), U.S. Coast Guard, Washington, D.C. 20226. The regulations exclude from its application the U.S. Intracoastal Waterway and barges moving on the Western Rivers (Mississippi River and tributaries).

### **3b—WATERFRONT FACILITIES: HANDLING CARGOES HAVING POTENTIAL UNUSUAL RISKS TO PORT AREA**

It is proposed to add or revise requirements designated 33 CFR 126.05 and 126.15 to provide safety requirements for facilities handling bulk liquid products (petroleum plants), to establish a new category of facility; namely, those that handle cargoes having potential unusual risks, and to describe safety requirements and procedures. The present requirements are mainly directed toward the general cargo terminal. The proposed additions are peculiar to facilities handling bulk petroleum products or highly hazardous products. These proposals are considered vital to minimize hazards to the facilities, vessels and persons in the area of the operations, as well as to minimize water pollution. The proposal designated 33 CFR 126.15(n) concerns maintenance of bulk liquid facilities and will provide a reasonable deterrent to water or air pollution and fire from the accumulation of flammable liquids or vapors upon a designated bulk liquid waterfront facility. The proposal designated 33 CFR 126.15(o) describes the conditions for establishing a designated water-



front facility for handling cargoes having potential unusual risks. This proposal will require owners, operators or agents of such facilities to clear this type of operation with State, county and municipal authorities prior to the designation of the facility. It is also proposed to require warning notices to watercraft be provided so that in the event of a casualty such watercraft will have a reasonable opportunity to take necessary evasive or protective action.

#### ITEM PH 4-67—NAVIGATION LIGHTS AND SHAPES

The Rules of the Road have traditionally required that the prescribed lights be visible for a stated distance on a "dark night with a clear atmosphere." However, there are no standards within these Rules or the regulations for inspected and uninspected vessels upon which the intensity of navigation lights can be based. Currently, U.S. vessels under construction which will be inspected and certificated by the Coast Guard have been meeting standards or criteria set forth in an internal Coast Guard instruction, which have been a clarification of the meaning of visibility under these Rules of the Road. It is now proposed to publish these standards and to include them within the regulations for both inspected and uninspected vessels.

##### 4a—UNINSPECTED VESSELS (INCLUDING MOTORBOATS)

A new section designated 46 CFR 25.05-15 regarding light standards for navigation lights and shapes is proposed. The proposed regulations would publish the minimum intensity outside the lens required of every navigation light. They would further translate these intensity figures into recommended lamp wattages for 115 volt systems or recommended bulb numbers for motorboats having 6, 12, or 32 volt systems. It is stressed that these figures are recommended and are explained in detail in the proposed addition to the Electrical Engineering Regulations, but are omitted from the simplified versions for Uninspected Vessel Regulations.

The definitions of a "dark night with a clear atmosphere" and the selection of a practical threshold of vision enable a minimum value of intensity for any given distance of visibility to be computed. To aid vessel operators in selecting the appropriate electric lamps for their navigation lights, a table of recommended lamp ratings is furnished. These lamp sizes are recommended because of the many variables that can change the actual intensity at any given point outside the lens; these variables include lamp characteristics, color filter characteristics, fresnel lens lamp-to-light ratio, and fresnel lens focus.

The proposed standards for light are necessary to improve upon certain existing lights that are inadequate. There are still a limited number of kerosene red and green lights being used. The proposed regulations would eliminate kerosene side lights because an oil flame cannot give the intensity necessary to meet the 2-mile standard with the relatively inefficient red and green filters. The enforcement of the standards should assure that all vessels in U.S. waters can be easily discerned at night; this should increase marine safety in crowded harbors.

##### 4b—ALL CLASSES OF INSPECTED VESSELS

New regulations designated 46 CFR 113.55-30 are proposed regarding light standards for navigation lights for inspected vessels and a new regulation designated 46 CFR 184.15-5 regarding navigation light standards. The proposed regulations would publish the minimum intensity outside the lens required of every navigation light. They would further translate these intensity figures into recommended lamp wattages for 115 volt systems. For motorboats it would be recommended bulb numbers for 6, 12, or 32 volt systems.

#### 4c—RULES OF THE ROAD—INLAND

Revising of 33 CFR 80.18(b) and 80.21(b) is proposed to describe revised standards for navigation lights for towing vessels and self-propelled dredges underway. The existing requirement for 5-mile red lights would prescribe the use of a light with an intensity of 100 candlepower at the source outside the lens. This would be accomplished with either a 2,000 candlepower lamp used without a fresnel lens, or with a 500 candlepower lamp and a fresnel lens. Either way would be difficult to effect. With the establishment and publication of definite light standards, it is necessary to reduce the visibility requirement for the red lights from 5 to 2 miles.

#### 4d—RULES OF THE ROAD—WESTERN RIVERS

Revising 33 CFR 95.52(b) and 95.55(b) is proposed to describe revised standards for navigation lights for towing vessels and self-propelled dredges underway.

#### ITEM PH 5-67—FIRE PROTECTION ON BOTH NEW AND EXISTING PASSENGER VESSELS (100 GROSS TONS OR OVER)

As a result of the U.S. initiative following tragic fires on the passenger ships *Lakonia*, *Yarmouth Castle*, and *Viking Princess*, the Maritime Safety Committee of the Intergovernmental Maritime Consultative Organization (IMCO) has recommended amendments to the 1960 SOLAS Convention which would improve the fire safety of both new and existing passenger ships. It is expected that these SOLAS amendments will be approved by the IMCO General Assembly and forwarded to the governments signatory to the Convention for ratification. With the proposed amendments, it is expected that the General Assembly will call for early, voluntary action to make the amendments effective prior to their actual coming into force. The SOLAS amendments which have been proposed would primarily have the effect of improving the fire safety of existing passenger ships. The following amendments to Subchapter H (Rules and Regulations for Passenger Vessels), Subchapter F (Marine Engineering Regulations) and Subchapter J (Electrical Engineering Regulations) incorporate the proposed IMCO regulations into the Coast Guard rules.

At the Thirteenth Session of the IMCO Maritime Safety Committee agreement was reached on numerous measures which would improve the fire safety of both new and existing passenger ships. These are:

a. The creation of a new Part G of the present International Convention for the Safety of Life at Sea, 1960 (SOLAS), intended primarily to update the safety of older ships.

b. The amendment of two regulations of the present SOLAS Convention intended to improve the fire safety of new passenger ships.

c. The recommended measures to be applied voluntarily by the Contracting Governments.

The proposals in this item are the U.S. actions to implement the recommendation in the IMCO Note Verbale, A1/C/3.07(NV.1), which urges Contracting Governments to take immediate action to put the proposed measures into effect awaiting the formal entry into force of these amendments.

##### 5a—STRUCTURAL FIRE PROTECTION

Amending of 46 CFR 72.05-90(c), regarding structural fire protection on existing passenger vessels, which were contracted for prior to May 26, 1965, is proposed to meet the requirements in 46 CFR 72.05-5 through 72.05-60 for new passenger vessels. One of the major purposes of

the proposed change to the International Convention was to eliminate use of the term "reasonable and practicable" as an excuse for not improving the fire safety of existing ships. While "reasonable and practicable" has been applied with special care in the United States, elimination of these words is felt necessary to comply with the spirit of the IMCO measures. It should be noted that "general" agreement still leaves some latitude.

#### 5b—FIRE MAIN SYSTEMS

Amending of 46 CFR Part 76 is proposed by adding a new section designated § 76.10-3 regarding water availability. This amendment is necessary to assure that water pressure is immediately available on the firemain protecting enclosed spaces. This will reduce the time necessary to begin firefighting operations and assure that an excessive number of hydrants are not opened. The possibility exists to maintain pressure by means of a service pump in lieu of a fire pump. Pressure on the firemain has not been previously required. This amendment, therefore, would require alteration to almost all existing passenger ships on an international voyage.

With respect to fire hydrants and hose, it is proposed to amend 46 CFR 76.10-10 (f) and (g) to clarify the definition of a fire hydrant and the use of water spray in the accommodation and service areas. Previously a "hydrant" has been generally agreed to mean the installation of a cock or valve such as the one described. Since the International Convention specifically mentions this, however, it is proper to include it in the Coast Guard regulations. This change should not affect any existing passenger ships. Water spray has many desirable features for combatting fires in accommodation and service spaces. It affords excellent protection to the user and helps to reduce the smoke problem. Measures recommended by IMCO recognize the importance of having this type of equipment available. As this equipment was not previously required, additional equipment will probably be required for many vessels.

With respect to firemain systems installed or contracted for prior to May 26, 1965, it is proposed to amend 46 CFR 76.10-90(a) to clarify that for vessels on an international voyage the separation of pumps, sources of power, etc., is imperative. In addition, it is proposed that vessels on an international voyage shall generally comply with the requirements of 46 CFR 76.10-5(b), and the minimum fire pump capacity for existing passenger ships will be consistent with the proposed international regulations. This should not affect the sizing of most existing fire pump installations.

#### 5c—CARBON DIOXIDE EXTINGUISHING SYSTEM

With respect to installations of carbon dioxide extinguishing systems contracted for prior to November 19, 1952, it is proposed to amend 46 CFR 76.15-90(a) (2) to insure that vessels on an international voyage are fitted with proper fire extinguishing equipment. In view of the extreme fire hazard of machinery spaces, as witnessed by recent casualties and international concern, it is imperative that proper protection be provided. This change should affect very few, if any, ships presently on an international voyage.

#### 5d—FIREMAN'S OUTFIT

With respect to items included in the fireman's outfit, it is proposed to amend 46 CFR 77.35-10 by bringing the Coast Guard regulations into agreement with the SOLAS definition of fireman's outfit, which will be by adding such items as rigid helmet, boots and gloves, and protective clothing. These changes are necessary to describe the additional items of protective equipment.

#### 5e—AUTOMATIC VENTILATION DAMPERS

To facilitate identifying the location of dampers in a darkened or smoke-filled ship, it is proposed to amend 46 CFR 78.47-53 regarding the marking of automatic ventilation dampers to require that they use red daylight-reflecting letters at least one-half inch high. This will bring Coast Guard requirements into agreement with proposed international regulations.

#### 5f—FUEL OIL SERVICE SYSTEMS

To provide remote shutdown capability for all oil fuel lines under pressure, it is proposed to amend 46 CFR 55.10-40(g) regarding service oil pumps in fuel oil service systems to be equipped with a means of control from outside the boilerroom, which will apply to all passenger ships on an international voyage, regardless of the date of construction. This is an important feature and considered to be necessary to reduce the possible severity of any machinery space fire. This change would bring Coast Guard regulations into agreement with proposed International regulations which recognize this as an important fire safety measure.

#### 5g—MEANS OF STOPPING MACHINERY

Amending of 46 CFR 61.05-25 regarding means of stopping machinery is proposed to require all passenger ships on an international voyage, regardless of the date of construction, to have suitable remote controls from outside of the space concerned for machinery driving forced and induced draft fans, fuel oil transfer pumps, fuel oil unit pumps and other similar fuel pumps. This is an important feature considered necessary to reduce the possible severity of any machinery space fire. This change would bring Coast Guard regulations into agreement with proposed International regulations which recognize this as an important fire safety measure.

#### 5h—VENTILATION SYSTEMS

Amending of 46 CFR 111.50-5(c), regarding ventilation systems is proposed to add requirements for the remote control means for stopping accommodation and machinery space ventilation fans required by the electrical regulations on all passenger vessels on an international voyage regardless of the date of construction. This change would bring Coast Guard regulations into agreement with proposed International regulations which recognize this as an important fire safety measure.

#### 5i—MOTION PICTURE PROJECTION ROOMS

The special requirements for motion picture projection rooms and projection equipment in 46 CFR 111.65-15(a) are to be modified so that nitrocellulose film is specifically prohibited and that only acetate or slow-burning film may be used. This is proposed so these regulations will be in agreement with proposed international regulations.

#### 5j—EMERGENCY LIGHTING AND POWER SYSTEMS FOR VESSELS CONTRACTED FOR PRIOR TO NOVEMBER 19, 1952

A new regulation designated 46 CFR 112.90-3 for emergency lighting power systems for passenger vessels on an international voyage contracted for prior to November 19, 1952, is proposed which will require such vessels to meet the applicable standards in 46 CFR Subparts 112.05 through 112.55 for new passenger vessels. With respect to the present regulations in 46 CFR 112.90-5 for emergency lighting system for ocean and coastwise passenger vessels contracted for prior to November 19, 1952, it is

proposed to amend them so they will apply to those ocean and coastwise vessels other than passenger vessels on an international voyage. The proposed amendment to 46 CFR 112.90-10, regarding emergency lighting system for passenger vessels other than ocean and coastwise passenger vessels, contracted for prior to November 19, 1952, will add to the scope of that regulation those passenger vessels on an international voyage. These proposed amendments have the effect of improving the fire safety of existing passenger ships.

#### 5k—GENERAL ALARM SYSTEM

New requirements to 46 CFR 112.25-5(c) regarding operation of general alarm systems and to 113.25-10(b) regarding distribution of general alarm system feeders and branch circuits are proposed so that these regulations will apply to all passenger vessels on an international voyage, regardless of the date of construction, and will permit some design flexibility. This proposal will permit the alarm to be used to alert the crew to an emergency without alarming the passengers. It also avoids exceptions by specifying all passenger vessels.

#### 5L—EMERGENCY LOUDSPEAKER SYSTEM

Extending the coverage of the emergency loudspeaker system on both new vessels and existing vessels to include the accommodation spaces and service spaces is proposed by adding them to the areas listed in 46 CFR 113.50-5(a) and 113.50-90(b)(1). These amendments will bring Coast Guard regulations into agreement with proposed International regulations which recognize this as an important fire safety measure.

### ITEM PH 6-67—FIRE PROTECTION FOR TANK VESSELS AND CARGO VESSELS

#### 6a—ACCOMMODATION STAIRWAYS ON TANK VESSELS AND CARGO VESSELS

With respect to structural fire protection for tank vessels contracted for on or after January 1, 1963, it is proposed to define a stairtower by adding the definition as 46 CFR 32.57-5(g), and by revising 46 CFR 32.57-10(d) (2) and (4), regarding stairways. These changes are necessary in order to make it clear that stairways penetrating more than a single deck are required to be protected by "A" Class bulkheads. This protection is essential to insure the integrity of stairtowers under fire exposure conditions. Failure of the stairtower at one level would not only cause a "chimney effect" and make the stairway useless for access or egress purposes, but would imperil the integrity of all other decks served by the stairtower.

With respect to structural fire protection for cargo vessels contracted for on or after November 19, 1952, it is proposed to define a stairtower by adding the definition as 46 CFR 92.07-5(g), and by revising 46 CFR 92.07-10(d) (2) and (4), regarding stairways. These changes are necessary in order to make it clear that stairways penetrating more than a single deck are required to be protected by "A" Class bulkheads. This protection is essential to insure the integrity of stairtowers under fire exposure conditions. Failure of the stairtower at one level would not only cause a "chimney effect" and make the stairway useless for access or egress purposes, but would imperil the integrity of all other decks served by the stairtower.

#### 6b—COMBUSTIBLE VENEERS ON CARGO AND TANK VESSELS

Clarification where combustible veneers may be used on cargo and tank vessels is proposed by amending 46 CFR

92.07-10(d) (9) and 32.57-10(d) (9). The proposed change to § 92.07-10(d) (9) will revise the structural fire protection requirements for cargo vessels contracted for on or after November 19, 1952. The proposed change to § 32.57-10(d) (9) will revise the structural fire protection requirements and will apply to tank vessels contracted for on or after January 1, 1963. These changes should clarify the regulations which have been misinterpreted to require standards more severe than those applied to combustible veneers placed on passenger vessels.

#### 6c—STRUCTURAL FIRE PROTECTION REQUIREMENTS FOR INDUSTRIAL TYPE CARGO VESSELS

An increasing number of work barges, derrick barges, pipe laying barges, construction barges, drill rigs and service vessels are being constructed under the provisions of the Cargo and Miscellaneous Vessel Regulations in 46 CFR Parts 90 to 97, inclusive (Subchapter I). These vessels are usually under 4,000 gross tons and therefore have not been subject to even the minimum fire protection requirements described in the regulations for cargo vessels. These vessels with large numbers of persons on board are often engaged in high fire hazard types of work. Therefore it is proposed to extend the present minimum structural fire protection requirements for cargo vessels to these vessels which are 300 gross tons or over and if over 12 industrial persons are carried in addition to the crew. To identify these vessels it is proposed to define them as "industrial vessels" by adding a definition designated 46 CFR 90.10-16. To identify the persons working on such vessels it is proposed to define them as "industrial personnel" by adding a definition designated 90.10-40.

With respect to the extension of the structural fire protection requirements to industrial vessels, it is proposed to amend 46 CFR 92.07-1 and 92.07-90 to specify the requirements for both existing and new cargo vessels being used as industrial vessels and when of 300 gross tons or over and carrying in excess of 12 industrial personnel.

#### 6d—FIRE EXTINGUISHING SYSTEMS FOR MACHINERY SPACES ON TANK VESSELS AND CARGO VESSELS

One of the requirements of the International Convention of Safety of Life at Sea, 1960 (Chapter II, Regulation 65(h)), states that when cargo vessels and tank vessels of 1,000 gross tons or over and on an international voyage and such vessels are fitted with internal combustion propelling machinery then such machinery shall be protected by an approved fire extinguishing system. To implement these provisions of SOLAS for vessels on an international voyage, it is proposed to require such equipment by amending 46 CFR 34.05-5(a) (7) for tank vessels and 95.05-10(e) for cargo vessels. Because of the severe consequences of an uncontrolled machinery space fire, it is also proposed to require similar protection on tank vessels and cargo vessels not on an international voyage.

In the administration of 1960 SOLAS determinations have been made by the Commandant that (a) "internal combustion engines" include gas turbines as similar fuel hazards exist; (b) spaces containing fuel oil units, purifiers, valves and manifolds are included as a part of the boiler installations; and (c) a total-flooding carbon dioxide system is the best extinguishing system for internal combustion machinery.

#### 6e—FIRE EXTINGUISHING SYSTEMS FOR POWER-OPERATED INDUSTRIAL TRUCK STOWAGE ON CARGO VESSELS

The regulations in 46 CFR 97.70-30(b) permit stowage of fueled power operated industrial trucks in fixed metal

enclosures, on or above the weather deck, with access from the weather deck only, and with adequate ventilation. There is no inference of fire protection requirements. The spaces should be treated as a flammable liquid stowage space with a fixed CO<sub>2</sub> system in accordance with 46 CFR 95.05-10(c). It is proposed to amend 46 CFR 97.70-30(b) to require a fixed carbon dioxide or other approved system to be installed in all stowage spaces, used for power operated industrial trucks.

#### **ITEM PH 7-67—GAS FREEING INSPECTIONS PRIOR TO MAKING ALTERATIONS OR REPAIRS INVOLVING HOTWORK**

Recently a serious casualty occurred while hotwork was being performed on a fitting of a tank containing a protective coating. This protective coating, when heated, let off flammable vapors. In this instance, an explosion occurred in which a worker lost his life and extensive damage was done to the vessel. At the investigation it was found that no gas free certificate had been issued. In reviewing the regulations it was determined that no gas free certificate was actually required. Therefore, it is proposed to amend the inspection regulations for tank vessels (CG-123), passenger vessels (CG-256), cargo and miscellaneous vessels (CG-257), and small passenger vessels under 100 gross tons (CG-323), in order that the requirements regarding gas freeing of spaces and use of gas free certificates will include repair work in any space or tank that has a residue or protective coating which is combustible or capable of releasing flammable or toxic vapors when exposed to heat.

For many years the provisions of "Standard for the Control of Gas Hazards on Vessels to be Repaired," NFPA No. 306, published by National Fire Protection Association, 60 Batterymarch Street, Boston, Mass. 02110, has been the guide in conducting the inspections and issuance of gas free certificates required by the inspection regulations. This guide not only includes instructions for assuring that the compartment or space is safe for performing work involving heat or fire, but also it assures that the spaces involved do not contain a vapor which may be hazardous.

#### **7a—TANK VESSELS**

Amending of 46 CFR 35.01-1(b) by revising requirements governing inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions on tank vessels and tank barges is proposed to require inspection of any space for purpose of determining it is gas free prior to performing hotwork.

#### **7b—PASSENGER VESSELS**

Amending of 46 CFR 71.60-1(b) by revising requirements governing inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions on passenger vessels of 100 gross tons or over is proposed to require inspection of any space for purpose of determining it is gas free prior to performing hotwork.

#### **7c—CARGO AND MISCELLANEOUS VESSELS**

Amending of 46 CFR 91.50-1(b) by revising requirements governing inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions on cargo and miscellaneous vessels is proposed to require inspection of any space for purpose of determining it is gas free prior to performing hotwork.

#### **7d—SMALL PASSENGER VESSELS**

A new regulation designated 46 CFR 176.23-1 is proposed to the small passenger vessel regulations (CG-323) regarding gas freeing of "T" vessels since many of the larger ones are constructed of steel. The new requirements will cover the inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning or like fire-producing actions on small passenger vessels of less than 100 gross tons and carrying more than 6 passengers. The regulations will establish the "Standard for the Control of Gas Hazards on Vessels to be Repaired," NFPA No. 306, as the guide to be followed. The regulations also prohibit the undertaking of hotwork until after specified gas-freeing inspections have been made. In general, the same procedures will be followed as for other inspected vessels.

#### **ITEM PH 8-67—LIFESAVING EQUIPMENT**

##### **8a—ADDITIONAL LIFE PRESERVERS REQUIRED ON SMALL PASSENGER VESSELS**

When the regulations for passenger vessels were amended to include the requirements necessary to implement the 1960 Safety of Life at Sea Convention (SOLAS), the requirement for 5 percent additional life preservers for all passenger vessels on an international voyage was not added to the Rules and Regulations for Small Passenger Vessels (Under 100 Gross Tons) (Subchapter T) (CG-323). Since the 1960 SOLAS applies to small passenger vessels on an international voyage, it is proposed to add this requirement as 46 CFR 180.25-5(b) so that those concerned will provide additional life preservers when engaged on international voyages.

##### **8b—COLOR OF LIFEBOATS AND BUOYANT APPARATUS ON SMALL PASSENGER VESSELS**

It is proposed to amend the regulations for small passenger vessels under 100 gross tons to require that lifeboats and buoyant apparatus carried on such vessels will be of a uniform highly visible color. At present there are no set requirements regarding the color of lifeboats and buoyant apparatus. The owners have therefore painted them any color, running the entire spectrum of colors, which often present no contrast with surrounding water on which the vessel normally operates. This lack of contrast reduces the probability of detection and increases search time needed to locate survivors. A second or third search of the same area may be needed, which could be obviated if a highly visible color were used. By prescribing one color for certain waters it is believed that search and rescue operations, if needed, would be greatly facilitated due to increased contrast of the device with the water and then having the information that it is only necessary to look for a device of a definitely known color.

To accomplish these changes, it is proposed to add new regulations which will be in effect on and after March 1, 1968, for both new and existing small passenger vessels under 100 gross tons and carrying more than 6 passengers. For small passenger vessels in ocean and coastwise service and Great Lakes service, it is proposed to add new paragraphs designated 46 CFR 180.15-5(b) and 180.10-15(b), which will specify that lifeboats and buoyant apparatus shall be international orange in color. For such vessels in lakes, bays, and sounds service, it is proposed to add a new paragraph designated 46 CFR 180.10-20(b), which will specify that all lifeboats and buoyant apparatus shall be either international orange or white in color. In the waters of lakes, bays, and sounds, it has been observed that where the waters have a high degree of silt the coloring of the waters provides a good contrast



with white, and therefore either white or international orange color is satisfactory.

#### **8c—DISTRESS SIGNALS REQUIRED FOR FREIGHT VESSELS UNDER 150 GROSS TONS**

The regulations for small passenger vessels under 100 gross tons in 46 CFR 180.35-5(a)(1) require 6 hand red flares and 6 orange smoke signals or 12 hand combination flares and distress signals to be carried. The regulations for cargo and miscellaneous vessels in 46 CFR 94.90-1(a) exempt all manned freight vessels of less than 150 gross tons certificated for ocean and coastwise service. Such small freight vessels may carry as many as 16 persons in addition to the crew between ports or places in the United States on ocean or coastwise routes. Often these vessels are larger than Subchapter T vessels carrying more than 6 passenger.

It is proposed to amend 46 CFR 94.90-1, 94.90-5, 94.90-10, and 94.90-15 to require that all new and existing small freight vessels under 150 gross tons and certificated for ocean or coastwise service, which are permitted to carry persons in addition to the crew, to have 6 hand red flares and 6 orange smoke signals or 12 hand combination flares and distress signals on and after an effective date to be determined. For such vessels which are on short runs and the operating time away from a dock is limited to approximately 30 minutes, it is proposed in 46 CFR 94.90-15 not to require such vessels to carry these distress signals.

#### **8d—RELEASES, HYDRAULIC AND MANUAL, FOR LIFESAVING EQUIPMENT**

For some time it has been observed that hydraulic releases have been used in inflatable liferaft installations. Instructions regarding the inspection requirements for hydraulic releases when carried with approved liferafts or buoyant apparatus have been requested. The practice to permit the use of such releases does not provide a method to determine suitability. Furthermore, under certain conditions the hydraulic release could become inoperative and fail to provide the release of the lifesaving equipment as presently required by the regulations.

In order that requirements for all vessels subject to inspection and certification by the Coast Guard will be the same, it is proposed to add regulations stating that hydraulic releases approved under a Coast Guard specification designated 46 CFR Subpart 160.062 may be permitted in the installation of any rigid liferaft, inflatable liferaft, or buoyant apparatus and to require the servicing and testing of such releases at periodic intervals. To accomplish this it is proposed to add regulations designated 46 CFR 33.20-20 and 33.25-15(e) for tank vessels, 71.25-15(a)(9) and 75.15-10(a)(5) for passenger vessels, 91.25-15(a)(8) and 94.15-10(a)(5) for cargo and miscellaneous vessels, 167.35-3(a) for public nautical schoolships, 176.25-20(c), 176.25-22(d) and 180.20-1(c) for small passenger vessels under 100 gross tons, and 189.25-15(a)(8) and 192.15-10(a)(5) for oceanographic vessels. It is also proposed to add a Coast Guard specification regarding hydraulic and manual releases for lifesaving equipment which has been designated as 46 CFR 160.062 and consists of §§ 160.062-1 to 160.062-6, inclusive. This specification will provide for the Commandant's approval of releasing devices, as well as for the servicing and testing of approved devices at periodic intervals.

### **ITEM PH 9-67—VESSEL INSPECTIONS**

#### **9a—DISPLAY OF PLANS REQUIRED ON TANK VESSELS**

A new regulation designated 46 CFR 35.10-3 regarding display of plans on both new and existing tank vessels and

tank barges with sleeping accommodations for more than 6 persons is proposed. It is proposed that the plan displayed on each vessel will show pertinent firefighting information for the guidance of the officer in charge of the vessel.

#### **9b—DRYDOCKING OF TANK AND CARGO VESSELS OPERATING EXCLUSIVELY ON FRESH WATER**

The regulations in 46 CFR 31.10-20 for tank vessels (CG-123) and 91.40-1 for cargo vessels (CG-257) governing drydocking intervals could be interpreted, as written, that cargo vessels and tankships operating exclusively in fresh water do not require drydocking. Since this is not what was intended, it is proposed to amend 46 CFR 31.10-20(a)(4) and 91.40-1(a)(4) by adding the words "if it operates exclusively in fresh water or" so that there is no question that the requirements provide for a 60-month drydocking interval for those vessels operating exclusively in fresh water.

#### **9c—ANCHORS FOR TANK BARGES AND CARGO BARGES**

The American Bureau of Shipping (ABS) no longer requires ground tackle on unmanned barges as a condition of classification, regardless of route. After this information was received, the Coast Guard made a study of this matter. It has been determined that the installation of ground tackle aboard unmanned barges on either sea-going or inland routes is of little or no value unless the equipment can be controlled remotely from the towing vessel. Since available information does not provide evidence that anchors on unmanned barges have proved beneficial in the interest of safety, it is proposed to withdraw the requirements for anchors and chains on unmanned barges in ocean, coastwise or Great Lakes service by amending 46 CFR 32.15-15 and 96.07-5(a).

#### **9d—MISCELLANEOUS UP-DATING CHANGES FOR TANK VESSELS, PASSENGER VESSELS, AND CARGO AND MISCELLANEOUS VESSELS**

In order to bring the vessel inspection regulations up-to-date, it is proposed to revise the regulations in Subchapters D (Tank Vessels), H (Passenger Vessels), I (Cargo and Miscellaneous Vessels) and T (Small Passenger Vessels). These changes include such items as: unfired pressure vessels; Federal Communications certificates; primary lifesaving equipment; side light screens; electrical system installations; and the manning of lifeboats having radios and searchlights.

With respect to unfired pressure vessels, the proposed amendments to 46 CFR 31.01-5(a), 71.20-15(a), and 91.20-15(a) will clarify the scope of the initial inspections to include the inspection of unfired pressure vessels.

All radio inspections are controlled by the Federal Communications Commission's regulations. The Coast Guard now determines only that the vessel is in possession of a valid certificate issued by the Federal Communications Commission, if any. Therefore, the proposed changes to 46 CFR 31.01-5(a), 31.10-15(b), 71.20-15(a), 71.25-10(a), 91.20-15(a), and 176.05-5 will show this determination.

It has been determined that light screens for navigation lights and shapes which are painted glossy black provide the best reflection capability. At present this requirement for painting of side screens is only in the Electrical Engineering Regulations (Subchapter J) and such a requirement is not directly related to electrical engineering. Therefore, it is proposed to transfer this requirement from these regulations to the various vessel inspection regulations for the various categories of vessels. To accomplish this it is proposed to add to the tank vessel regulations a new section designated 46 CFR 32.15-3 regarding navigation lights and shapes for all new and existing tank

vessels and tank barges; to add to the passenger vessel regulations a new section designated 46 CFR 77.17-5 regarding light screens; to add to the cargo and miscellaneous vessel regulations a new section designated 46 CFR 96.20-15 regarding light screens; to add to the small passenger vessel regulations a new section designated 46 CFR 184.15-10 regarding light screens; and to add to the oceanographic vessel regulations a new section designated in 46 CFR 195.20-15.

For some time the descriptions of primary lifesaving equipment have been in various vessel inspection regulations and it is proposed to add a sentence describing what may be acceptable substitutes for a lifeboat. For tank vessels it is proposed to add the revised definition of primary lifesaving equipment for tank vessels and tank barges as a new section designated 46 CFR 33.01-10. For passenger vessels it is proposed to revise the definition of primary lifesaving equipment in 46 CFR 75.05-10(a). For cargo and miscellaneous vessels it is proposed to revise the definition of primary lifesaving equipment in 46 CFR 94.05-10(a). For small passenger vessels under 100 gross tons, it is proposed to add a definition of primary lifesaving equipment as 46 CFR 180.10-1(b).

For the mast and sail required on certain lifeboats the present regulations specify the sail shall be of good quality canvas. Other materials have been developed and found to be acceptable for use as sails. Therefore, it is proposed to add wording permitting the use of these materials, by revising 46 CFR 33.15-10(s), 75.20-15(s), and 94.20-15(s).

The tank vessel regulations are silent concerning the manning of lifeboats with motors, radiotelegraphs and/or searchlights. Therefore, it is proposed to add to the tank vessel regulations new sections designated 46 CFR 33.30-10 and 33.30-15 to require the master to assign to each lifeboat men capable of operating the equipment therein, such as motors, radiotelegraphs and searchlights.

With respect to electrical engineering and interior communication systems, it is proposed to update the list of systems by revising 46 CFR 77.05-1(a) for passenger vessels, and 96.05-1(a) for cargo and miscellaneous vessels.

To modernize the language in the vessel inspection regulations, it is proposed to substitute the word "radiotelegraph" for "wireless" in 46 CFR 78.14-20 for passenger vessels, and in 97.14-20 for cargo and miscellaneous vessels.

#### **9e—MISCELLANEOUS UP-DATING CHANGES FOR UNINSPECTED VESSELS (INCLUDING MOTORBOATS)**

In order to bring the regulations for uninspected vessels up to date, it is proposed to add or revise various regulations. With respect to definitions of terms used in these regulations, it is proposed to add definitions of the word "barge" as a new section designated 46 CFR 24.10-2 and the phrase "oceanographic research vessel" as a new section designated 46 CFR 24.10-20. These definitions are needed because of the act of July 30, 1965 (Public Law 89-99; 46 U.S.C. 441-445), under which all mechanically propelled oceanographic vessels of less than 300 gross tons, which are not inspected for certification, will be subject to the requirements for uninspected vessels in Subchapter C or 46 CFR Parts 24 to 26, inclusive.

Approved work vests are for crewmembers while working on board merchant vessels. They are considered to be items of safety apparel but cannot be substituted for other required lifesaving devices. Therefore, it is proposed to add a new section designated 46 CFR 25.25-25 regarding work vests and state that when carried on uninspected vessels such vests are not accepted as a substitute for any portion of the approved lifesaving devices required by 46 CFR 25.25-10.

With respect to hand portable fire extinguishers of the vaporizing liquid type containing carbon tetrachloride or chlorobromomethane or other toxic vaporizing liquids, it

is proposed to delete the obsolete language regarding the prohibition to use such equipment after January 1, 1962, and to state in general terms that such equipment is not acceptable as equipment required by these regulations.

The 1960 International Convention for Safety of Life at Sea contains certain requirements applicable to all vessels engaged in international voyages. Since many large vessels are subject only to the requirements for mechanically propelled vessels in the regulations for uninspected vessels (Subchapter C), it is desirable to refer to these requirements based on the 1960 SOLAS Convention. Therefore, it is proposed to add a new section designated 46 CFR 26.03-10 regarding signaling lights for all vessels of over 150 gross tons when engaged on international voyages. With respect to all vessels on ocean and coastwise voyages in the course of which pilots are likely to be employed, it is proposed to add a new regulation designated 46 CFR 26.03-15 requiring such vessels to be equipped with pilot ladders, man ropes and safety lines for use in conjunction with the pilot ladders, whenever circumstances may so require; and additionally, the vessels shall have available for use at night, lights capable of shining over the side.

#### **9f—HOSPITAL SPACES ON TANK VESSELS AND CARGO VESSELS**

It has been a Coast Guard policy not to require a hospital space on cargo and tank vessels in which the crew is berthed in single occupancy rooms. In lieu of the required hospital space, the Coast Guard, has, however, required that one room, not necessarily designated as a hospital space but always available while the vessel is at sea, be fitted for use as a treatment and/or isolation room. In order that this policy will be published in the regulations, it is proposed to add new requirements to 46 CFR 32.40-1(c) and 92.20-35 which will state this policy and describe the standards such room shall meet.

### **ITEM PH 10-67—ELECTRICAL ENGINEERING REGULATIONS**

The Electrical Engineering Regulations (CG-259, Subchapter J, 46 CFR Parts 110-113) have been reviewed and where possible changes are proposed which will bring these regulations into closer agreement with the National Electrical Code.

#### **10a—ELECTRICAL SYSTEM STANDARD VOLTAGES**

The present regulations in 46 CFR Part 111 do not recognize 120/208-volt, 3-phase electrical systems. On certain vessels, especially small vessels with small electrical power requirements, this system would often be more economical than other systems. In industry electrical systems of this type are standard and equipment designed for these voltage ratings are readily available. Therefore, it is proposed to amend 46 CFR 111.05-25(b) by revising Table 111.05-25(b) so that the standard voltages for alternating current will include the distribution voltage of 120/208 and the comparative generated voltage of 125/216 as standard voltages. This proposed change is recommended so these voltage systems may be permitted without question.

#### **10b—OVERCURRENT PROTECTION, DUAL VOLTAGE SYSTEMS**

The present regulations require that a pole be provided in the generator circuit breakers for the neutral conductor of dual voltage systems. This usually dictates the use of 4-pole circuit breakers, which are more expensive and are hard to procure commercially. Therefore, it is proposed to amend 46 CFR 111.35-15 (b) and (c) regarding equipment for switchboards and 111.55-1 (d), (h), and (i) regarding overcurrent devices to remove this requirement since no increase in safety is afforded by providing circuit breaker poles for neutral conductors. The proposed changes will also permit solid neutrals in feeder circuits.

## 10c—OVERCURRENT DEVICES IN PANELBOARD

The present regulations limit the number of overcurrent devices in panelboards to 60. The National Electrical Code now limits the number of overcurrent devices in panelboards to 42. The problem concerning the number of overcurrent devices is the heat generated by each such device, which is the same whether the panelboard is used shoreside or on shipboard. Therefore, it is proposed to amend 46 CFR 111.40-1(g) to reduce the number of overcurrent devices from 60 to 42 and to reduce the permitted amperage for switching devices from 50 amperes or less to 30 amperes or less, which will bring the regulation into agreement with the National Electrical Code. This proposal is an increase in requirements since a greater number of panelboards will be required for a given distribution system in the future.

## 10d—INTERRUPTING RATING OF FUSES AND CIRCUIT BREAKERS

The present regulations permit the use of circuit breakers and fuses in applications where their interrupting rating may be exceeded, where suitable backup protection is incorporated in the electrical system. As circuit breakers which require backup protection may be damaged in case of short circuit, continuity of service may be impaired. Therefore, it is proposed to amend 46 CFR 111.55-20 regarding interrupting rating of fuses and circuit breakers to provide for adequate continuity of service by limiting the use of backup breakers to nonvital circuits, to add general requirements for backup installations, to specify an 80 percent of the instantaneous trip feature of backup breakers, and to rearrange existing requirements.

## 10e—EMERGENCY LIGHTING AND POWER SYSTEMS

The present Coast Guard regulations pertaining to the emergency lighting and power systems for passenger vessels has a division in the requirements at a vessel size of 1,600 gross tons, with the requirements for vessels under 1,600 gross tons being less stringent. The 1960 Safety of Life at Sea Convention (SOLAS) makes no corresponding distinction. These Coast Guard regulations for vessels under 1,600 gross tons are less than the requirements in Chapter 2, Regulation 25, of the 1960 SOLAS Convention. Therefore, it is proposed to bring the general requirements in Table 112.05-5(a) in 46 CFR 112.05-5 into agreement with Chapter 2, Regulation 25, of 1960 SOLAS Convention, by deleting the present requirements for ocean and coastwise vessels and inserting one standard for all these vessels.

## 10f—STARTING MEANS FOR EMERGENCY DIESEL GENERATOR SETS

The present regulations regarding emergency diesel-engine-driven generator sets are written in a manner that emphasizes batteries as the starting means for such equipment. As hydraulic starting means are now available and offer a superior method of starting a diesel engine, the proposed revision of 46 CFR 112.50-1 emphasizes the use of hydraulic starting means and the text is rearranged. The requirements have not been changed except to require a shutdown on loss of lubricating oil pressure, overspeed, and release of carbon dioxide. This automatic shutdown is in keeping with an industry recommendation for engine protection.

## 10g—GENERAL ALARM SYSTEM

The present regulations do not require that the location of the general alarm feeder distribution panel be associated with the location of the general alarm system power supply. As only a single cable is required between the power supply and the feeder distribution panel, damage to this cable can jeopardize the entire system. The proposed

changes to 46 CFR 113.25-5 regarding operation and 113.25-10 regarding distribution of general alarm system feeders and branch circuits will augment the dependability of the system. It is proposed to limit the length of the cable run by requiring the power supply and the feeder distribution panel to be in the same space, and to enhance its dependability by providing control of the general alarm system at the location of the power supply. In particular, the proposed amendments to 46 CFR 113.25-5 will clarify the requirements and specify the number and where contact makers shall be provided, including at the location of the feeder or branch circuit distribution panels; while the amendment to 46 CFR 113.25-10 will require that the feeder distribution panel shall be located in the same space as the power supply in order to improve the dependability of the system. With respect to alarm bells for tankships constructed on or after September 15, 1943, it is proposed to amend 46 CFR 32.25-1(b) to clarify the requirements pertaining to contact maker location and the number required.

## ITEM PH 11-67—OPERATORS OR OCEAN OPERATORS OF SMALL PASSENGER VESSELS AND MOTORBOAT OPERATORS

### 11a—OPERATORS OR OCEAN OPERATORS OF SAILING AUXILIARY VESSELS

The great majority of sailing vessels carrying more than six passengers for hire are equipped with auxiliary power. The use of the auxiliary power under average conditions is limited to when maneuvering in restricted waters or when the vessel is becalmed. When sailing auxiliary vessels are under way, the most important safety factor is the skill of the master, who needs to have experience with both sail vessels and mechanically propelled vessels, and who needs to be qualified to handle both types of vessels. Therefore, it is proposed to add a definition of a "sailing auxiliary vessel" in a new section designated 46 CFR 175.10-38 in Subchapter T (Small Passenger Vessels). It is also proposed to add new sections to Part 187 regarding licensing. The section designated 46 CFR 187.25-11 will describe the service requirements for sailing auxiliary vessels. The proposed new sections designated 46 CFR 187.20-17 and 187.25-21 regarding examination for operators and ocean operators of sailing auxiliary vessels will describe the examination requirements for a license as operator of sailing auxiliary vessels and as operator of sailing auxiliary vessels in ocean service, respectively. The change in 46 CFR 187.20-5(b) will provide that applicants for each type of license covered will be required to submit evidence of service on the type of vessel for which he desires to be licensed.

### 11b—OPERATORS OF MECHANICALLY PROPELLED VESSELS

The examinations for operators of mechanically propelled vessels, for sailboat operators and for motorboat operators include questions on the Rules of the Road applicable to the waters on which the applicant operates. The provisions of 46 CFR 10.20-5(b)(2) and 187.20-15(b) advise that it will be incumbent on motorboat operators and sailboat operators to familiarize themselves with the appropriate Rules of the Road if they should operate on other waters for which the Rules of the Road differ. Because there is no present regulation which so advises the operators of mechanically propelled vessels of this responsibility, it is proposed to add a new regulation designated 46 CFR 187.20-10(b), which will so advise them. This proposal will make the operators of mechanically propelled vessels aware of their responsibilities regarding need to know the Rules of the Road applicable to the waters in which they operate in the same manner that motorboat operators and sailboat operators are presently advised.

#### **11c—OCEAN OPERATORS, MINIMUM AGE AND SERVICE REQUIREMENTS**

The present minimum age required for ocean operators is 21 years, and it is proposed to reduce this age to 19 years, which is considered consistent with requirement that a third mate of inspected vessels need be only 19 years old. To accomplish this it is proposed to appropriately amend 46 CFR 187.25-1(d) regarding specific requirements for ocean operators.

Due to the seasonal nature of ocean operators' service in many areas, it is considered desirable to reduce the total elapsed time required to obtain the specified service from 3 years to 2 years and to eliminate special credit for seasonal work in order to insure uniformity in the administration of experience requirements. To accomplish this, it is proposed to amend 46 CFR 187.25-5 regarding service requirements for mechanically propelled vessels.

#### **11d—MOTORBOAT OPERATORS, REGENCY OF SERVICE FOR LICENSE**

Recent experience is a prime ingredient of the overall experience required to insure the belief that a prospective candidate can be entrusted with the duties and responsibilities of the license sought. Therefore, it is proposed to amend 46 CFR 10.20-3(a)(1) so that in the future it will be necessary for the applicants of motorboat operators licenses to show that at least 25 percent of the required experience has been obtained within the 3 years immediately preceding the date of application. This proposal will institute reGENCY of service requirements for a license as motorboat operator, which will be similar to that required for other types of licenses, except radio officers licenses.

#### **11e—MOTORBOAT OPERATORS, RULES OF THE ROAD EXERCISE FOR RENEWAL OF LICENSES**

The renewal procedures for all licensed deck officers and for operators and ocean operators of small passenger vessels carrying more than six passengers require the licensees who renew their licenses to either complete a Rules of the Road exercise or examination in order to assure continuing familiarity with this important subject. While an original applicant for a motorboat operator's license is examined on the "collision regulations" under present regulations, there is no provision for assuring a continued familiarity with this subject when renewing licenses. In the overall interest of safety, it is proposed that 46 CFR 10.20-9 be amended by adding requirements which will obligate all licensed motorboat operators to remain familiar with the Rules of the Road applicable to the waters for which they are licensed. The proposed demonstration of knowledge of the application of the Rules of the Road is an exercise in which the applicant may use the applicable Rules of the Road publication to answer the multiple choice type questions. Additionally, in the case of motorboat operators who have not served on their licenses or who have not been closely associated in the operation of vessels or motorboats, an oral examination will be required to satisfy the Officer in Charge, Marine Inspection, that such an operator is capable and qualified.

### **ITEM PH 12-67—MERCHANT MARINE OFFICERS AND SEAMEN**

#### **12a—CERTIFICATE OF REGISTRY AS JUNIOR ASSISTANT PURSER AND PHARMACIST'S MATE**

The rating of pharmacist's mate was discontinued as of November 17, 1956, due to the disestablishment of training schools for this rating. A new training pro-

gram for the rating of pharmacist's mate has been established. Therefore, it is proposed to amend 46 CFR 10.25-9(a) to establish a rating of Junior Assistant Purser and Pharmacist's Mate which will permit the endorsement of pharmacist's mate on certificates of registry held by those who are found qualified for such a rating.

#### **12b—MASTER OF COASTWISE STEAM OR MOTOR VESSELS OF 500 GROSS TONS OR LESS**

The proposed changes to 46 CFR Part 10 are to provide for the increase in scope of licenses issued under the provisions of 46 CFR 10.05-5(b) and 10.05-28(a) for masters and mates employed on vessels operated on limited coastwise routes in connection with the offshore mineral and oil industries. Since the deck licenses in question are for inspected vessels, there appears to be no valid reason for limiting them to motor vessels, so the proposed changes will be to extend coverage to include steam vessels. Various requests have been received to include certain vessels of over 300 gross tons under these licensing provisions. Due to the similarity of the characteristics of vessels of 300 gross tons and 500 gross tons, it is proposed to extend the coverage of these licenses to not more than 500 gross tons. With respect to qualifications for master of coastwise steam or motor vessels, it is proposed to amend 46 CFR 10.05-5(b) to extend application to include steam vessels and to increase the vessel size from 300 to 500 gross tons.

#### **12c—MATE OF STEAM OR MOTOR VESSELS ENGAGED IN OFFSHORE MINERAL AND OIL INDUSTRIES**

The proposed changes to 46 CFR Part 10 are to provide for the increase in scope of licenses issued under the provisions of 46 CFR 10.05-5(b) and 10.05-28(a) for masters and mates employed on offshore mineral and oil industries. Since the deck licenses in question are for inspected vessels, there appears to be no valid reason for limiting them to motor vessels, so the proposed changes will be to extend coverage to include steam vessels. Various requests have been received to include certain vessels of over 300 gross tons under these licensing provisions. Due to the similarity of the characteristics of vessels of 300 gross tons and 500 gross tons, it is proposed to extend the coverage of these licenses to not more than 500 gross tons. With respect to the qualifications of a mate of vessels engaged in offshore mineral and oil industries, it is proposed to amend 46 CFR 10.05-28(a) so the minimum service will qualify for a license as mate of steam or motor vessels and the size of such vessel is to be increased from 300 to 500 gross tons.

#### **12d—SERVICE AS ABLE SEAMAN AS QUALIFYING SERVICE FOR LICENSE AS SECOND MATE**

It is proposed to amend the regulations pertaining to service required for an original license in 46 CFR 10.05-29(a) for second mate of ocean steam or motor vessels and in 46 CFR 10.05-31(a) for second mate of coastwise steam or motor vessels. These proposed changes will provide for the acceptance of 5 years' service in the deck department of ocean or coastwise vessels, including 2 years as able seaman, for an original license as second mate of ocean or coastwise vessels. The present regulations require 2 years of the 5 years' service to be in the capacity of quartermaster or boatswain. Relatively few vessels carry quartermasters at this time and the normal quartermaster's duties are now being performed by able seamen. A boatswain does not ordinarily stand bridge watches. Under present day procedures, it



is considered that the service as an able seaman is comparable to service as quartermaster or boatswain for the purpose of gaining well-rounded experience for an original license as second mate.

## 12e—REEXAMINATIONS AND REFUSAL OF LICENSES

The present regulations specify a waiting period of 6 months after a second or subsequent examination failure.

It is proposed to amend 46 CFR 10.02-19(a) regarding reexaminations by reducing such waiting period from 6 to 3 months from the date of the second or subsequent failure. The primary reason for a time delay between examinations is to insure a candidate has sufficient time to adequately prepare for the examination. It is now believed that 3 months should be generally sufficient for such purpose. The proposed change will relieve the hardship and delay now experienced by some candidates. †

# AMENDMENTS TO REGULATIONS

## APPROVED EQUIPMENT

### COMMANDANT ISSUES EQUIPMENT APPROVALS; TERMINATES OTHERS

By Commandant's Action of November 9, 1966, Coast Guard Approval was granted to certain items of life-saving, firefighting, and other equipment and terminated for others. Included among the approvals were life preservers, lifeboat winches, lifeboats, lifeboat compasses, water lights, heating boilers, buoyant vests, buoyant cushions, work vests, lifeboat protective covers, safety valves, flame arresters, and for some incombustible materials. Terminations were issued for certain buoyant apparatus, lifeboat winches, lifeboats, mechanical disengaging devices, lifeboats, buoyant cushions, inflatable liferafts, work vests, valves, and for some heating boilers.

Those interested in these approvals and terminations should consult the Federal Register of November 18, 1966, for detailed itemization and identification.

#### § 84.01 [Amended]

2. Section 84.01 *Application* is amended by canceling paragraph (c).

3. Section 84.10(a) is amended to read as follows:

#### § 84.10 *Hawser lengths for all tows on inland waters.*

(a) The length of hawsers between vessels shall be limited to no more than 450 feet (75 fathoms). This length shall be the distance measured from the stern of one vessel to the bow of the following vessel. The distance between two vessels should in all cases be as much shorter as the weather or sea will permit: *Provided*, That where, in the opinion of the master of the towing vessel, it is dangerous or inadvisable, whether on account of the state of weather or sea or otherwise, to limit hawser lengths, the 450-foot limitation need not apply.

*Effective date.* A finding is hereby made that delay in the effective date of the amendments in this document is unnecessary as they modify restrictions in the regulations (5 U.S.C. 1003 (c)). Accordingly, the amendments in this document shall become effective immediately upon date of publication in the Federal Register.

(Federal Register of October 22, 1966)

ter of December 6, 1966. The omnibus provisions range from navigation lights to elevated temperature cargo. Some of the areas affected include: whistles, sounding equipment, venting, liquified flammable gases, marine boiler steel plate, plan approval, crew accommodations, lifesaving equipment, CO<sub>2</sub> extinguishing systems, foghorns, motors, overcurrent protection, general alarm systems, inflatable liferafts and licensing.

## EXPLOSIVES REGULATIONS

Dangerous cargo regulations as they pertain to transportation on board vessels were amended by new regulations published in the Federal Register of December 10, 1966.

## APPRENTICE ENGINEER PROGRAM APPROVED

The Merchant Marine Council on November 22, 1966, held a special public hearing in Washington to hear oral comments on the apprentice engineer programs.

After consideration of the oral and written comments submitted, the Merchant Marine Council unanimously recommended approval of the proposals as set forth in the notice of proposed rule making published in the Federal Register on September 3, 1966, and distributed with the Coast Guard announcements of September 6, and October 26, 1966.

After reviewing the proposals regarding apprentice engineers and considering the unanimous recommendation of the Merchant Marine Council together with the public hearing record and comments received, the Commandant approved these proposals which will establish a seaman's rating as apprentice engineer, permit recognition of training programs for prospective third assistant engineers, and the acceptance of the completion of approved training programs as qualifying experience for an

## NAVIGABLE WATERS

The Coast Guard has determined the Oklawaha River and its chain of lakes in Florida, and the Savannah River for its entire length in South Carolina and Georgia including Hartwell Reservoir to be navigable. These determinations were published in the Federal Register of December 17, 1966.

## TITLE 46 CHANGES

### NUMEROUS AMENDMENTS

Numerous miscellaneous amendments to Title 46 regulations have been published in the Federal Register

## TITLE 33 CHANGES

### LENGTH OF TOW HAWSERS

The master of a towing vessel has the primary responsibility for the safety of his vessel and tow, as well as a further responsibility to navigate the tug and tow in such a manner that other vessels and property are not endangered or embarrassed in their operation. The general limitation on the length of hawser between vessels of a tow is necessary, but the master needs additional discretionary authority to determine the proper length of a towing hawser under a particular set of conditions of wind, weather, traffic, etc.

Title 33 CFR 84.01 and 84.10 are amended as follows:

original license as a third assistant engineer. The amendments will add another method to those already provided in 46 CFR 10.10-21 for applicants to qualify for an original license as third assistant engineer of steam vessels. It is noted that, in a number of comments submitted, concern was expressed over the method of employment of apprentice engineers on board merchant vessels. The rating of apprentice engineer will not be required by certificates of inspection issued by the Coast Guard.

If the owner, operator, agent, or master of a vessel requests that the manning include an apprentice engineer, a seaman holding such endorsement may be signed on the shipping articles. Following are the amendments:

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

##### **Subpart 10.10—Professional Requirements for Engineer Officers' Licenses (Inspected Vessels)**

1. Section 10.10-21 is amended by changing the period (.) to a semicolon and adding the word "or," at the end of paragraph (a) (7) and by adding a new paragraph (a) (8) reading as follows:

##### **§ 10.10-21 Third assistant engineer; steam vessels.**

(a) \* \* \*

(8) Satisfactory completion of a 3-year apprentice engineer training program approved by the Commandant.

#### **PART 11—LICENSES IN TEMPORARY GRADES OR SPECIAL ENDORSEMENTS ON LICENSES TO PERMIT TEMPORARY SERVICE**

##### **Subpart 11.10—Licenses in Temporary Grades**

2. Section 11.10-50 is amended by adding at the end of paragraph (a) a new sentence reading as follows:

##### **§ 11.10-50 Temporary Third Assistant Engineer.**

(a) \* \* \* Satisfactory completion of a 2-year apprentice engineer training program approved by the Commandant will also be acceptable.

#### **PART 12—CERTIFICATION OF SEAMEN**

##### **Subpart 12.25—Certificates of Service for Ratings Other Than Able Seaman or Qualified Member of the Engine Department**

3. Subpart 12.25 is amended by add-

ing a new § 12.25-35 at the end thereof reading as follows:

##### **§ 12.25-35 Apprentice engineers.**

(a) Persons enrolled in an apprentice engineer training program approved by the Commandant and who present a letter or other documentary evidence that they are so enrolled may be issued a merchant mariner's document as apprentice engineer and may be signed on ships as such. The endorsement apprentice engineer may be in addition to other endorsements. However, this endorsement of apprentice engineer does not authorize the holder to fill any of the regular ratings.

(b) Persons holding merchant mariner's documents with the endorsement apprentice engineer shall be deemed to be seamen under the provisions of Title 53 of the Revised Statutes and the regulations in this subchapter.

(Federal Register of December 13, 1966)

#### **ELECTRICAL REGULATIONS**

Miscellaneous amendments to parts 111, and 113, primarily editorial in nature have been published in the Federal Register of December 31, 1966.

#### **NVIC 4-66**

##### **STANDARDS SET FOR MUD BALLAST**

Problems which have arisen from the use of high density drilling mud type fluids as fixed ballast indicate that this concept needs special consideration. Without specific treatments, the mud may generate dangerous quantities of methane gas due to bacteria colony growth, and cause rapid corrosion of ballast tanks due to inherent acidity. However, specifications and procedures have been developed which, when followed, render such fluid safe and effective as a ballasting medium. Navigation and Vessel Inspection Circular No. 4-66 sets forth the procedures and standards for fixed mud ballast use. Special drilling-mud type fluids may be used as fixed ballast in double bottoms of vessels over 65 feet in length, subject to the requirements of 46 CFR 93.13-5 and 46 CFR 74.15-5, as applicable. This may be obtained from the local marine inspection office or by writing, Commandant (CHS) U.S. Coast Guard, Washington, D.C. 20226.

#### **SAILBOAT, SMALLBOAT RIGHT OF WAY LIMITED**

Public Law 89-764, effective February 3, 1967, prohibits power-driven vessels under 65 feet and sailboats from hampering the safe passage of larger steam vessels in restricted channels. Inland Rules, Western River Rules and Great Lakes Rules are affected.

Article 20 of the Inland rules will have added to it the following: "This rule shall not give to a sailing vessel the right to hamper, in a narrow channel, the safe passage of a steam vessel which can navigate only inside that channel."

To article 25 will be added: "In narrow channels a steam vessel of less than sixty-five feet in length shall not hamper the safe passage of a vessel which can navigate only inside that channel."

Western River and Great Lakes rules additions are similar.

#### **STORES AND SUPPLIES**

Articles of ships' stores and supplies certificated from December 1, to December 30, 1966, inclusive, for use on board vessels in accordance with the provisions of Part 147 of the regulations governing "Explosives or Other Dangerous Articles on Board Vessels" are as follows:

##### **CERTIFIED**

*The Clarkson Laboratories, Inc.*, Camden, N.J. 08104: Certificate No. 707, dated December 1, 1966, "FIL-SOL."

*CRC Chemicals, Dresher, Pa.* 19025: Certificate No. 321, dated December 1, 1966. CRC 2-26 and Certificate No. 699 dated December 1, 1966, CRC 3-36, CRC 6-66 and CRC MASK.

*Highland Laboratories, Inc.*, 6140 South Eastern Ave., Los Angeles, Calif. 90022: Certificate No. 708, dated December 12, 1966, ELECTRICAL CLEANER, ESC-100.

##### **AFFIDAVITS**

The following affidavits were accepted during the period from November 15, 1966, to December 15, 1966:

*Pacific Bellows, Inc.*, P.O. Box 1182, LaJolla, Calif. 92038, FITTINGS.<sup>1</sup>

*Penberthy Mfg. Co.*, Division of Houdaille Industries, Inc., Prophetstown, Ill. 92038, VALVES and FITTINGS.<sup>2</sup>

<sup>1</sup> Bellows Expansion Joints, 15 p.s.i. maximum.

<sup>2</sup> Change of address.

## MERCHANT MARINE SAFETY PUBLICATIONS

The following publications of marine safety rules and regulations may be obtained from the nearest marine inspection office of the U.S. Coast Guard. Because changes to the rules and regulations are made from time to time, these publications, between revisions, must be kept current by the individual consulting the latest applicable Federal Register. (Official changes to all Federal rules and regulations are published in the Federal Register, printed daily except Sunday, Monday, and days following holidays.) The date of each Coast Guard publication in the table below is indicated in parentheses following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

The Federal Register may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Subscription rate is \$1.50 per month or \$15 per year, payable in advance. Individual copies may be purchased so long as they are available. The charge for individual copies of the Federal Register varies in proportion to the size of the issue but will be 15 cents unless otherwise noted in the table of changes below. Regulations for Dangerous Cargoes, 46 CFR 146 and 147 (Subchapter N), dated January 1, 1967 are now available from the Superintendent of Documents, price \$2.50.

CG No.	TITLE OF PUBLICATION
101	Specimen Examination for Merchant Marine Deck Officers (7-1-63).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (8-1-62).
115	Marine Engineering Regulations and Material Specifications (3-1-66), F.R. 12-6-66.
123	Rules and Regulations for Tank Vessels (5-2-66), F.R. 12-6-66.
129	Proceedings of the Merchant Marine Council (Monthly).
169	Rules of the Road—International—Inland (9-1-65). F.R. 12-8-65, 12-22-65, 2-5-66, 3-15-66, 7-30-66, 8-2-66, 9-7-66, 10-22-66.
172	Rules of the Road—Great Lakes (9-1-66).
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (3-2-64).
175	Manual for Lifeboatmen, Able Seamen, and Qualified Members of Engine Department (3-1-65).
176	Load Line Regulations (1-3-66), F.R. 12-6-66.
182	Specimen Examinations for Merchant Marine Engineer Licenses (7-1-63).
184	Rules of the Road—Western Rivers (9-1-66). F.R. 9-7-66.
190	Equipment lists (8-3-64). F.R. 10-21-64, 10-27-64, 3-2-65, 3-26-65, 4-21-65, 5-26-65, 7-10-65, 8-4-65, 10-22-65, 10-27-65, 1-27-66, 2-2-66, 2-5-66, 2-10-66, 3-15-66, 3-24-66, 4-15-66, 9-8-66, 11-18-66.
191	Rules and Regulations for Licensing and Certificating of Merchant Marine Personnel (2-1-65). F.R. 2-13-65, 8-21-65, 3-17-66, 10-22-66, 12-6-66, 12-13-66.
200	Marine Investigation Regulations and Suspension and Revocation Proceedings (10-1-63). F.R. 11-5-64, 5-18-65.
220	Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels (4-1-57).
227	Laws Governing Marine Inspection (3-1-65).
239	Security of Vessels and Waterfront Facilities (7-1-64). F.R. 6-3-65, 7-10-65, 10-9-65, 10-13-65, 3-22-66, 7-30-66, 8-2-66.
249	Merchant Marine Council Public Hearing Agenda (Annually).
256	Rules and Regulations for Passenger Vessels (5-2-66), F.R. 12-6-66.
257	Rules and Regulations for Cargo and Miscellaneous Vessels (1-3-66). F.R. 4-16-66, 12-6-66.
258	Rules and Regulations for Uninspected Vessels (1-2-64). F.R. 6-5-64, 6-6-64, 9-1-64, 5-12-65, 8-18-65, 9-8-65, 12-6-66.
259	Electrical Engineering Regulations (7-1-64). F.R. 2-13-65, 9-8-65, 12-6-66, 12-31-66.
266	Rules and Regulations for Bulk Grain Cargoes (11-1-66).
268	Rules and Regulations for Manning of Vessels (2-1-63). F.R. 2-13-65, 8-21-65, 12-6-66.
270	Rules and Regulations for Marine Engineering Installations Contracted for Prior to July 1, 1935 (11-19-52). F.R. 12-5-53, 12-28-55, 6-20-59, 3-17-60, 9-8-65.
293	Miscellaneous Electrical Equipment List (4-1-66).
320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (10-1-59). F.R. 10-25-60, 11-3-61, 4-10-62, 4-24-63, 10-27-64, 8-9-66.
323	Rules and Regulations for Small Passenger Vessels (Under 100 Gross Tons) (1-3-66). F.R. 12-6-66.
329	Fire Fighting Manual for Tank Vessels (4-1-58).

### CHANGES PUBLISHED DURING NOVEMBER AND DECEMBER 1966

The following have been modified by Federal Registers:

CG-190, Federal Register, November 18, 1966.  
 CG-115, CG-123, CG-176, CG-191, CG-256, CG-257, CG-258, CG-259, CG-268, and CG-323, Federal Register, December 6, 1966.  
 Dangerous Cargo Regulations, Federal Register, December 10, 1966.  
 CG-191, Federal Register, December 13, 1966.  
 CG-259, Federal Register, December 31, 1966.

