PROCEEDINGS

OF THE MERCHANT MARINE COUNCIL

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Features

THE TURBINE WILL OUTLAST THE SHIP

RADAR PLOTTING AIDS

RENEWAL OF DECK OFFICERS' LICENSES

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BROTHER MARINUS, Order of St. Benedict, St. Paul's Abbey, Newton, N.J., the former Captain LaRue of the SS *Meredith Victory*, is seated below the Gallant Ship plaque during ceremonies held under the auspices of the Propeller Club of the United States held at the Port of Washington, D.C. Standing, left, is VADM Ralph E. Wilson, USN, (Ret.) and right, Frederick H. Mueller, Secretary of Commerce. (See story on page 194)

NATIONAL EXAMINATIONS FOR U.S. COAST GUARD ACADEMY

THE 85TH ANNUAL examination for admission to the U.S. Coast Guard Academy, at New London, Conn., will be held February 20 and 21 in 123 cities of the United States, its possessions, and selected cities abroad. Successful applicants will be admitted to a 4-year course of instruction at the Academy which has provided career officers for the regular Coast Guard since 1876.

Appointments to cadetships at the Academy are made solely on the basis of competitive examination and prospective adaptability to military life. There are no Congressional appointments or geographical quotas.

An applicant must be a high school senior or graduate, who has reached his 17th but not his 22d birthday on July 1, 1961. Applicants still in high school must graduate and earn 15 units by June 30, 1961. The units must include three in English, two in Algebra, and one in Plane Geometry. Applicants must be in excellent physical condition, between 64 and 78 inches in height, with proportionate weight, and have 20/30 vision in each eye, correctible to 20/20.

The Academy curriculum includes academic subjects and military training. Courses are conducted in engineering, the humanities, and subjects related to the professional duties of a Coast Guard officer.

During their training, cadets are paid $1333.80 per year.

Upon completion of training at the Academy cadets are commissioned as ensigns in the Coast Guard and awarded bachelor of science degrees.

Extracurricular activities include a variety of clubs and athletics. Coast Guard teams compete with many colleges in football, basketball, swimming, track, and other major sports.

Coast Guard cadets spend a portion of each summer at sea, training aboard the bark *Eagle* and major cutters. Past training cruises have taken the cadets to such interesting ports of call as Amsterdam, London, Copenhagen, Dublin, and Antwerp.

The Coast Guard is a military service and is one of the five Armed Forces. While history finds the Coast Guard fighting in all of our wars with many recorded deeds of valor, traditionally the service takes its greatest pride in peacetime activities. Law Enforcement, Aids to Navigation, Merchant Marine Safety, Boating Safety, Search and Rescue, Ocean Weather Stations, International Ice Patrol, and many other duties provide aid and comfort to people of all nations using the air or sea lanes. Its duties are truly humanitarian and it is the successful performance of their jobs that gives real satisfaction to Coast Guard men everywhere.

For the Academy graduate, training is available in such fields as business administration, communications, civil engineering, electronics, oceanography, law, naval construction, and marine engineering. Postgraduate courses are conducted at advanced military schools and leading universities and colleges throughout the country.

Aviation is of increasing importance to Coast Guard operations, calling for many young officers to enter this exciting branch of the Coast Guard's organization for disaster on the sea or land, during peace or war.

An information booklet and application forms for entering the Coast Guard Academy may be obtained by writing the Commandant (PTP–2) U.S. Coast Guard, Washington 25, D.C. The completed application forms must be returned by January 10, 1961.

THE TURBINE WILL OUTLAST THE SHIP

MAINTENANCE OF MARINE PROPULSION TURBINES

By G. A. Sanborn

The initial reliability of a marine propulsion turbine is generally accepted, but continued reliability is dependent upon regular planned maintenance, according to Mr. G. A. Sanborn, Manager, Production Engineering of the General Electric Co., in a paper presented to the Northern California Section of the Society of Naval Architects and Marine Engineers. Mr. Sanborn, in his paper which follows, describes the several factors necessary to maintain propulsion equipment "ready for sea." ED.

OIL SYSTEMS

OIL SYSTEMS for propulsion turbines may have the highest quality oil and the best of equipment obtainable and still not do a proper job unless the oil is kept in proper condition. Dirty oil or oil that has lost its lubricating properties is a hazard to good operation. The following is a partial list of direct failures that can be expected with dirty or tired oil.

1. Scored journals.
2. Journal bearing failure.
3. Thrust bearing failure.
4. Malfunctioning of overspeed protection system.
5. Excessive vibration.

These items in themselves do not compare in value with the contributory losses that may occur.

Journal bearing failures can cause scored journals, loss of oil deflectors, and may cause excessive vibration.

Loss of thrust bearings may cause bucket damage, diaphragm damage, packing damage.

Malfunctioning of the overspeed system may cause loss of life as well as total loss of the turbine.

Excessive vibration can cause loss of journal bearings, oil deflectors, steam packing and rupture of oil lines.

It is imperative that the lubricating system be maintained continually with good clean oil.

STEAM SYSTEMS

Reliable operating propulsion turbines require that the steam system also be kept as clean as possible. Salt or other solids in the steam will cause rapid deterioration of the internal parts of the turbines. Most turbine buckets and diaphragm blades are made of a stainless material which will give long life if given proper care. This material, however, is highly susceptible to salt corrosion, especially in the dry steam region of the turbine. Salt particles which are deposited on the buckets and diaphragm blades will not attack them unless moisture is present. This takes place usually during periods when the turbines are secured. If they have not been properly dried out by running the air ejectors for a short period of time after shutdown, then the remaining moisture will form concentrated salt solutions on the parts and result in rapid corrosion. If it is known that salt has contaminated the steam system, steps should be taken to wash the unit with hot water to remove it as soon as possible.

Other solids should be removed by feed-water treatment. These solids, if allowed to remain in the steam, will deposit on the turbine parts and may cause excessive vibration and plugging of the steam path. This plugging, if allowed to continue, will close up the steam passages and increase the loading on the thrust bearing, possibly to the point of failure. If the solids are water soluble, they can be removed by washing, but if they are insoluble it will be necessary to chip off the deposits or remove the rotor from the ship for grit blasting. Keeping the steam clean and taking immediate action if it becomes contaminated will reduce maintenance costs greatly.

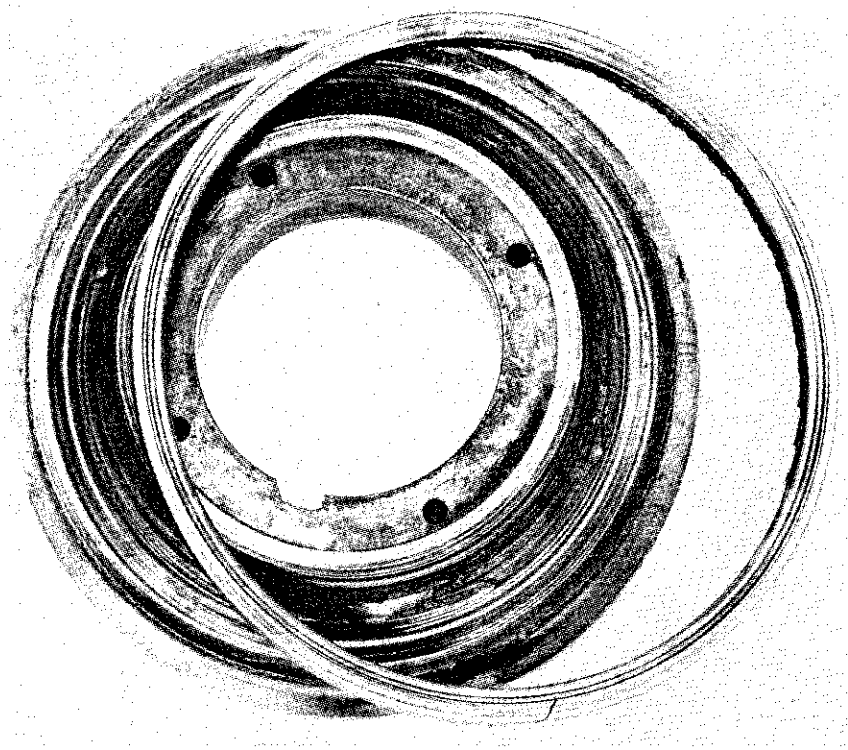


FIGURE 1. Thrust collar for L.P. turbine damage caused by lubrication failure.

VIBRATION

Excessive vibration in propulsion turbines is detrimental to the unit and should be corrected as soon as possible. Some of the common causes of excessive vibration are alignment, bent or bowed shafts, failure of associated equipment such as bearings, worn couplings, and unbalance.

Bowed shafts are usually caused by uneven heating of rotor. Failure to rotate rotor or turning gear when steam seal has been applied during preparation for starting is one of the most common reasons for a bowed shaft. Always place unit on turning gear before applying steam seal. Packing rubs during warmup period can also cause a bowed shaft. Continued operation of rotor in a bowed

state will probably aggravate the condition as the bowed side of rotor will rub against packings which will generate more local heating of the rotor and increase the bow in it. Placing unit on turning gear for a short period of time will usually overcome this condition.

Worn couplings are a very common source of rotor vibration. They should be checked periodically to see that the teeth are not galled and that radial clearances are within manufacturers normal limits.

Broken babbitt in bearings, especially on the aft end of the turbine, can very often be caused by a worn or unbalanced coupling.

Replacements of parts or whole couplings should be carefully balanced both statically and dynamically before installation to minimize any unbalance and then carefully checked under operating conditions.

Unbalance of the turbine rotor itself can also cause excessive vibration. This can be caused by uneven buildup of solids on the rotor or by failure of a bucket or shroud band. This most commonly blamed cause of vibration is extremely unlikely because of the careful design and precision manufacture of the rotors. However, they should always be carefully inspected and magnafluxed each time the turbine is opened for inspection.

MONITORING THE TURBINE

Monitoring the turbine can in many cases indicate impending trouble before it has reached the stage of expensive maintenance or has caused an unscheduled outage. Each time the turbines are reconditioned into a "good as new condition," a complete set of readings of all operating instruments should be made and recorded. This information should consist of at least the following items.

a. Propeller RPM.
b. Inlet pressure and temperature.
c. Condenser pressure.
d. Barometer.
e. Pressure at all heater openings.
f. Cross over pressure.
g. First-stage pressure.
h. Hand valves open.
i. Inlet oil temperature.
j. Bearing discharge oil temperature.
k. Number of heaters in service.
i. Date.

The data should be taken for as many speed and hand valve positions as are convenient. At periodic intervals (monthly or at least quarterly), duplicate data should be taken and compared with the original. Any variations in the readings will indicate that deterioration is taking place. The turbine manufacturer can analyze the data and usually indicate what the trouble may be. Any variations of 10 percent or more in any of the readings is a signal for immediate action as further operation will very likely cause extensive damage to the equipment.

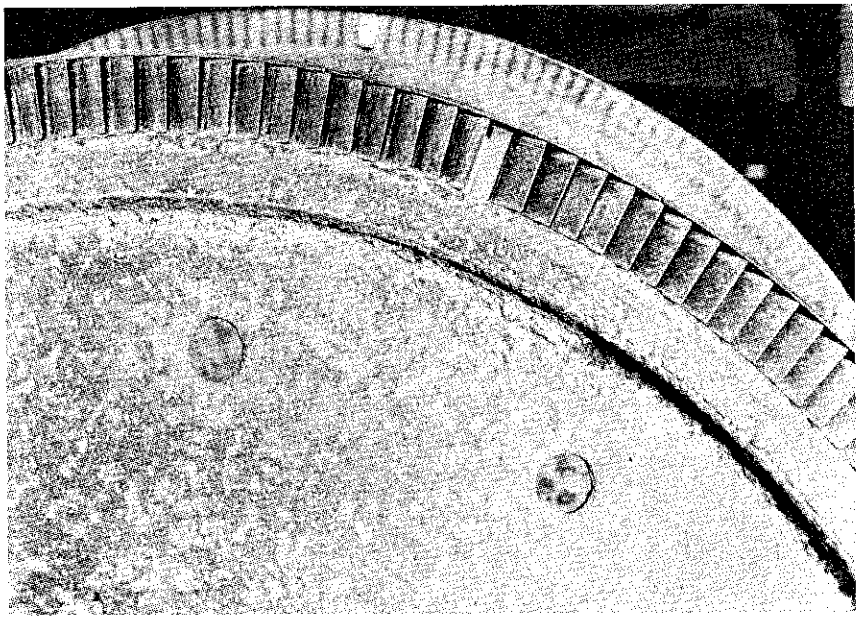


FIGURE 2. Turbine wheel severely pitted from salt corrosion.

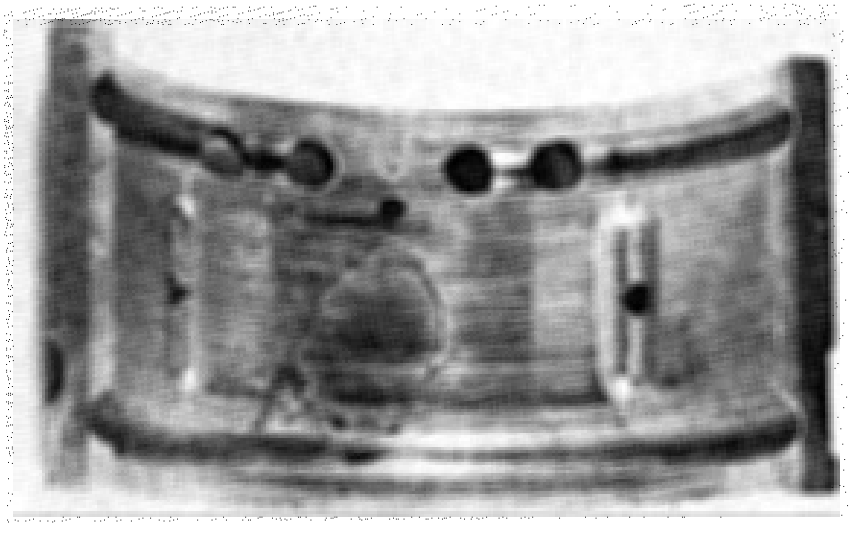
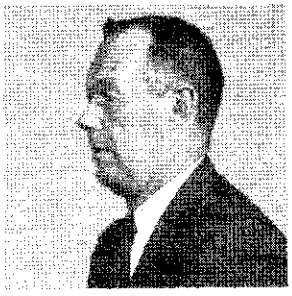


FIGURE 3. Journal bearing for H.P. turbine damage caused by excessive rotor vibration.

ABOUT THE AUTHOR



MR. GEORGE A. SANBORN graduated with a B.S. Degree in Mechanical Engineering from Worcester (Mass.) Polytechnic Institute in 1936 when he joined the General Electric Co. During World War II he was supervisor in Turbine Testing Division which produced cargo ship turbines and gears and Navy Turbine-Generator sets. For the past five years he has been the Manager of Production Engineering in the Medium Steam Turbine Gear and Generator Department.

MAINTENANCE SCHEDULING

Satisfactory operation of marine propulsion turbines cannot be expected unless they are kept in good condition. Time and sustained operation will gradually cause wearing of some parts, increased fuel consumption and corrosion of parts. The best way to reduce the effects of these things is a well-planned maintenance schedule. The following suggestions are the minimum scheduled inspections that should be followed by all owners of marine propulsion turbines.

EVERY FOUR YEARS MAXIMUM

1. Open turbine casings.
   (a) Remove rotors.
      1. Magnaflux completely.
      2. Clean if necessary.
      3. Replace parts recommended at previous inspections.
      4. Check journals and refinish if necessary.
      5. Check thrust collar and refinish if necessary.
      6. Inspect coupling sleeve and replace if necessary.
   (b) Remove diaphragms.
      1. Clean and inspect.
      2. Examine steam joints and repair if necessary.
   (c) Inspect casings.
      1. Check steam joints and repair if necessary.
      2. Make sure all drain orifices are open.
      3. Repair areas of erosion in LP turbine.
      4. Clean all areas of casing and bearing brackets.
   (d) Inspect.
      1. Bearings—replace if necessary.
      2. Oil deflectors—if clearance is excessive, replace.
      3. Packings—if clearances are excessive, replace.
      4. Thrust—if scored or worn, replace.
   (e) Replace diaphragms and rotor.
      1. Check clearances.
         a. Bearings.
         b. Thrust.
         c. Packing (axial and radial).
         d. Nozzle to bucket bands.
   (f) Inspect and correct valves and valve seats if necessary.
      1. Renew soft packing.
      2. Dismantle and inspect maneuvering valve and safety devices where necessary.
      3. Dismantle, clean and inspect the steam seal regulator, correct valve where indicated.
      4. Dismantle and inspect all nonreturn valves, guard valves, and shutoff valves, and correct where indicated.

EVERY YEAR MAXIMUM

1. Inspect all bearings and journals.
2. Inspect all end packings.
3. Inspect last-stage buckets of LP turbine and casing for erosion. Check to see that moisture removal orifices are open.

EVERY STARTUP OR AT LEAST WEEKLY

1. Check overspeed mechanism to see that it functions properly.

Marine propulsion turbines are well designed and built for years of trouble-free service if properly maintained.

RADAR PLOTTING AIDS

By Howard L. Peterson, Jr.

RADAR PLOTTING is the title of the article featured on the reverse side of both North Atlantic and North Pacific Pilot Charts for November 1960. The article consists primarily of extracts from a new Hydrographic Office manual. This manual, H.O. Pub. No. 257—*Radar Plotting Manual*, is now available from sales agents of the Hydrographic Office. The price of the manual is 35 cents. The manual serves a twofold purpose; it is a treatise on radar plotting and collision prevention. It also explains the new Radar Plotting Sheets, developed by the Hydrographic Office.

RADAR PLOTTING MANUAL

A significant section of the manual, which could not be included on the pilot charts, contains a review of the many aspects of collision prevention. Practice plotting problems which should be of assistance to a deck officer are also included.

The more than 30 problems are divided into three groups, each group following a particular part of the discussion of radar plotting. The first group is concerned primarily with determining time and distance off at the closest point of approach (CPA). The second group stresses construction of a speed triangle to determine course and speed of the other ship. The third group of problems offers additional factors such as speed changes or course alterations by either own ship or other ship.

The opinions or assertions in this paper are the private ones of the author and are not to be construed as official, or reflecting the views of the Department of Defense, the Navy Department, the Coast Guard, or the naval service at large.

The problems were carefully selected to provide practice in use of all of the standard radar range settings. Speeds of the ships involved range from as low as 5 knots to more than 20 knots. A ship encounters all possible situations—meeting, crossing, overtaking, and overtaken. Answers to all problems are given. By solving all practice problems, any person can obtain an excellent grasp of the usual situations encountered.

Direct plotting on the radar scope is considered as an alternative solution to a separate plot on paper. Several distance triangle methods are both illustrated and discussed.

The manual includes a convenient listing of the contents and a bibliography of recent publications on radar plotting. Also included are several illustrations of the various plotting aids.

All illustrations are full page width, and those illustrations drawn on a Radar Plotting Sheet include all the scales. This makes it easy for the reader to follow the step-by-step directions outlined in the text.

ADVANTAGES OF NEW PLOTTING SHEETS

The H.O. 4665 series of Radar Plotting Sheets were designed for use by merchant mariners. Since they are intended for one single purpose only—radar plotting—these plotting sheets offer many distinct advantages.

1. Radar Plotting Sheets may be used with any radar set having a dis-

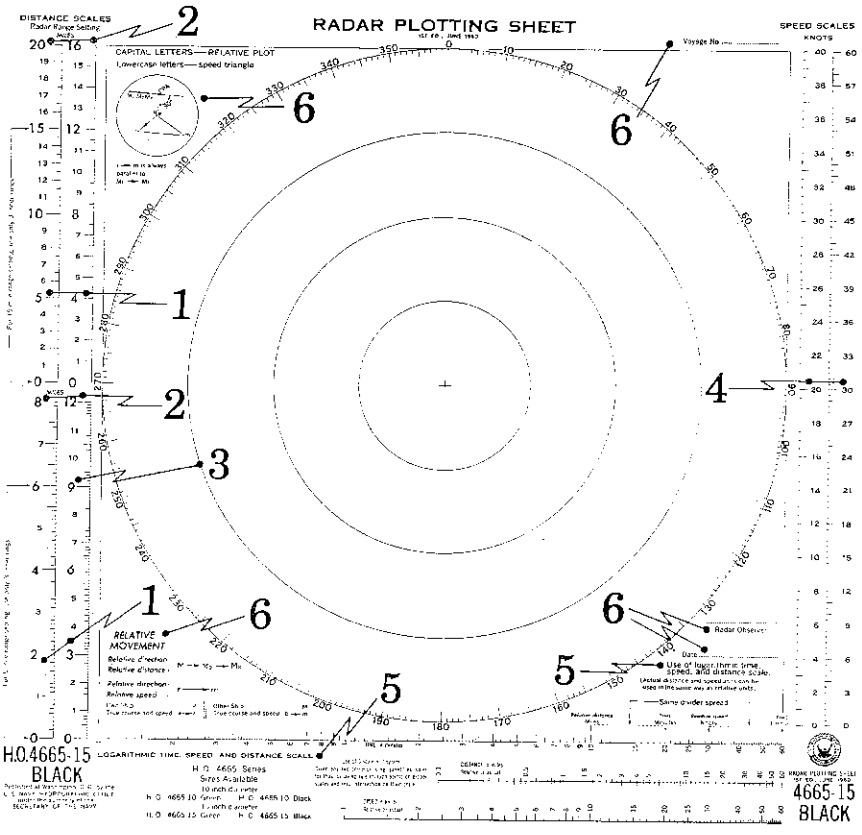
tance interval of either 2, 3, 4, or 5 miles between range rings. These whole-mile distance intervals are found on nearly all commercial American-made radar sets and on many radar sets made outside the U.S.A.

2. All plotting of contacts seen on these radar sets is at a 1:1 scale. On the plotting sheet, the distance from the center to each successive concentric circle is always equal to the distance from the center of the radar scope to the successive range rings on the scope.

3. Quick check of the graphic plot against the radar scope is simple and easy because the contacts must appear in the same position relative to the range rings and relative to each other. A contact on the third radar range ring must plot on the third concentric circle of the Radar Plotting Sheet. If it does not, the contact is plotted incorrectly.

4. Speed triangle is simplified. If own ship's speed is 20 knots or less, the 40-knot speed scale is nearly always suitable. If own ship's speed is greater than 20 knots, the 60-knot speed scale should be used. When using the 40-knot speed scale for own ship's speed of 20 knots or less, occasionally the other ship's course-speed line (*em*) may extend outside the compass rose. This indicates the other ship's speed is greater than 20 knots, but its speed should still be measured on the same 40-knot scale used for own ship's course-speed line (*er*).

5. The logarithmic Time, Speed, and Distance Scale is designed for radar plotting. The right-hand time limit is 60 minutes (1 hour); therefore, the distance traveled in 60 minutes automatically equals the speed in knots. The lower right-hand corner of the plotting sheet shows an example of the use of dividers with this scale.



6. Additional features. The upper left-hand corner shows a typical relative plot and the accompanying speed triangle. The labels used for the relative plot and speed triangle are explained fully in the lower left-hand corner.

For identification purposes, suitable spaces are provided for entering Voyage No., Date, and initials of the Radar Observer. If the need ever developed, these entries together with the data usually found on a completed plot should be adequate to reconstruct the entire plot.

A completed Radar Plotting Sheet should indicate the radar range setting in use and the speed scale chosen. Although bearing and range of contacts could then be obtained easily from plotted positions of the contact, the radar observer should be careful to indicate the *time* alongside each position plotted. The relative speed and direction of relative movement are also found easily from the completed relative plot.

The first speed triangle drawn identifies own ship's initial course and speed as well as the other ship's course and speed. If drawn, successive speed triangles would indicate changes from the original situation.

EXPERIMENTAL VERSION AIDED DEVELOPMENT

Critical observers will note many similarities between the H.O. 4665 series of Radar Plotting Sheets and the experimental Radar Plotting Sheet, H.O. 2665b, issued as a supplement to the October 1959 Pilot Charts. The many questionnaires returned from this Pilot Chart supplement indicated a desire for both 10-inch and 15-inch diameters. A considerable number of the questionnaires also indicated a preference for a plotting sheet printed in black.

The Hydrographic Office, in keeping with its tradition of serving the needs of the mariner, has made the H.O. 4665 series of Radar Plotting Sheets available in either 10-inch or 15-inch diameter sizes. Both small and large sizes are printed in black or printed in green. They are distributed only in pads of 50 sheets each. Included with each pad is a buff-colored instruction sheet.

The availability of these low-priced plotting sheets should facilitate plotting not only to acquire necessary information, but for practice as well.

ABOUT THE AUTHOR

HOWARD L. PETERSON, Jr., received a Bachelor of Science degree from Kings Point, the U.S. Merchant Marine Academy, graduating number one in his class. He holds a U.S. Coast Guard license as Master Mariner, unlimited.

During eight years as a Navigational Scientist at the U.S. Navy Hydrographic Office, he has participated in preparation of several publications, including H.O. Pub. No. 220, *Navigation Dictionary*, and the new *Radar Plotting Manual*, H.O. Pub. No. 257.

For the 1958 edition of Bowditch, he designed the new Table 3 and designed and compiled Appendix S, Maritime Positions. Since coming ashore again, in 1957, he has been concerned primarily with radar plotting. He is the originator and developer of H.O. 2665b, the experimental Radar Plotting Sheet. He is now assisting in revision of H.O. Pub. No. 217, Maneuvering Board Manual.

RENEWAL OF DECK OFFICERS' LICENSES

ITEM XII on the agenda of the Merchant Marine Council Public Hearing of April 4, 1960, contained a proposal to amplify the requirements of 46 CFR 10.02–9 for renewal of deck officers' licenses. The proposal was initiated by the Coast Guard in response to a clearly recognized need for a regulation which would oblige all deck officers to remain familiar with the Rules of the Road applicable to the waters for which they are licensed. Careful consideration has been given to all the oral and written comments received concerning the proposal. These comments were welcomed and contained constructive criticisms, suggestions, and views which resulted in the Merchant Marine Council making significant modifications to the original proposal. The final outcome of the proposal is explained in Navigation and Vessel Inspection Circular No. 7–60. The license renewal regulations as amended appear in that circular, in this article, and in the Federal Register, Volume 25, No. 187, of September 24, 1960. The amendments to the regulations will become effective January 1, 1961.

Navigation and Vessel Inspection Circular No. 7–60 has been distributed to the maritime industry and to the Coast Guard Marine Inspection Offices. Additional copies of the circular have been furnished to the Marine Inspection Offices for use during license renewals and for distribution upon request. Copies of the circular may also be obtained upon request from the Commandant (CHS), U.S. Coast Guard, Washington 25, D.C.

PROFESSIONAL EXAMINATION FOR RENEWAL

A deck officer who has not served under the authority of his license during the 3 years next preceding the date of application for renewal, or who has not been employed in a position closely related to the operation of vessels during the same 3-year period, is given a professional *examination* to determine that he is thoroughly familiar with the Rules of the Road applicable to the waters for which he is licensed. A deck or engineer officer who applies for renewal of his license after 12 months after the date of its expiration is given a professional *examination* for the same grade of license, of such length and scope as will, in the judgment of the Officer in Charge, Marine Inspection, be sufficient to demonstrate adequately the continued professional knowledge of the examinee. Such examinations in the cases of officers not actively engaged in their profession have been in effect for many years and will not be discussed in this article.

DEMONSTRATION OF KNOWLEDGE OF THE RULES OF THE ROAD BY OFFICERS ACTIVELY ENGAGED IN THEIR PROFESSION

A deck officer who has served under the authority of his license during the 3 years next preceding the date of application for renewal, or who has been employed in a position closely related to the operation of vessels during the same 3-year period, must, beginning January 1, 1961, submit an affidavit that he has read within the 3 months preceding the date of application for renewal the Rules of the Road applicable to the waters for which he is licensed and demonstrate his knowledge of the application of such Rules of the Road.

AN EXERCISE, NOT AN EXAMINATION

The procedure whereby deck officers actively engaged in their profession will answer questions to demonstrate their knowledge of the application of the Rules of the Road is an exercise, not an examination. The Rule or Rules of the Road which apply are shown by each question, and deck officers may refer to the Rules of the Road in answering the questions. This procedure will not be used to create hardships or discriminate against the officers at times of license renewals. It is educational in principle and is designed to encourage all deck officers to remain thoroughly familiar with the Rules of the Road applicable to the waters for which they are licensed. The procedure is more completely outlined below:

1. Each deck officer will answer multiple-choice-type questions on the Rules of the Road applicable to the waters for which he is licensed. For example, an officer who holds a license as First Class Pilot upon the Mississippi River between Baton Rouge, Louisiana, and St. Louis, Missouri, will answer a set of questions on the Western Rivers Rules. Similarly, an officer who holds a license as Master of ocean steam or motor vessels of any gross tons will answer a set of questions on the International Rules and a set of questions on the Inland Rules.

2. Multiple-choice-type questions on the practical application of the International, Inland, Great Lakes, and Western Rivers Rules of the Road are attached to Navigation and Vessel Inspection Circular 7–60, and will be reprinted in the PROCEEDINGS in forthcoming months. These are the sets of questions which deck officers will answer; no questions other than those attached to this or forthcoming circulars will be used. Over a period of time additional sets will be prepared, and changes to the Rules of the Road will require revisions of existing sets. However, no questions will be put into use without first being published in a Navigation and Vessel Inspection Circular.

3. Deck officers may refer to the Rules of the Road when answering the questions. There is no minimum passing grade, but each question must be answered correctly prior to renewal of license. In the event an officer submits incorrect answers to some of the questions, he will immediately be personally advised of the questions incorrectly answered and may correct his answers at that time. Every effort will be made to keep the time required for demonstration of knowledge of the Rules of the Road at a minimum.

RENEWAL BY MAIL

A deck or engineer officer who must pass an examination for renewal of license cannot renew his license by mail. Other officers, who would be put to great inconvenience or expense to appear in person at a Marine Inspection Office or who are engaged in a service that necessitates their continued absence from the United States, may renew their licenses by mail as in the past. The Officer in Charge, Marine Inspection, will furnish, along with other renewal forms, the questions a deck officer must answer on the Rules of the Road applicable to the waters for which he is licensed. In every such case of renewal by mail, the deck officer must certify to the effect that the answers to the questions are his own.

RENEWAL PERIOD

In the past, a deck or engineer officer's license could be renewed, except in extraordinary circumstances, not more than 30 days prior to the date of expiration. This 30-day period has been changed to 90 days.

SERVICE UNDER THE AUTHORITY OF LICENSE

The phrase "served under the authority of his license" as it appears in 46 CFR 10.02–9 (e)(1) and (e)(2) is a substitution for the phrase "employed on the waters for which he is licensed." This substitution was made to eliminate a misconception apparently widespread as evidenced

by the comments of deck officers who attended the Merchant Marine Council Public Hearing of April 4, 1960, that the latter phrase requires recent service, during the 3 years next preceding date of application for renewal, on *all* waters for which an applicant is licensed. If a deck officer has served under the authority of his license on only a part of the waters for which he is licensed, he meets the intent of the phrase "served under the authority of his license." Thus, a pilot, for example, who holds a license covering extensive routes will not be *examined* in the Rules of the Road simply because he has not recently served on all the waters for which he is licensed.

EMPLOYMENT IN A POSITION CLOSELY RELATED TO THE OPERATION OF VESSELS

Evidence of certain shoreside employment is accepted for meeting the intent, in 46 CFR 10.02–9 (e)(1) and (e)(2), of the phrase "employed in a position closely related to the operation of vessels." Service in an unlicensed capacity in the deck department of a vessel also meets the intent of the phrase. Similarly, service as deck officer on an inland diesel tug would be acceptable.

The following is the complete text of 46 CFR 10.02–9 as it appears in the Federal Register of September 24, 1960.

10.02–9 Requirements for renewal of license

10.02–9(a) Duty of applicants. Applicants for renewals of licenses are charged with the duty of establishing to the satisfaction of the Coast Guard that they possess all of the qualifications necessary before they shall be issued a renewal of license.

10.02–9(a)(1) Written application. The Officer in Charge, Marine Inspection, shall, before granting renewal of a license, require the applicant to make written application on Coast Guard Form CG–3479.

10.02–9(b) Application for renewal. The applicant for renewal shall appear in person before an Officer in Charge, Marine Inspection, except as provided in paragraph 10.02–9(g).

10.02–9(c) Fitness. No license shall be renewed if title has been forfeited or facts which would render a renewal improper have come to the attention of the Coast Guard.

10.02–9(d) Period of grace.

10.02–9(d)(1) A license shall be renewed within 12 months after the date of expiration as shown on the license held, except when an applicant's license has expired beyond the 12 month period of grace during the time of the holder's service with the Armed Forces or the Merchant Marine and there was no reasonable opportunity for renewal. The period of such service following the date of expiration as shown on the license shall be added to the 12 month period of grace.

10.02–9(d)(2) No license shall be renewed more than 90 days in advance of the date of expiration thereof, unless there are extraordinary circumstances that justify a renewal beforehand, in which case the reasons therefore must appear in detail upon the records of the Officer in Charge, Marine Inspection, renewing the license.

10.02–9(e) Masters', mates', or pilots' licenses.

10.02–9(e)(1) Every Officer in Charge, Marine Inspection, shall, before renewing an existing license to a master, mate, or pilot who has served under the authority of his license within the three years next preceding the date of application for renewal, or who has been employed in a position closely related to the operation of vessels during the same three year period, require that such licensed officer present an affidavit that he has read within the three months next preceding the date of application the Rules of the Road applicable to the waters for which he is licensed and demonstrate his knowledge of the application of the Rules of the Road.

10.02–9(e)(2) Every Officer in Charge, Marine Inspection, shall, before renewing an existing license to a master, mate, or pilot who has not served under the authority of his license within the three years next preceding the date of application for renewal, or who has not been employed in a position closely related to the operation of vessels during the same three year period, satisfy himself that such licensed officer is thoroughly familiar with the Rules of the Road applicable to the waters for which he is licensed. A written examination may be required for this purpose, or the applicant may be examined orally and a summary of the oral examination placed in the officer's license file.

10.02–9(f) Physical requirements.

10.02–9(f)(1) No license as master, mate, or pilot shall be renewed except upon the official certificate of a medical officer of the United States Public Health Service that the color sense of the applicant is normal. Applicants for renewal of license as engineer shall not be subject to examination as to ability to distinguish colors.

10.02–9(f)(2) The test for color vision shall be by means of the "Stillings" test, or failing that, by means of the "Williams" lantern test. A person failing the "Stillings" test and wishing to qualify by the lantern test shall, if the Public Health Station at which he is undergoing test is not equipped with a lantern, pay his own expenses to journey to such station as is equipped with same.

10.02–9(f)(3) In the event an applicant for renewal of license as master, mate, or pilot is pronounced color blind, the Officer in Charge, Marine Inspection, may grant him a license limited to service during daylight only.

10.02–9(f)(4) In the event it is found that an applicant for renewal of license obviously suffers from some physical or mental infirmity to a degree that, in the opinion of the Officer in Charge, Marine Inspection, would render him incompetent to perform the ordinary duties of an officer at sea, the applicant shall be required to undergo an examination by a medical officer of the Public Health Service to determine his competency. If the applicant subsequently produces a certificate from the Public Health Service to the effect that his condition has improved to a satisfactory degree, or is normal, he shall be qualified in this respect.

10.02–9(f)(5) Nothing herein contained shall debar an applicant who has lost the sight of one eye from securing a renewal of his license, provided he is qualified in all other respects, and the vision in his one eye passes the test required for the better eye of an applicant possessed of both eyes.

10.02–9(f)(6) In exceptional cases where an applicant would be put to great inconvenience or expense to appear before a medical officer of the United States Public Health Service, the physical examination or certification may be made by another reputable physician.

10.02–9(g) Renewal by mail. Where an applicant for renewal would be put to great inconvenience or expense to appear in person before an Officer in Charge, Marine Inspection, or is engaged in a service that necessitates his continuous absence from the United States, his existing license may be renewed by forwarding the following documents to the Officer in Charge, Marine Inspection, of the office which issued the license to be renewed:

10.02–9(g)(1) A letter of transmittal indicating reasons for not appearing in person and stating to the best of his knowledge no physical incapacity exists, together with a properly executed application on Coast Guard Form CG–3479;

10.02–9(g)(2) The oath of office on the form prescribed by the

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Coast Guard which has been duly executed before a person authorized to administer oaths;

10.02–9(g)(3) The license to be renewed; and,

10.02–9(g)(4) In the case of the renewal of a master's, mate's, or pilot's license:

10.09–9(g)(4)(i) Certification by a United States Public Health Service Medical Officer or other reputable physician that color sense is normal; and,

10.02–9(g)(4)(ii) Documentary evidence of service under authority of license within the three years next preceding the date of application or evidence of employment in a position closely related to the operation of vessels within the same three year period, together with an affidavit that the applicant has read within the three months next preceding the date of application the Rules of the Road applicable to the waters for which he is licensed and demonstration of his knowledge of the application of the Rules of the Road.

10.02–9(h) Reissue of expired license.

10.02–9(h)(1) Whenever an applicant shall apply for renewal of his license for the same grade, after 12 months after date of its expiration, he shall be required to pass an examination for the same grade of license, of such length and scope as will, in the judgment of the Officer in Charge, Marine Inspection, be sufficient to demonstrate adequately the continued professional knowledge of the examinee, except no professional examination will be required provided the license expired during the time of the holder's service with the armed forces or the merchant marine, and there was no reasonable opportunity for renewal. The Office in Charge, Marine Inspection may require a written examination for this purpose.

10.02–9(h)(2) The renewed license shall receive the next higher number of issue of present grade and for the number of issue of all grades.

THE GALLANT SHIP AWARD

The SS *Meredith Victory* was awarded a Gallant Ship plaque, her former Master the Meritorious Service medal, and unit citations and ribbons given to the Master, officers and crew at recent ceremonnies in Washington, D.C.

The ceremonies were the result of an Act of Congress signed by President Eisenhower, honoring the vessel, officers and crew for what was described as "the greatest rescue operation by a single ship in the history of mankind." The feat which occurred during the Korean conflict has been reported in previous issues of the PROCEEDINGS.

In presenting the award, VADM Ralph E. Wilson, USN (Ret.), Chairman, Federal Maritime Board, and Maritime Administrator, U.S. Department of Commerce, stated: "It shall be duly recorded that the courage, resourcefulness, sound seamanship, and teamwork of each member of this famous crew resulted in the successful completion of one of the greatest maritime rescues in the history of the world." The rescue referred to was the evacuation by the *Meredith Victory* of 14,000 Korean Nationals from the Port of Hungnam.

Following is a list of the crew at the time of evacuation in addition to Capt. Leonard P. LaRue, Master, and Mr. James R. Lunney, Staff Officer:

● DECK DEPARTMENT
Dino S. Savastio
Albert W. Golembeski
Alvar G. Franzon
Henry J. B. Smith
Nathaniel T. Green, Jr.
Elmer B. Osmund
William R. Jarrett
Patrick H. McDonald
Charles L. Harris
Kenneth E. Jones
Noel R. Wilson
Lonnie G. Hunter
Richard L. Coley
Leon A. Katrobos
Ismmal B. Tang

● ENGINE DEPARTMENT
John P. Brady
George E. Hirsimaki
Harding H. Petersen
Nile H. Noble
James A. Kelsey
Alfred W. Kaufhold
Merl Smith
Morall B. Harper
Sidney E. Deel
Charles C. Crockett
Steve Xenos
Lawrence Hamaker, Jr.
Joseph A. Horton
Louis A. Sullivan
Lee Green
Vernice Newsome
Andres Diaz
Joseph Blessett

● STEWARDS DEPARTMENT
Major M. Fuller
Herbert W. Lynch
Wong T. Win
Willie Newell
Adrian L. McGregor
Johnnie Pritchard
Edgar L. Hardon
Robert H. Clarke
Leon L. Hayes, Jr.
Ernest Wingrove
Ira D. Murphy
Mack Perkins

SAFETY, THE GREASE OF LIFE

By Robert J. Pease, Chief Mate, SS *Cotton State*

The Following Article Won Honorable Mention in *States Marine Lines* Safety Contest and Contains Some Healthy Reminders for Safety

An electric motor will run trouble free for a long time. Occasionally a brush will wear out or an armature will require refinishing, but this normal wear can be expected. With normal maintenance, the life of the armature and brushes can be lengthened considerably. With regular frequent greasing, using a good grade of grease, bearings will last for the life of the motor. However, if no system of regular inspection and maintenance is put into effect this motor can and will break down long before it should.

Perhaps you are wondering what this has to do with human beings and with Safety. Well, put yourself in the position of this electrical motor. You can go quite a while without sickness, ulcers, bad teeth, boils, or injuries. These are prevented by exercising a system of regular inspection and maintenance, i.e., cleanliness, proper clothing for the weather, routine physicals, prompt care for minor illness, and, above all, practicing Safety continually. By doing this your "armature" will be kept clean and smooth; your "brushes" will give no trouble; your "motor" or body will run for its expected life without breaking down.

Good health habits can and do help prevent illness; can and do prevent minor complaints from developing into major and serious illnesses. Good Safety habits can and do prevent injuries. Good health habits are really good Safety habits, for anything that will help prevent illness or injury can be viewed in this way. Safe working habits used continually will prevent injuries and can be likened to regular greasing with a good grade of grease. All good Safety habits are worthwhile, take very little time and effort, and will pay off if followed all the time.

Remember, with Safety practiced everyday, in your work and in your play, your motor will run trouble free for a long, long time. Without Safety in your work, in your everyday routine, without regular inspections or examinations, without taking good care of your body, the result can be, as in the case of the electric motor, your ceasing to run. This breaking down can be, again as in the case of the electric motor, a shocking experience.

Courtesy *Safety Bulletin*, States Marine Lines

OIL POLLUTION PANEL
MERCHANT MARINE COUNCIL
UNITED STATES COAST GUARD
WASHINGTON 25, D. C.

To: The Crews of U. S. Merchant Vessels

Gentlemen:

In 1955, as a result of Resolution No. 8 of the International Conference of Pollution of the Sea by Oil, the United Nations sent a questionnaire to the various countries of the world. This questionnaire was designed to gain technical information about oily residues and the results of research on the problem of oil pollution. The USCG Oil Pollution Panel participated in the development and analysis of the required information on slop oil handling facilities throughout this country. In January of 1956, the U. S. formally replied to the U. N. questionnaire.

Through the Department of State, the Coast Guard recently has received a U. N. questionnaire designed to bring up to date the information developed as a result of the 1955 questionnaire. The Coast Guard has asked the Panel to once again undertake the job of reviewing slop oil handling facilities and other efforts toward pollution abatement. Work is presently underway toward this end. We felt this would be interesting to you as an example of other tacks taken by the Panel in its anti-pollution campaign.

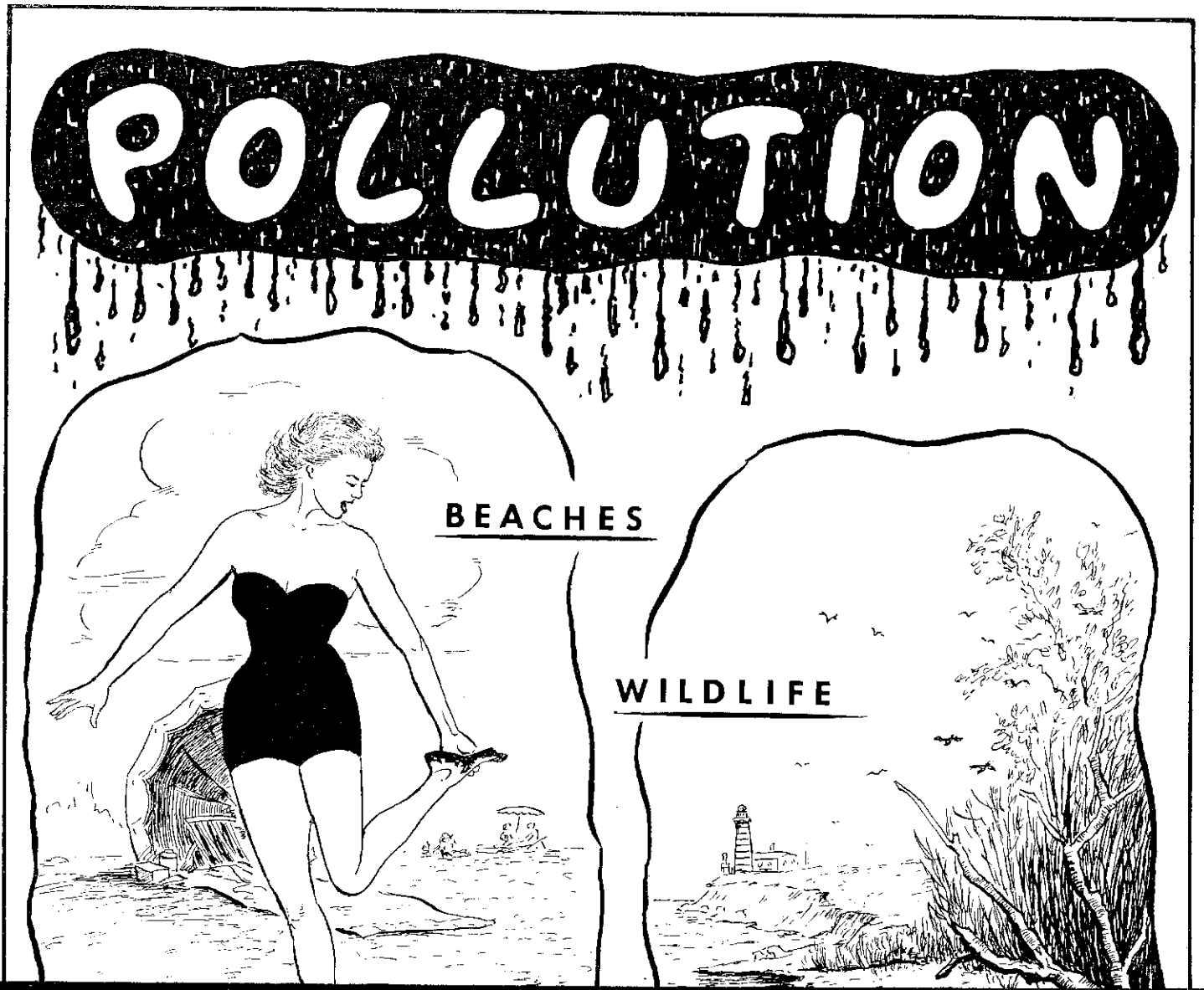
We hope that you enjoyed the pollution poster in the August issue of the PROCEEDINGS. The Panel is indebted to the fine work of A. E. Merrikin, a radio officer with Texaco, Inc., who originated and drew the fine poster. These posters have proven to be an effective tool in the fight against pollution and requests for permission to reproduce them have been received from overseas.

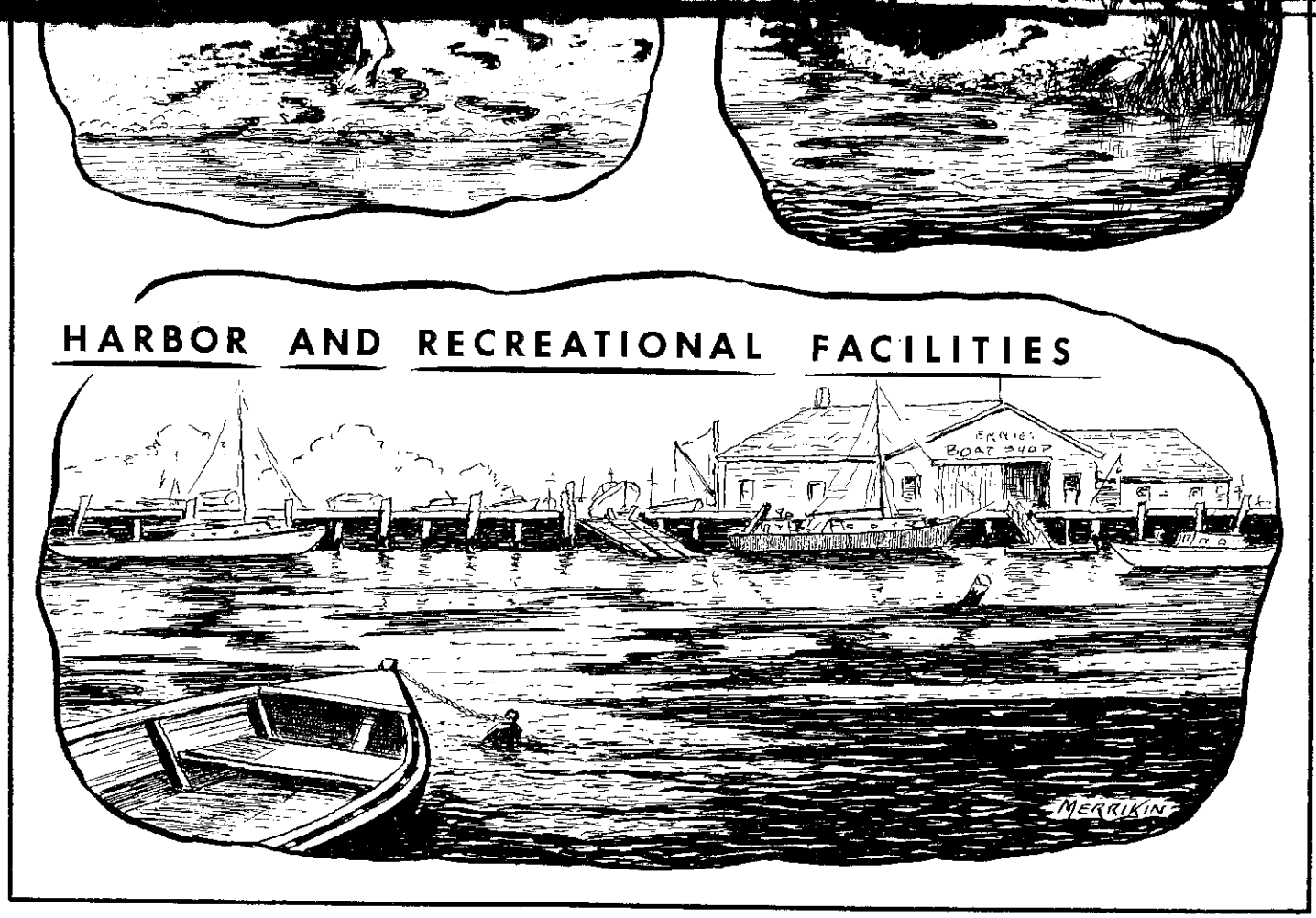
You will find on the next page another poster, which we hope will be placed on the bulletin board of each ship as a constant reminder of the need for vigilance when handling oil and oily water.

Yours very truly,

R. E. Mackey

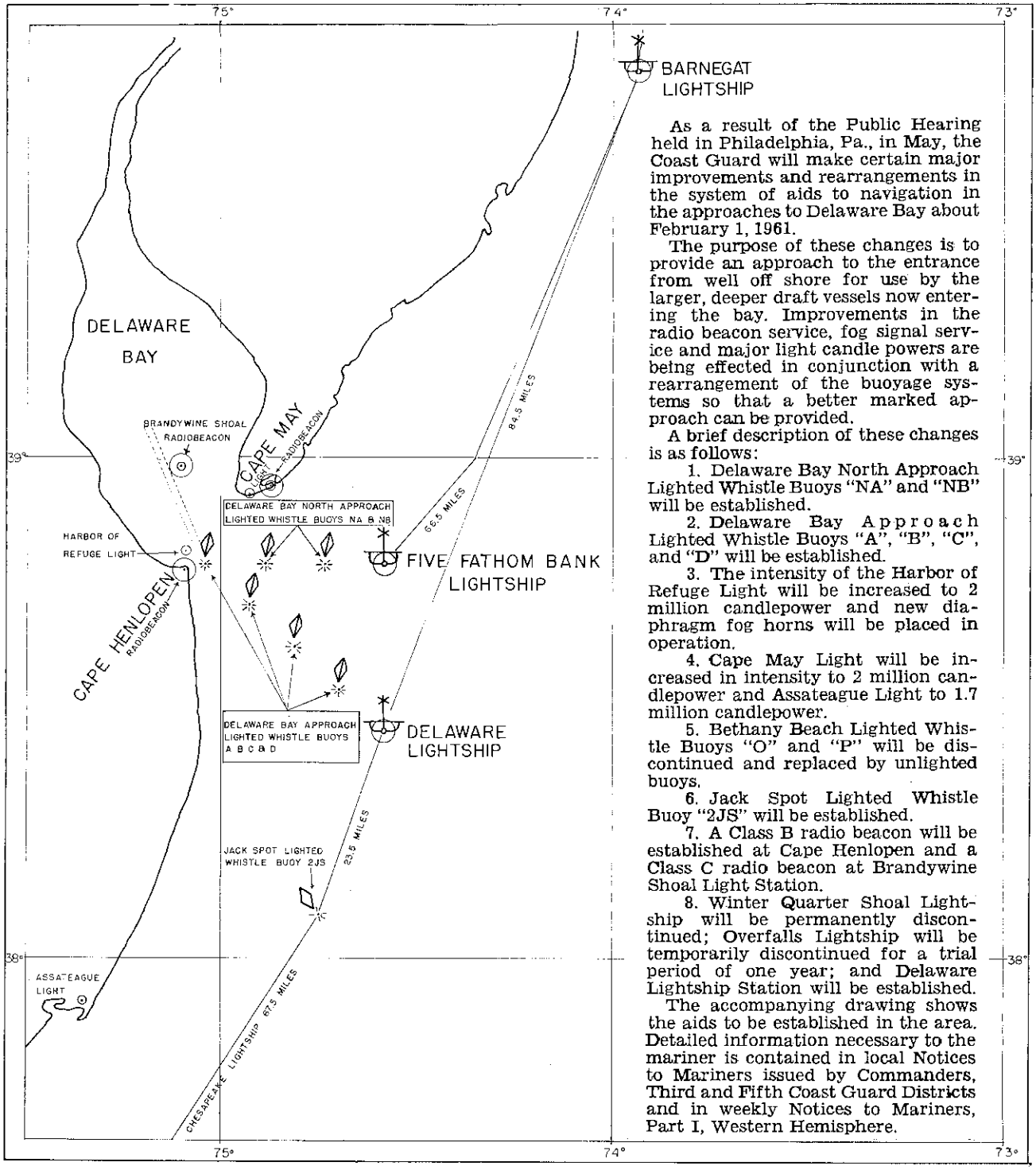
R. E. Mackey, Chairman


POLLUTION
BEACHES
WILDLIFE


HARBOR AND RECREATIONAL FACILITIES
ERNIE'S BOAT SHOP
MERRIKIN

LET'S STOP IT!

NEW AIDS FOR DELAWARE BAY



As a result of the Public Hearing held in Philadelphia, Pa., in May, the Coast Guard will make certain major improvements and rearrangements in the system of aids to navigation in the approaches to Delaware Bay about February 1, 1961.

The purpose of these changes is to provide an approach to the entrance from well off shore for use by the larger, deeper draft vessels now entering the bay. Improvements in the radio beacon service, fog signal service and major light candle powers are being effected in conjunction with a rearrangement of the buoyage systems so that a better marked approach can be provided.

A brief description of these changes is as follows:

1. Delaware Bay North Approach Lighted Whistle Buoys "NA" and "NB" will be established.

2. Delaware Bay Approach Lighted Whistle Buoys "A", "B", "C", and "D" will be established.

3. The intensity of the Harbor of Refuge Light will be increased to 2 million candlepower and new diaphragm fog horns will be placed in operation.

4. Cape May Light will be increased in intensity to 2 million candlepower and Assateague Light to 1.7 million candlepower.

5. Bethany Beach Lighted Whistle Buoys "O" and "P" will be discontinued and replaced by unlighted buoys.

6. Jack Spot Lighted Whistle Buoy "2JS" will be established.

7. A Class B radio beacon will be established at Cape Henlopen and a Class C radio beacon at Brandywine Shoal Light Station.

8. Winter Quarter Shoal Lightship will be permanently discontinued; Overfalls Lightship will be temporarily discontinued for a trial period of one year; and Delaware Lightship Station will be established.

The accompanying drawing shows the aids to be established in the area. Detailed information necessary to the mariner is contained in local Notices to Mariners issued by Commanders, Third and Fifth Coast Guard Districts and in weekly Notices to Mariners, Part I, Western Hemisphere.

MARITIME SIDELIGHTS

A special citation for vessel sanitation has been presented to Archibald E. King, president of Isthmian Lines, Inc., on board the company's vessel *Steel Vendor*.

The citation was awarded because each of the 24 vessels operated by Isthmian Lines earned a rating of 95 percent or better on an official Public Health Service inspection involving 166 separate items of sanitary construction, maintenance, and operation.

Richard C. Arnold, assistant surgeon general of the Public Health Service, presented the award to Mr. King.

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The Department of Labor has made available pocket editions of two safety and health regulations, one for ship repair and the other for longshoring.

Safety regulations were put into effect in March of 1960, as authorized under an amendment in 1958 to the Longshoremen's and Harbor Workers' Compensation Act. The new standards, developed with the cooperation of labor and management, cover work within the Federal Maritime jurisdiction on U.S. navigable waters.

The 17 field offices of the Bureau of Labor Standards, which administers the safety rules, are distributing the booklets.

The regulations are mandatory upon employers of ship repair personnel and longshoremen.

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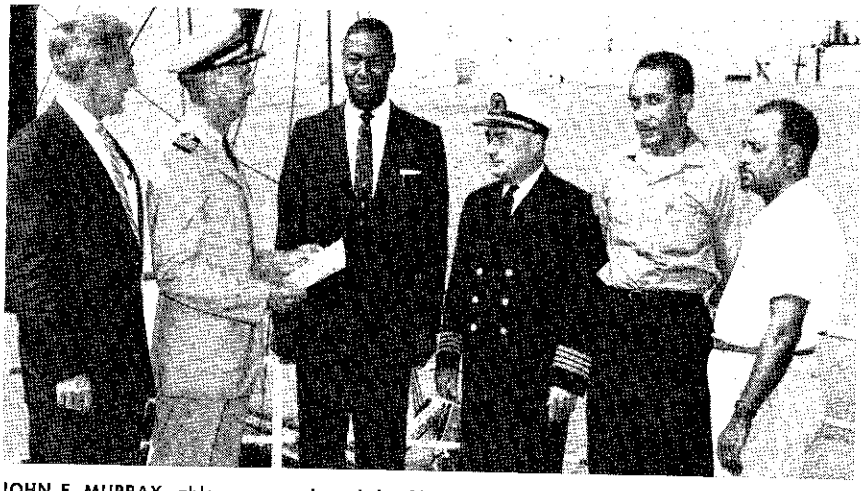
A $36,238,400 contract for the construction of four cargo vessels has been assigned by Lykes Bros. Steamship Co., Inc., Bethlehem Steel Corp., Shipbuilding Division, and the Federal Maritime Board. The contract covers a third group of vessels to be ordered in Lykes Bros. Steamship Co.'s fleet-replacement program, which will total 53 ships and cost some $555 million to construct in domestic yards. Five vesels in the replacement program are under construction and four have been completed and are in service. The vessels will be built at Bethlehem's Sparrows Point, Md., yard.

COMMENDATION



JOHN F. MURRAY, able seaman aboard the SS *Mormacpine* was presented with a commendation from the Commandant, U.S. Coast Guard, for his heroic action in rescuing two survivors from the fishing vessel *Jane* which sunk as a result of a collision.
The Board of Investigation which inquired into the circumstances of the collision disclosed that following the collision the *Mormacpine* circled back to the scene where two survivors were sighted in the water. Without regard for his own safety, Mr. Murray descended a Jacob's ladder into the water, and while being alternately submerged beneath and raised above the surface of the water by the roll of the ship, assisted both men up the ladder to safety.
In the above photograph taken aboard the *Mormacpine* Mr. Murray receives the commendation from CAPT J. D. Craik, USCG, Marine Inspection Officer, Third Coast Guard District. Pictured from left to right are: Mr. C. F. Hodder, Director of Personnel and Labor Relations, Moore-McCormack lines; CAPT Craik; Mr. Murray; CAPT J. F. Strobert, Master SS *Mormacpine*; Mr. George Robinson, National Maritime Union Patrolman; and Mr. Simon Bonilla, NMU Delegate of the Vessel.

Capt. Jack M. Windas has been appointed master of the hospital ship *Hope I* for her forthcoming year-long voyage to southeast Asia. Captain Windas has had 25 years' service with the American President Lines, which will serve as operating agent for the ship.

The 15,000-ton Hope, equipped as a medical training center, will bring to southeast Asia modern medical knowledge and techniques. The 230-bed ship left San Francisco last month for Indonesia. The $3,500,000 needed to operate the hospital ship for a year is financed by contributions from the American public.

A new dispatching procedure that uses Gatun Lake as a staging area for ships and an expanded pilot force and extra lock crews have enabled the Panama Canal to keep up with sharply increasing traffic in the past year. During the past fiscal year 10,794 commercial oceangoing ships used the Canal. This exceeded by 1,076 the earlier record set in the fiscal year 1959.

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The 29,724 gross-ton tanker *Philine* successfully transited the Suez Canal southbound at 36 feet 6 inches, according to a report in *Lloyd's List*. A trial passage at 37 feet is planned shortly.

UNITED STATES COAST GUARD

ADDRESS REPLY TO:
COMMANDANT
U.S. COAST GUARD
HEADQUARTERS
WASHINGTON 25, D.C.

MVI
7 July 1960

Commandant's Action on Marine Board of Investigation; explosion and fire on barge *Freeport Sulphur Co. No. 20*, Avondale Marine Ways, Harvey, La., on 17 November 1959 with loss of life

The record of the Marine Board of Investigation convened to investigate subject casualty, together with its Findings of Fact, Conclusions and Recommendations has been reviewed.

The *Freeport Sulphur Co. No. 20 (Fs–20)* is a steel hull, non-propelled, molten sulphur barge, the construction of which was completed in the latter part of October 1959. The barge consisted of a main cargo space through the center with wing tanks along each side plus forward and after rake tanks. All of these spaces with the exception of the main cargo space were coated with a grease type rust preventive. Atop the after rake were located the pumproom and a 5,000 gallon oil tank.

On 12 November 1959 the *Fs–20* arrived, without cargo, at the Avondale Marine Ways, Harvey, La., to undergo repairs to damage suffered in a minor casualty a week earlier and to have a new water sprinkling system installed. Before work began a gas chemist, certified by the American Bureau of Shipping, issued a gas-free certificate covering the entire hull structure and certifying it safe for men—safe for fire.

On the morning of 17 November 1959 yard personnel made preparations to cut a hole through the after bulkhead of the main cargo space into the center stern rake compartment to accommodate a 2'' water line. An explosimeter reading in the center stern rake compartment taken by the yard's shipfitter foreman disclosed no dangerous gases. One of the workmen applied the cutting torch to the rust preventive coating on the ladder near the center stern rake manhole. The witnesses agreed that the material burned and melted while the flame was being applied but whether it went out of its own accord or whether the flame was blown out is not clear. In any case, none of the witnesses voiced any concern over the apparently combustible characteristics of this material; however, as a precaution it was agreed that the rust preventive would be wiped from the bulkhead where the cutting was to take place. The pipefitter that was to do the burning entered the main cargo space and heated until red a ½'' spot on the bulkhead to mark the location of the hole. Another workman entered the center stern rake tank and wiped the rust preventive from around the area with dry rags. Apparently no solvent was utilized. When the workman indicated that a large area had been cleared the pipefitter re-entered the main cargo space and commenced the actual burning. The other man stood by with a water hose on deck over the manhole to the center stern rake compartment. When the pipefitter had burned half-way around the circle he noticed little flames sputtering through the hole. He shut off the torch and immediately went upon deck. The other man was playing the hose through the manhole onto the bulkhead and stated that a fire had started and that he was unable to put it out. Seeing that the fire was intensifying and noticing a hissing sound emanating from the compartment the pipefitter suggested they get help then turned and ran from the barge shouting "fire." When he had reached a point about 15 or 20 feet away the hissing sound increased to a "whoosh" followed by an explosion of great magnitude which in turn was followed a few seconds later by a second explosion of less force. The deck of the center stern rake was thrust upward and ruptured and the entire pumproom was blown from the barge onto the dock. As a result five men were killed including the workman who was attempting to extinguish the fire with the hose.

After the casualty, samples of the rust preventive taken from the wing tanks and forward compartments were tested and found to have a flash point of 90° F. and a fire point of 130° F. A sample of the same material from the overhead of the compartment in which the explosion occurred had a flash point of 315° F. and a fire point of 615° F. The flash point and fire point of a sample taken from a new can of the product were both found to be 85° F. A brochure describing the product stated that the material contains solvent with minimum flash point of 100° F.

The weather at the time of the casualty was cloudy, wind north, 15–20 MPH, temperature 46° F.

The Board also determined that at the time the rust preventive had been applied by the shipyard after construction a thinner having a flash point of approximately 100° F. was used to facilitate application.

REMARKS

Concurring with the Board it is apparent that the cutting torch set fire to the rust preventive which in turn released a large volume of gas so rapidly and violently that an explosion resulted. The second explosion, which occurred in the port stern rake compartment, was a direct result of the heat and fire in the center compartment.

The fact that the flash point of the rust preventive taken from the overhead of the center stern rake compartment was found to be 315° F can be accounted for by the fact that more volatile fractions would be vaporized out by the heat of the fire and explosion.

The Board's conclusion that the tests conducted by the certifying gas chemist prior to issuing the gas-free certificate were inadequate is also concurred in. The stated purpose of the regulation requiring an inspection of a compartment prior to making repairs involving riveting, burning, welding and so forth is to determine that such operations can be conducted with safety. By failing to properly test or otherwise familiarize himself with the characteristics of the rust preventive which coated the tanks the gas chemist did not properly discharge his responsibility before certifying that the hull structure was safe for fire, safe for men.

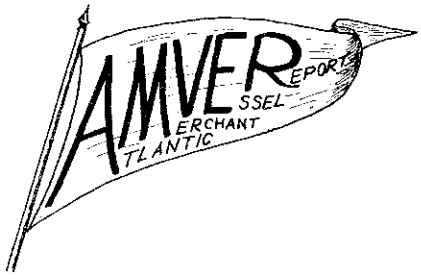
In accordance with the Board's recommendation a copy of this investigation will be forwarded to the American Bureau of Shipping for their review of present standards for the control of gas hazards aboard vessels. The need for additional regulations by the Coast Guard in this regard is under active consideration.

Publication of the hazards of using substances with low flash points in compartments aboard vessels, as further recommended by the Board, is not considered to be necessary. When the flash point of a substance is known the hazards will be apparent.

Subject to the foregoing remarks, the record of the Marine Board of Investigation is approved.

J. A. HIRSHFIELD,
Vice Admiral, U.S. Coast Guard,
Acting Commandant.

THE ATLANTIC MERCHANT VESSEL REPORT SYSTEM



Because the AMVER System depends a great deal on the cooperation of merchant shipping, we wish to commend the shipmasters and radio officers, and the executives of operating companies who have actively and faithfully participated in the AMVER System. Without their interest the AMVER System could not be effective in search and rescue. Over the past months visitors to the AMVER Center, representing a number of vessels and shipping lines, have received a firsthand view as to how the system works. In return, these visitors have supplied the AMVER Center with helpful information which has been invaluable in improving the operation of the system. Up-to-date information on individual vessels, problems in reporting, the customary routes used, personal experiences with AMVER, and questions about the system are usual topics during the visits. The information and questions from those who have participated in, or had experience with, the AMVER System is greatly welcomed by the Center.

WHY MAKE ARRIVAL REPORTS?

We have been asked about the use of arrival reports. "Arrival" (or Type 3) reports give the ship's position and time at the point where the ship leaves the AMVER plotting area. It signifies the end of a plot on the vessel's current passage. Entering this data to the computer instructs this machine that the reporting vessel is no longer applicable for offshore assistance operations.

In practice, the Type 3 reports play an additional and more important role—they are used as controls for checking the automatic positionkeeping operation. For each Type 3 report, the vessel's position is computed to the time reported and this compared to the position reported. A difference between the computed and reported positions alerts the computer operator to possible errors in entering the original data or computing errors caused by possible failure of a minor component in the computer. (A major component failure will usually be noticed earlier.) The use of "controls" is a basic feature of every automated data-processing system.

Occasionally, vessels send "arrival" reports even though no Type 1 (movement) report was sent for the passage, and therefore the vessel has not been plotted at the Center when the "arrival" report is received. Under these conditions, the arrival report has relatively little value. They do permit still another function of Type 3 reports however; namely, that of correcting the vessel's last reported destination in the "memory" section of the computer. This information is sometimes helpful later when the only information available, on an assistance case, for example, was received in a garbled state.

AMVER INSTRUCTIONS AVAILABLE

Further information about AMVER program may be obtained by writing Commander, Eastern Area, U.S. Coast Guard, Customhouse, New York 4, N.Y., or to Commandant, U.S. Coast Guard, Washington 25, D.C. AMVER instructions are available at any Coast Guard District Office, Captain of the Port, or Marine Inspection Office at U.S. Atlantic or Gulf Coast ports.

RECORD HAWAII SUGAR SHIPMENT

LARGEST CARGO of Hawaii sugar ever shipped to mainland arrived in San Francisco Bay aboard Matson Lines freighter SS *Californian*, shown passing under the Richmond-San Rafael Bridge en route to California & Hawaii Sugar Refinery at Crockett. The huge bulk cargo and container vessel, on her maiden voyage in Matson's Hawaii service, had 15,700 tons of bulk sugar in holds on arrival from Hilo. Previous record load was about 12,000 tons. The *Californian*, formerly a bulk ore and oil carrier, was converted in Mobile, Ala., for bulk sugar and cargo container service in Hawaii trade.

PERSONAL CASUALTIES

From the tabulations of personal accidents aboard commercial vessels printed in this issue, it is apparent that the greatest number of deaths occurred from natural causes. Of the 170 total, 131 of these deaths resulted from one of the cardiovascular diseases. The second largest number of deaths resulted from falling overboard. Seventy-five persons were lost in this type of accident. This shows some improvement over last year's total of 104 and, although there is no way of knowing, it is hoped that this decrease reflects a greater utilization of work vests. This year, tugs accounted for 11 and barges accounted for 13 of these deaths as compared to 18 and 22, respectively, last year.

Again this year the third worst killer aboard U.S. commercial vessels was suicide, with a total of 29 deaths of which 11 were passengers. There were also 25 cases listed only as disappearances. Unquestionably some of these cases were also the result of suicide.

The greatest number of lost-time-injury cases occurred as the result of slips and falls from ladders or stairways; 134 persons were reported injured from this cause, in addition to 3 deaths. Last year in this category 113 injury cases and 7 death cases were reported. Of the casualties reported this year, 77 could be classified only as a misstep of the individual involved.

STATISTICAL SUMMARY OF DEATHS ABOARD INSPECTED COMMERCIAL VESSELS

1 July 1959–30 June 1960

PERSONNEL CASUALTIES			HUMAN							ENVIRONMENT					OTHER								
Deaths	Injuries	Reported during period of—	Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Other human errors	Weather conditions	Poor maintenance (housekeeping)	Inadequate lighting	Inadequate rails, guards, etc.	Other	Failure approved equipment or material	Failure unapproved equipment or material	Vessel casualty	Supervision inadequate	Life preservers insufficient	Lack of tools/equipment	Lack of protective gear	Insufficient information to classify as to cause	Miscellaneous causes
Total		Classification																					
147	.....	Natural cause	--	--	----	--	--	--	--	--			--	--	----	----	----	----	----	----	----	----	----
1	.....	Homicide	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	----
26	.....	Suicide (and attempts)	--	--	----	--	--	--	--	--		--	--	--	----	----	----		----	----	----	----	----
14	.....	Disappearance	--	--	----	--	--	--	--		--	--	--	--	----	----	----	----	----	----	----	----	----
2	.....	Drowning (other than falls)	----	----	----	----	1	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----
3	.....	Slips and falls: Ladders	1	--	----	--	1	--	--	1	--	--	--	--	----	----	----	----	----	----	----	----	----
3	.....	Gangways	2	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	----
1	.....	On deck	--	--	----	--	--	--	--	1	--	--	--	--	----	----	----	----	----	----	----	----	----
18	.....	Falls from vessel—Into water	5	--	----	1	2	--	3	1	--	--	--	1	----	1	----	----	----	----	----	3	1
14	.....	Falls into hold, tank	--	--	----	--	5	--	5	--	--	1	--	--	----	----	----	1	----	----	----	2	----
1	.....	Falls—other—different level	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	----
5	.....	Struck by: Falling object	--	--	----	--	2	--	--	--	--	--	--	--	----	1	----	----	----	----	----	----	2
2	.....	Flying object	--	--	----	--	1	--			--	--	--	--	----	1	----	----	----	----	----	----	----
3	.....	Moving object (other than vessel)			----	--	2	--	1	--	--	--	--	--	----	----	----	----	----	----	----	----	----
1	.....	Boat or ship	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	1
4	.....	Asphyxiation	--	--	----	--	3	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	1
1	.....	Struck against	--	--	----	--	--	--	--	1	--	--	--	--	----	----	----	----	----	----	----	----	----
1	.....	Burns	--	--	----	--	--	--	--	1	--	--	--	--	----	----	----	----	----	----	----	----	----
1	.....	Lines, caught in	--	--	----	--	--	--		1	--	--	--	--	----	----	----	----	----	----	----	----	----
3	.....	Not otherwise classified	--	--	----	--	2	--	--	--	--	--	--	--	----	----	----	----	----	----	----	--	1
*251	.....	Total	8	--	----	1	21	--	9	6	--	1	--	1	----	4	----	1	--	----	----	5	6

*Crew members 166, passengers 56, longshoremen and shore workers 25, and others 4.

STATISTICAL SUMMARY OF DEATHS ABOARD UNINSPECTED COMMERCIAL VESSELS

1 July 1959–30 June 1960

PERSONNEL CASUALTIES			HUMAN							ENVIRONMENT					OTHER								
Deaths	Injuries	Reported during period of—	Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Other human errors	Weather conditions	Poor maintenance (housekeeping)	Inadequate lighting	Inadequate rails, guards, etc.	Other	Failure approved equipment or material	Failure unapproved equipment or material	Vessel casualty	Supervision inadequate	Life preservers insufficient	Lack of tools/ equipment	Lack of protective gear	Insufficient information to classify as to cause	Miscellaneous causes
Totals		Classification																					
23	------	Natural Cause	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	--	----	---
3	------	Homicide	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
3	------	Suicide (and attempts)	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
11	------	Disappearance	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
4	------	Drowning (Other than falls)	1	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	3	---
57	------	Falls from Vessel: Into Water	4	2	----	--	9	--	16	1	--	--	5	1	----	----	----	----	----	----	4	12	3
1	------	Falls from Vessel—Other	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
4	------	Falls into Hold, Tank	1	--	----	--	--	--	3	--	--	--	--	--	----	----	----	----	----	----	----	----	---
3	------	Falls—Other—Different Level	--	--	----	--	1	--	2	--	--	--	--	--	----	----	----	----	----	----	----	----	---
5	------	Struck by: Falling Object	--	--	----	--	2	--	--	--	--	--	--	--	----	2	----	----	----	----	----	----	1
2	------	Flying Object	--	--	----	--	1	--	--	--	--	--	--	--	----	1	----	----	----	----	----	----	---
1	------	Moving Object (Other than Vessel)	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
4	------	Asphyxiation	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	2	----	----	----	----	1
1	------	Struck against	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
1	------	Cargo handling	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
1	------	Machinery—Tools	--	--	----	--	--	--	--	--	--	--	1	--	----	----	----	----	----	----	----	----	---
4	------	Lines, caught in	--	--	----	--	2	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	2
2	------	Pinching—Crushing	--	--	----	--	--	--	2	--	--	--	--	--	----	----	----	----	----	----	----	----	---
1	------	Not otherwise classified	--	--	----	--	1	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	---
*131	------	Total	6	2	----	--	20	--	23	1	--	--	6	1	----	3	----	2	----	----	4	15	8

*Crew members 101, passengers 6, longshoremen and shore workers 18, and others 6.

LOST OVERBOARD

Working on top of deck cargo 16-feet above the weather deck, the chief engineer of a C-2 type cargo ship was inadvertently lost over the side recently. Despite every effort by the ship, he was not found and is presumed drowned.

What happened was this: At about 9 a.m. in a position 900 miles northeast of Honolulu, under moderate wind and sea conditions, an old discarded 3-legged boom rest was being jettisoned. The chief engineer, assisted by members of the deck department, hoisted it with the cargo gear on top of one of the double-decked cargo containers abreast of No. 5 hatch, starboard side.

At this point the engineering officer and the bos'n attempted to slide or push the awkward 200-pound boom rest over the side by each lifting one of its legs. Suddenly, the chief was carried overboard with the boom rest.

With the cry "man overboard" the ship was put into a "Williamson Turn" and immediate steps were taken to locate the man. Lookouts were posted. Ring buoys were thrown over the side. A lifeboat was prepared for launching and radio messages were sent to the Coast Guard and for the information of nearby ships.

The search continued all day and on into the night. Lookouts were increased, deck lights turned on, and a series of flares were employed. A second ship appeared on the scene and assisted in the search. All to no avail—the man was not found.

Working on top of deck cargo is a dangerous practice that should not be undertaken without certain precautions. The bridge should be notified. The men should wear life preservers. Life lines should be used, particularly if the deck load is a high one.

If you lose your balance and fall overboard, you become a mighty small object to find even under the best circumstances.

STATISTICAL SUMMARY OF PERSONAL INJURIES ABOARD COMMERCIAL VESSELS

1 July 1959–30 June 1960

PERSONNEL CASUALTIES			HUMAN							ENVIRONMENT					OTHER								
Deaths	Injuries	Reported during period of—	Intoxication	Physical deficiency	Unsafe movement (running, jumping, etc.)	Psychological (immaturity, insanity)	Unsafe practice	Law violation	Other human errors	Weather conditions	Poor maintenance (housekeeping)	Inadequate lighting	Inadequate rails, guards, etc.	Other	Failure approved equipment or material	Failure unapproved equipment or material	Vessel casualty	Supervision inadequate	Life preservers insufficient	Lack of tools/ equipment	Lack of protective gear	Insufficient information to classify as to cause	Miscellaneous causes
Total		Classification																					
	4	Suicide (and attempts)	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	----
	134	Slips and Falls: Ladders	8	--	2	--	27	--	77	7	5	--	--	1	----	7	----	----	----	----	----	----	----
	19	Gangways	4	--	----	--	2	--	13	--	--	--	--	--	----	----	----	----	----	----	----	----	----
	88	On Deck	5	1	----	--	9	--	56	3	12	--	--	1	----	1	----	----	----	----	----	----	----
	105	Other—Same Level	5	2	----	--	7	--	63	11	13	--	--	1	----	1	----	----	----	----	----	2	----
	4	Falls from Vessel: Into Water	--	--	----	1	--	--	2	--	--	--	--	--	----	----	----	----	----	----	----	1	----
	1	Other	--	--	----	--	--	--	1	--	--	--	--	--	----	----	----	----	----	----	----	----	----
	9	Falls into Hold, Tank	--	--	----	--	--	--	9	--	--	--	--	--	----	----	----	----	----	----	----	----	----
	104	Falls — Other — Different Level	4	--	2	--	19	--	62	6	1	--	--	--	----	9	----	----	----	----	----	1	----
	101	Struck by: Falling Object	--	--	----	--	20	--	64	6	--	--	--	--	----	9	----	1	----	----	----	1	----
	21	Flying Object	--	--	----	--	3	--	12	--	--	--	--	1	----	5	----	----	----	----	----	----	----
	79	Moving Object (Other than Vessel)	1	--	----	--	17	--	23	5	--	--	--	--	----	30	----	1	----	----	----	----	2
	2	Boat or Ship	--	--	----	--	--	--		1	--	--	--	--	----	----	----	----	----	----	----	----	1
	1	Exposure	--	--	----	--	--	--	--	--	--	--	--		----	1	----	----	----	----	----	----	----
	15	Asphyxiation	--	--	----	--	10	--	--	--	--	--	--	1	----	----	----	----	----	----	4	----	----
	94	Struck against	--	--	----	--	11	--	63	16	1	--	--	1	----	2	----	----	----	----	----	----	----
	78	Machinery—Tools	--	--	----	--	37	--	23	2	--	--	--	1	----	14	----	1	----	----	----	----	----
	27	Burns	--	--	----	--	15	--	5	1	--	--	--	--	----	3	----	1	----	----	2	----	----
	52	Scalds	--	--	----	--	30	--	14	1	--	--	--	1	----	4	----	1	----	----	1	----	----
	40	Lines, caught in	--	--	----	--	14	--	17	1	--	--	--	--	----	8	----	----	----	----	----	----	----
	77	Pinching - Crushing	1	--	----	--	32	--	31	6	--	--	--	1	----	6	----	----	----	----	----	----	----
	5	Heavy weather	--	--	----	--	1	--	--	4	--	--	--	--	----	----	----	----	----	----	----	----	----
	68	Over exertion	--	--	----	--	3	--	62	--	1	--	--	--	----	2	----	----	----	----	----	----	----
	65	Sprains and Strains	3	--	6	--	6		46	2	1	--	--	--	----	1	----	----	----	----	----	----	----
	74	Cuts, punctures, etc	4	--	1	--	21	--	27	4	3	--	--	1	----	4	----	--	----	----	----	5	1
	3	Galley accidents	--	--	----	--	--	--	2	--	--	--	--	--	----	----	----	----	----	----	----	1	----
	111	Fights	--	--	----	--	--	--	--	--	--	--	--	--	----	----	----	----	----	----	----	----	----
	7	Unknown causes	--	--	----	--	--	--	--	--	--	--	--	--	----	--	----	----	----	----	--	5	2
	10	Not otherwise classified	1	--	1	--	2	--	--	2	--	--	--	--	----	1	----	----	----	----	----	3	----
	*1,398	Total	36	3	12	1	289	--	672	78	37	--	--	10	----	108	----	5	----	----	7	19	6

*Crew members 1,387, passengers 2, longshoremen and shore workers 5, and others 4.

AMENDMENTS TO REGULATIONS

[EDITOR'S NOTE.—The following regulations have been promulgated or amended since the last issue of the PROCEEDINGS. A complete text of the regulations may be found in the Federal Register indicated at the end of each article. Copies of the Federal Registers containing the material referred to may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.]

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

SUBCHAPTER C—AIDS TO NAVIGATION

[CGFR 60-63]

PART 72—MARINE INFORMATION

Subpart 72.05—Lists of Lights and Other Marine Aids

PURPOSE OF COAST GUARD LISTS

The purpose of this amendment to 33 CFR 72.05-1 is to provide in the regulations for the publishing of Coast Guard Lists of Lights and Other Marine Aids in Five Volumes thereby reducing the size of the volumes to permit ease of use and correction, and to discontinue the publishing of Local Lists of Lights and Other Marine Aids for individual Coast Guard Districts.

§ 72.05-1 Purpose.

(a) The Coast Guard publishes annually the following five Lists of Lights and Other Marine Aids covering the waters of the United States, its territories and possessions.

(1) Volume I, Atlantic Coast, from St. Croix River, Maine, to Little River, South Carolina.

(2) Volume II, Atlantic and Gulf Coasts, from Little River, South Carolina, to Rio Grande River, Texas, and the Greater Antilles.

(3) Volume III, Pacific Coast and Islands.

(4) Volume IV, Great Lakes.

(5) Volume V, Mississippi River System.

(b) These Lists of Lights and Other Marine Aids show the official name, location, characteristics and general description of all aids to navigation maintained by or under authority of the U.S. Coast Guard.

(Sec. 92, 63 Stat. as amended; 14 U.S.C. 92. Interpret or apply sec. 93, 63 Stat. 504 as amended; 14 U.S.C. 93)

(Federal Register Document, 60-8675; Filed Sept. 16, 1960, and printed Sept. 17, 1960)

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

[CGFR 60-611]

MISCELLANEOUS RULES OF THE ROAD AMENDMENTS

Pursuant to the notice of proposed rule making published in the Federal Register on February 18, 1960 (25 F.R. 1440-1448), and Merchant Marine Council Public Hearing Agenda dated April 4, 1960 (CG-249), the Merchant Marine Council held a public hearing on April 4, 1960, for the purpose of receiving comments, views and data. The proposals considered were identified as Items I through XII, inclusive, and Item IV contained miscellaneous proposals regarding Rules of the Road.

This document contains the regulations and actions taken with respect to the Rules of the Road in Item IV, which were considered at the April 4, 1960, Public Hearing and annual session of the Merchant Marine Council. It includes those actions taken with respect to the following proposals, which are hereby adopted as proposed or as revised:

1. Lights for dump scows. (Item IV, CG-249, p. 53.) Adopted as proposed.

NOTE: The regulation designated § 80.17 in Coast Guard Pamphlet "Rules of the Road—International—Inland," CG-169, will have the paragraphs redesignated at the next printing to agree with 33 CFR 80.17. The change to 33 CFR 80.17(b)(10) in this document revises the next to the last undesignated paragraph in § 80.17 on page 49 of CG-169 (5-1-59).

2. Close-up and intermediate towing. (Item IV, CG-249, p. 54.) In line with comments received, 33 CFR Part 84 regarding towing of barges was revised and brought up-to-date.

3. Warning signals for vessels loading or unloading dangerous cargo in bulk. (Item IV, CG-249, p. 58.) In line with comments received, 33 CFR 80.37, 90.25, and 95.67 were revised.

NOTE: The requirements for vessels to display this warning signal when transferring elemental phosphorus in water, sulfuric acid, hydrochloric acid, liquid chlorine, or anhydrous ammonia, are in regulations designated 46 CFR 98.05-50(i), 98.10-45(g), 98.15-45(h), 98.20-70(g), and 98.25-90(g), which will be published in a separate Federal Register document CGFR 60-36, entitled "Miscellaneous Vessel Inspection Amendments."

In conjunction with the miscellaneous Rules of the Road amendments, as set forth in this document, the following general actions are also made:

a. Compliance with the revised requirements will be permitted on and after the date of publication of this document in the Federal Register.

b. The effective date for the mandatory compliance with the new requirements, as set forth in this document, shall be on and after January 1, 1961.

c. With respect to warning signals for vessels loading or unloading dangerous cargoes in bulk, i.e., elemental phosphorus in water, sulfuric acid, hydrochloric acid, liquid chlorine, or anhydrous ammonia, the vessels may display these signals before January 1, 1961, but such warning signals shall be displayed on and after January 1, 1961.

The actions taken with respect to a daytime distress signal intended for small vessels in Item IV were published in a separate document in the Federal Register on May 20, 1960 (25 F.R. 4451). The requirements for barges to display a warning signal when transferring elemental phosphorus in water, sulfuric acid, hydrocloric acid, liquid chlorine, or anhydrous ammonia will be published in in a separate Federal Register doc-

ument CGFR 60–36, entitled "Miscellaneous Vessel Inspection Amendments."

(Federal Register Document, 60–8773; Filed Sept. 20, 1960, and printed Sept. 21, 1960)

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 60–54]

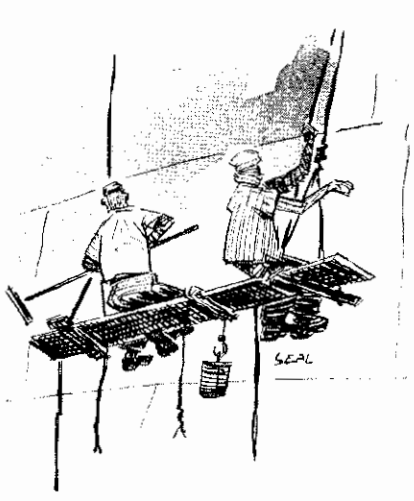
SUBCHAPTER T—SMALL PASSENGER VESSELS (NOT MORE THAN 65 FEET IN LENGTH)

REVISION OF SUBCHAPTER

Pursuant to the notice of proposed rule making published in the FEDERAL REGISTER on February 18, 1960 (25 F. R. 1440–1448), and Merchant Marine Council Public Hearing Agenda dated April 4, 1960 (CG–249), the Merchant Marine Council held a public hearing on April 4, 1960, for the purpose of receiving comments, views, and data. The proposals considered were identified as Items I through XII, inclusive, and Item V contained proposed requirements regarding small passenger vessels in 46 CFR Parts 175 to 186, inclusive (Subchapter T).

This document contains the actions taken with respect to small passenger vessels in Item V of the Agenda. On the basis of information received changes were made in certain proposals identified in the Agenda as §§ 176.01–1(a), 176.10–10, 176.10–13, 178.05–11, 178.05–13, 178.20–1, 178.35–1 (a) and (e), 178.40–1, 179.10–1(b), 180.10–5(a)(2), 180.10–10(a)(2), 182.01–20(a)(1), 182.10–20(a)(1), 182.15–5, 183.01–1(a), 183.01–5(a), 183.25–1(a), 183.25–5, 183.25–20 (j) and (k), 183.25–35(c)(1), 183.25–45 (b) (2) and (3).

The proposals in Item V as revised are accepted and are set forth in this document. The amendments which were not described in the FEDERAL REGISTER of February 18, 1960 (25 F.R. 1442–1444), are considered to be interpretations of law, or editorial amendments and it is hereby found that compliance with the Administrative Procedure Act (respecting notice of proposed rule making, public rule making procedure thereon, and effective date requirements thereof) is unnecessary with respect to such changes. Many of the regulations have been renumbered. For convenience comparison tables have been prepared showing the old section numbers and the new section numbers, and the sections assigned with asterisks indicate the text was revised or amended by this revision. These tables appear following the last section of regulations.



This revision to the "Small Passenger Vessel Regulations" is based on the experience gained from the inspection and certification of more than 4,000 small passenger vessels since Public Law 84–519 became effective on June 1, 1958. The primary aims in making the changes have been (1) the simplification and clarification of the regulations, (2) the incorporation of procedures and standards that have proved satisfactory for existing vessels, and (3) the rejection of procedures and standards that have proved impracticable or unnecessary for small passenger vessels. The changes are expected to enable the small boat owner to more easily determine the requirements applicable to his particular vessel.

It should be noted that the regulation changes will, for the most part, only affect new vessels and will not impose additional requirements on vessels which have already been approved and certificated by the Coast Guard. One exception to this is the change which provides that "on or before July 1, 1963, all kapok and fibrous glass life preservers which do not have plastic-covered pad inserts shall be removed from service." This requirement will affect all existing small passenger vessels as well as new vessels.

Navigation and Vessel Inspection Circular No. 4–57, dated October 1, 1957, sets forth in detail the application of the then effective "Small Passenger Vessel Regulations" to vessels in existence as passenger vessels before June 1, 1958. With this current revision of the regulations and since practically all of the existing vessels have already been inspected and certificated, Navigation and Vessel Inspection Circular No. 4–57 will be cancelled. The inspection procedures and standards for these existing vessels will, however, remain essentially the same as before.

A vast majority of vessels inspected under this subchapter carry less than 150 passengers. For these vessels particularly, the plans required to be submitted for approval have been reduced, and procedures modified to facilitate action on these plans by the Officer in Charge, Marine Inspection.

The complete rewrite of Part 178 (Watertight Integrity and Subdivision) and Part 179 (Stability) provides a simplified and less costly procedure for determining subdivision and stability for most vessels requiring such determination. The simplified stability test is similar to that used and proved satisfactory in determining the stability of existing small passenger vessels.

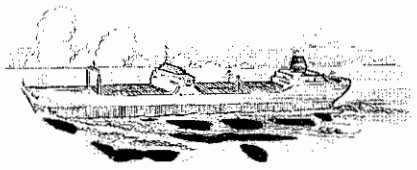
In addition to the substantive changes which appear in the Merchant Marine Council Public Hearing Agenda (CG–249), other changes have been made as described in the introduction to Item V of the Agenda. These additional changes are in the interest of simplification and clarification of the regulations and to rearrange the existing and newly adopted regulations. To this end, informative material has been added and cross-references, both within these regulations and to regulations contained in other subchapters of this chapter, have been eliminated where possible. The removal of cross references has necessarily resulted in a greater amount of material in the regulations. Examples of material added to remove cross references are the regulations in Subpart 182.20 with regard to diesel engine installations and in Subpart 183.10 with regard to electrical installations operating at potentials of 50 volts or more.

The licensing requirements for operators and ocean operators under 46 CFR Part 187 do not contain any requirements that have not been previously published. However, the current provisions are included in this document in order that the revision of Subchapter T will be complete.

(Federal Register Document, 60–9008; Filed Sept. 28, 1960, and printed Sept. 29, 1960)

EQUIPMENT APPROVED BY THE COMMANDANT

[EDITOR'S NOTE.—Due to space limitations, it is not possible to publish the documents regarding approvals and terminations of approvals of equipment published in the Federal Register dated September 21, 1960 (CGFR 60–62) and September 28, 1960 (CGFR 60–64). Copies of these documents may be obtained from the Superintendent of Documents, Washington 25, D.C.]



ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from September 1 to September 30, 1960, 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

Wyandotte Chemicals Corp., Wyandotte, Mich., Certificate No. 449, dated September 27, 1960, WYANDOTTE 468.

AFFIDAVITS

The following affidavits were accepted during the period from 15 August 1960 to 15 September 1960:

Associated Piping & Engineering Co., Inc.,[1] 1707 West Compton Blvd., Compton, Calif., FITTINGS.

Tube Turns, Division of Chemetron Corp.,[2] Louisville 1, Ky., FORGINGS.

Rheinhutte Corp. (vorm. Ludwig Beck & Co.), Wiesbaden-Biebrich, Rheinhaustr, 105/107, Germany, VALVES.

Hale Manufacturing Co.,[3] P.O. Box 1923, Tulsa, Okla., VALVES.

Sturgeon Bay Shipbuilding & Dry Dock Co., Sturgeon Bay, Wis., FLANGES AND BOLTING.

[1] Also listed in current CG–190 for flanges.
[2] Also listed in current CG–190 for fittings and flanges.
[3] Synthetic rubber-lined butterfly valves limited to Class II piping and a maximum temperature of 200° F. and to the acceptable piping systems.

Changes Published During September 1960

The following publications have been modified by Federal Register:

CG–190, CG–169, CG–172, and CG–184 Federal Register, September 21, 1960.

CG–191 Federal Register, September 24, 1960.

CG–190 Federal Register, September 28, 1960.

CG–323 Federal Register, September 29, 1960.

MARINE SAFETY PUBLICATIONS AND PAMPHLETS

The following publications and pamphlets are available and may be obtained upon request from the nearest Marine Inspection Office of the United States Coast Guard. The date of each publication is indicated in parenthesis following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

CG No.	Title of Publication
101	Specimen Examinations for Merchant Marine Deck Officers (7–1–58).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (8–1–58).
115	Marine Engineering Regulations and Material Specifications (3–1–58). F.R. 5–10–58, 4–25–59, 9–5–59, 3–17–60.
123	Rules and Regulations for Tank Vessels (12–1–59). F.R. 3–30–60.
129	Proceedings of the Merchant Marine Council (Monthly).
169	Rules of the Road—International—Inland (5–1–59). F.R. 5–21–59, 6–6–59, 5–20–60, 9–21–60.
172	Rules of the Road—Great Lakes (5–1–59). (F.R. 6–1–59, 1–7–60, 3–17–60, 5–20–60, 9–21–60.
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (7–2–51).
175	Manual for Lifeboatmen and Able Seamen, Qualified Members of Engine Department, and Tankerman (6–1–55).
176	Load Line Regulations (9–2–58). F.R. 9–5–59, 8–2–60.
182	Specimen Examinations for Merchant Marine Engineer Licenses (12–1–59).
184	Rules of the Road—Western Rivers (5–1–59). F.R. 6–1–59, 6–6–50, 5–20–60, 9–21–60.
190	Equipment Lists (4–1–60). F.R. 6–21–60, 8–16–60, 8–25–60, 8–31–60, 9–21–60, 9–28–60.
191	Rules and Regulations for Licensing and Certificating of Merchant Marine Personnel (5–1–59). F.R. 5–26–59, 6–20–59, 7–21–59, 8–15–59, 9–5–59, 1–8–60, 3–17–60, 3–30–60, 5–6–60, 7–8–60, 9–24–60.
200	Marine Investigation Regulations and Suspension and Revocation Proceedings (7–1–58). F.R. 3–30–60, 5–6–60.
220	Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels (4–1–57).
227	Laws Governing Marine Inspection (7–3–50).
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267	Rules and Regulations for the Numbering of Undocumented Vessels and the Reporting of Boating Accidents (5–1–59). F.R. 7–11–59, 7–18–59, 7–25–59, 9–5–59, 9–17–59, 10–2–59, 10–23–59, 11–19–59, 11–21–59, 12–5–59, 12–29–59, 1–1–60, 1–30–60, 2–13–60, 3–4–60, 3–17–60, 3–18–60, 4–6–60, 4–14–60, 4–20–60, 5–6–60, 5–11–60, 6–25–60, 6–29–60, 7–14–60, 7–29–60.
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290	Pleasure Craft (7–1–59).
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320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (10–1–59).
323	Rules and Regulations for Small Passenger Vessels (Not More Than 65 Feet in Length) (6–1–58). F.R. 9–29–60.
329	Fire Fighting Manual for Tank Vessels (4–1–58).

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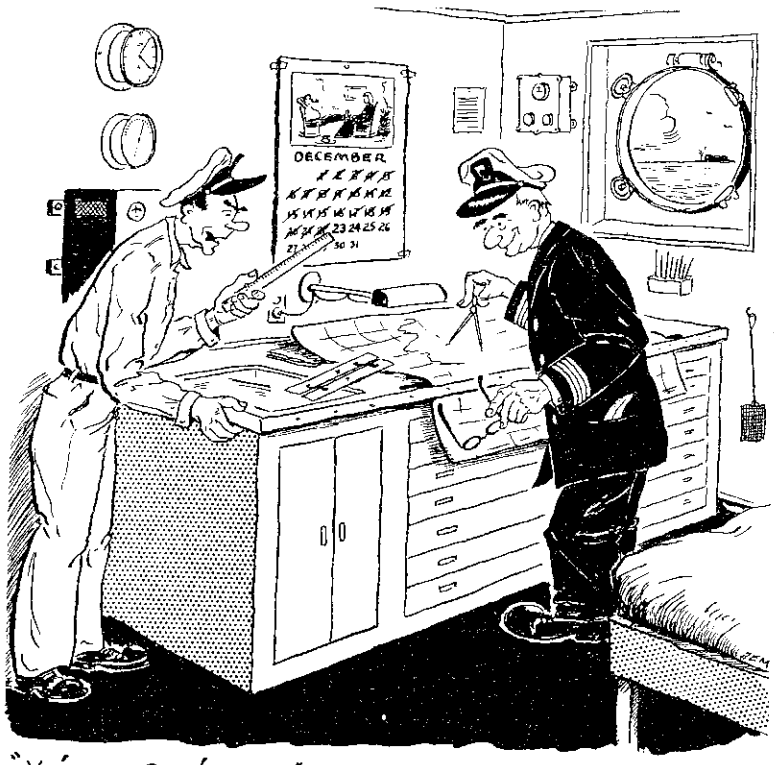
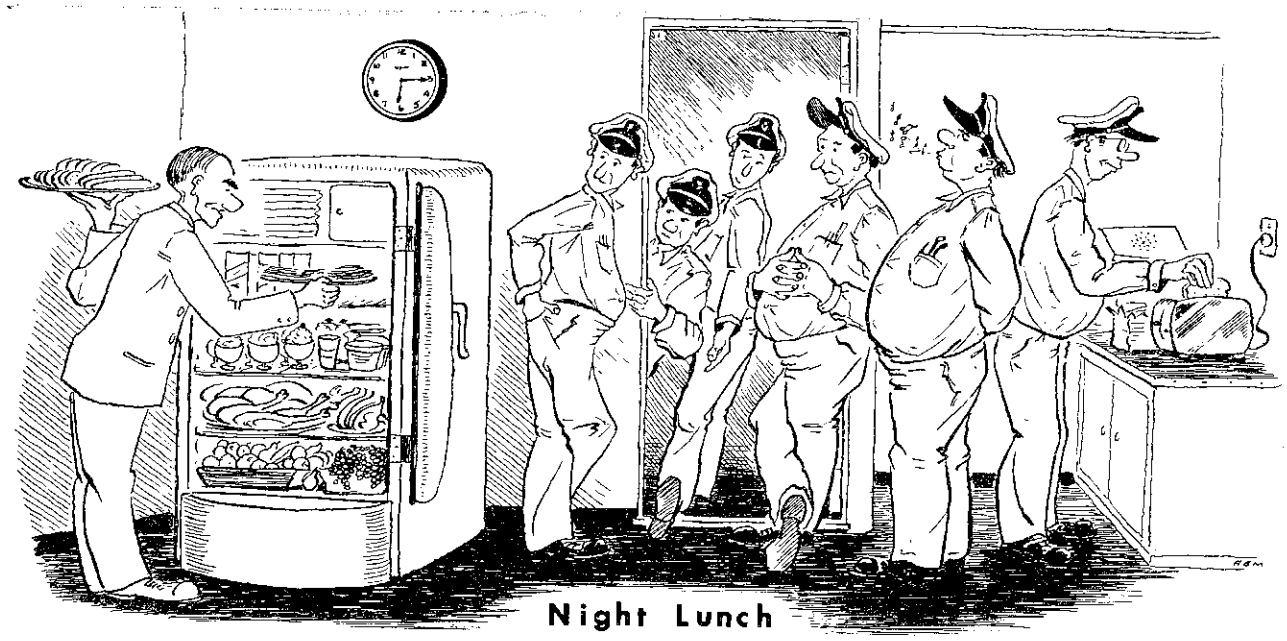
The Ships—As Figured From the Office (Part II)

"Name's Gillunk - New Second Mate Sir! Just finished Paid Leave Sir - Would you mind writing New York, requesting my next Paid Leave, Sir!"



"Ya' see Cap'n, Sir! About twelve turns at three knots around Tortugas - just happens to make us hit port on Christmas Day"



Night Lunch