

IN THIS ISSUE . . .

The Anatomy of Marine Casualty Investigations . .

THIS COPY FOR NOT LESS THAN 20 READERS-PLEASE PASS IT ALONG

CONTENTS

FEATURE The Anatomy of Marine Casualty Investigations		•	•	•	. 4
DEPARTMENTS					Q
Maritime Sidelights		•			. 0
Be Alert When Handling Mooring Lines	•	•	•		. 9
Nautical Queries	*	•		•	. 10
Amendments to Regulations	•	•		•	. 17

COVERS

FRONT COVER: Sliding Down the ways at Bethlehem Steel Corp. Sparrows Point shipyard, the S.S. Penn Champion, a 37,250-DWT tanker, is the first constructed here for Penn Tanker Co. of New York. The Penn Champion is the tenth vessel of its class to be launched at the Baltimore yard and has an extended cruising range of about 12,000 miles. Photo. Courtesy Francis DiGennaro.

BACK COVER: Handling of Synthetic Mooring Lines. Courtesy The Channel.

DIST. (SDL NO. 90)

A: abcdew(2); fghijklmnopqrstuv(1) B: n(40); c(16); e(5); f(4); gh(3); bikmq(1) C: abcdefgimnou(1) D: i(5); abdefklmnsuvx(1) E: d(1) F: p(1) Lists 141M, 111, 203

PROCEEDINGS

OF THE

MERCHANT MARINE COUNCIL

Published monthly at Coast Guard Headquarters, Washington, D.C. 20591, under the auspices of the Merchant Marine Council, in the interest of safety at sea. Special permission for republication, either in whole or in part, with the exception of copyrighted articles or pictures, is not required provided credit is given to the Proceedings of the Merchant Marine Council. Use of funds for printing this publication has been approved by the Director of the Burcau of the Budget, May 21, 1969.

The Merchant Marine Council of The United States Coast Guard

Admiral W. J. Smith, USCG Commandant

Page

Rear Admiral C. P. Murphy, USCG Chief, Office of Merchant Marine Safety, Chairman

Rear Admiral Roderick Y. Edwards, USCG Chief, Office of Public and International Affairs, Alternate Chairman

Captain James B. McCarty, Jr., USCG Deputy Chief, Office at Merchant Marine Safety, Vice Chairman

Rear Admiral R. W. Goehring, USCG Chief, Office of Operations, Member

Rear Admiral W. L. Marrison, USCG Chief Counsel, Member

Rear Admiral Joseph J. McClelland, USCG Chief, Office of Boating Safety, Member

Rear Admiral H. S. Pearson, USCG Chief, Office of Engineering, Member

Captain G. H. Read, USCG Chief, Merchant Vessel Personnel Division, Member

Captain Eric G. Grundy, USCG Chief, Hazardous Materials Division, Member

Captain Winford W. Barrow, USCG Chief, Merchant Vessel Inspectian Division, Member

Captain W. L. Aitkenhead, USCG Chief, Merchant Marine Technical Division, Member

Dr. Charles C. Bates Science Advisor to the Commandant, Member

Mr. Robert O. McDonald Chief, Merchant Vessel Documentation Division, Member

Captain Leonard E. Penso, USCG Executive Secretary and Member

T. A. DeNardo, Acting Editor

" ter

AMVER

T/S BREMEN DOES IT AGAIN

In a recent Atlantic medico, the T/S Bremen, being the closest doctorvessel, was called on for assistance. And in the tradition of her past, the German passenger liner unselfishly diverted from her intended course to add the saving of another human life to her outstanding record of humanitarianism at sea.

The case began when a 24-year-old crewman aboard the MS *Tielrode/ Onta* fell ill to an acute case of appendicitis. At 1754 G.m.t. on April 24, when the New York Rescue Coordination Center (RCC) was informed of the medical emergency, the Belgium freighter was 720 miles Northeast of Bermuda. According to a message sent by the master, radio contact had been established with the MS *Eeklo/Onee*, a Belgium doctorcarrying vessel, and temporary medical treatment had been prescribed.

Because the *Eeklo* was several sailing days away, the nearest medical facilities were at St. Johns, Newfoundland, and *Tielrode's* master indicated that this was his destination, asking if there was any other alternative. After checking with AMVER, RCC New York came up with that other alternative; the T/S *Bremen*, with a doctor on board, was only 158 miles Northwest of *Tielrode's* position. *Tielrode's* master then contacted the *Bremen*, explaining the situation, and the German master promptly agreed to a rendezvous.

While the two vessels steamed towards the rendezvous position, the U.S. Public Health Service Hospital in New York prescribed further medical instructions for the patient until he was under the personal care of a doctor. The following day the vessels met and the patient was taken aboard the Bremen. A few hours later, the German liner passed the following message to RCC New York: "Patient from Tielrode/Onta has been operated on and is doing fine."

For years now, the T/S Bremen has been a regular AMVER participant and has lent her lifesaving services to others at sea. This case, as it happened, was in the area of U.S. Coast Guard responsibility. As such, and in recognition of her most recent contribution, Rear Adm. Mark A. Whalen, Commander, Eastern Area, forwarded the following message to the master of the Bremen: "Your prompt and willing assistance in support of the emergency medical case aboard MV Tielrode was in keeping with the highest tradition of the sea and is very much appreciated."

Details of AMVER System operations may be obtained from Commander, Eastern Area, U.S. Coast Guard, Governors Island, New York, N.Y. 10004, and Commander, Western Area, U.S. Coast Guard, 630 Sansome Street, San Francisco, Calif. 94126. AMVER instructions are available there, and at Coast Guard Captain of the Port and Marine Inspection Offices in major Atlantic, Gulf, and Pacific ports of the United States. The instructions are published in the following languages: Danish, Dutch, English, French, German, Greek, Italian, Japanese, Norwegian, Portuguese, Russian, Spanish, and Swedish. Requests for instructions should state the language desired if other than English. \$

THE ANATOMY OF MARINE CASUALTY INVESTIGATIONS

Commander Donald F. Hall, USCG

Assistant Chief, Merchant Vessel Inspection Division, Headquarters

A discussion of significant marine casualties of 1969 in the context of the casualty investigation program and its aftermath.

THE INVESTIGATION of transportation accidents has been performed by various agencies of government for many years and in different ways depending upon the transportation mode involved. However, never before has there been such attention focused on safety and therefore on those incidents where safety has been shown to be lacking or could be improved. Because of this increased focus, it is valuable to examine the programs that relate to promoting safety to see if in fact their assumptions are still valid and whether the program is performing as intended. Furthermore, we think it is valuable to those interested in the activities of a particular agency to have knowledge of the basic machinery and operations relating to its functions. In previous years the Coast Guard has discussed selected aspects of safety, such as personnel failure, that relate to marine casualties investigated during that year. I would like to discuss marine casualties in the context of the casualty investigation program and its aftermath. It is hoped that by fostering better understanding of a particular program of safety its ability to achieve its goal will be enhanced.

What is the goal of a marine casualty investigation? Obviously, since it is part of the merchant marine safety

4

From an address before the 1969 Marine Section, of the National Safety Congress and Exposition.

program it should ultimately be directed toward prevention of casualties. The route by which this is accomplished, however, has never been clearly set out at one given time. Rather, it has evolved over many years into a tree of many branches.

INVESTIGATIONS AND SAFETY

The stated purpose of marine casualty investigations appears in Coast Guard regulations. They are for the purpose of taking appropriate measures for promoting safety of life and property at sea. Investigations determine as closely as possible: (1) The cause of the casualty, (2) whether there is evidence that any failure of material (either physical or design) was involved or contributed to the casualty (3) whether there is evidence that any act of misconduct, inattention to duty, negligence or willful violation of law on the part of any licensed or certificated man contributed to the casualty and (4) whether there is evidence that any Coast Guard personnel or any representative or employee of any other government agency or any other person caused or contributed to the cause of the casualty. It can be seen that determinations (2), (3) and (4) focus the inquiry in a particular direction and serve as an adjunct to existing safety programs related to vessel inspections and manning requirements. However, determination of the cause of the casualty may or may not be connected with other existing Coast Guard regulatory power. An investigation of a casualty involving uninspected vessels and uncertificated or unlicensed personnel is nonetheless important insofar as the need for expanded regulation may be demonstrated.

The investigation program has several underlying assumptions whose validity has been demonstrated many times. Investigating a marine casualty is an inquiry into a symptom, a manifestation of something else, a consequence of a condition. For every actual occurrence there are hundreds of near-accidents where fortuitous circumstances avert a casualty. The principle has evolved that the value of an investigation lies in its identification of causes or factors which were part of the causal chain of events and which are susceptible to remedial control. The value of an investigative report is directly proportional to its dissemination to those persons in the

January 1970

best position to take action on those causes or factors. The action taken will depend in large measure on what recommendations have been made. The National Transportation Safety Board in its Second Annual Report to the Congress stated:

> Recommendations arising from reports of accident investigations and from special studies are the most direct safety-influence output of the Board's work.

This is equally true for the Coast Guard to the degree that the aftermath of an investigation often consumes more manpower and material resources than the investigation itself. This is as it should be if we take the view that an investigation is not a cure of what is wrong but only a diagnosis.

Every year approximately 5,000 marine casualties are reported to the Coast Guard under reporting standards set out in regulations applicable to all U.S. commercial vessels anywhere in the world and to all vessels on navigable waters of the United States. Casualties are required to be reported that result in: (1) \$1,500 property damage or (2) effect on vessel seaworthiness or (3) stranding or grounding or (4) loss of life or (5) injury resulting in 72 hours incapacity. It is useful to indicate the distribution of workload for these cases. For example, in 1969 the nine largest Marine Inspection Offices, which have clear personnel divisions among various functions, accounted for 1,151 of the 2,684 vessel casualty reports forwarded to Headquarters. The total number of investigating officers preparing these reports was 54. It is estimated that these officers must divide their time equally between casualty investigations and investigation and presentation of misconduct and negligence cases concerning licensed or certificated persons. Naturally, not all cases receive an equal degree of investigation nor are all reports of the same type. Some cases are investigated by Marine Boards of Investigation. All others are investigated by



one officer either informally or by conducting formal proceedings similar to a Marine Board. Last year the Commandant convened six Marine Boards of Investigation to investigate casualties resulting in a total of 67 deaths. Marine Boards are convened for major casualties if such an investigation would tend to promote safety and is in the public interest.

PROMPT CASUALTY REPORT

A casualty that took the lives of nine men in a very short time occurred in the Santa Barbara Channel on 25 November 1968. The M/V*Triple Crown*,¹ a drilling rig anchor and supply vessel, was engaged in picking up the anchors and chain for the offshore drilling rig *Bluewater II* when the vessel listed to starboard and sank stern first. The Marine Board which investigated the incident concluded that it was caused by the flooding of the engineroom through the open starboard stackhouse door as the vessel rolled in moderate seas. It further found that the casualty may have been prevented or its effects minimized by closing and securing the engine stackhouse door which had been obstructed by an anchor. Another preventive measure indicated would have been proper loading of the vessel to maintain sufficient stern freeboard. The improper loading condition of the vessel was due to using water ballast tanks to stow anchor chain, fuel, and potable water instead of for reserve buoyancy. These causal factors indicated evidence of several violations of vessel inspection and manning laws and also vessel documentation laws regarding tonnage. Besides recommending that appropriate action be taken on the alleged violations against the owner, operator and charterers, the Board recommended amending the documentation laws to make requirements more explicit. It further recommended investigation to detect or remedy tonnage violations for vessels similar to the M/V Triple Crown.

The machinery of investigation and review of this case is worthy of note because it represents a step in assuring that the results of Marine Boards of Investigation become avail-

¹The Marine Board, Commandant and National Transportation Safety Board Actions on this casualty may be found in the November 1969 "Proceedings."

able as soon after the casualty as possible so they may have maximum impact. The time between the date of this casualty and release of the final report represents a significant reduction over the period of time for Marine Board cases that have occurred in the past. A total of only TEN MONTHS from the date of the casualty until final action by the NTSB and release to the public. Naturally, complete investigation and careful review are primary, but it is valuable from a safety viewpoint to publish the results of investigations of major casualties while the memory of the incident is relatively fresh in the public's mind. Of the six Marine Boards of Investigation convened this year, five have reported to the Commandant and the cases are under review. Upon completion of Commandant's Action the reports will be forwarded to the National Transportation Safety Board for final determination of cause.

This casualty also serves to point up the relationship between how pursuit of the cause of a casualty can lead into law enforcement functions. However, as the Board Report and Commandant's Action make clear, no determination on any violations is made or intended beyond merely finding evidence of such violation. Action upon this evidence is undertaken by separate and distinct procedures. This separation of functions is not only a necessary incident of due process of law but also an important principle in assuring the investigation remains unencumbered by non-safety considerations.

MATTERS OF JURISDICTION

A casualty which serves to point up the interrelation of jurisdiction among the various agencies of the Government occurred in the Gulf of Mexico on 24 October 1967. The Continental Oil Rig $43-A^2$ exploded

6

Commander Donald F. Hall, who is presently assigned as Assistant Chief, Merchant Vessel Inspection Division in the Office of Merchant Marine Safety at U.S. Coast Guard Headquarters in Washington, D.C., is a 1943 graduate of the Massachusetts Maritime Academy. Following graduation, Commander Hall was employed as a licensed deck officer in various merchant vessels, obtaining his unlimited master's license in 1947 at the age of 23. He entered the Coast Guard as a commissioned officer in 1953, and his merchant marine safety career began the following year at the port of Philadelphia. Commander Hall's Coast Guard duties include a previous assignment at Coast Guard Headquarters in the Merchant Vessel Personnel Division, as well as tours afloat and ashore at Boston, Norfolk and in Guam, where he served as Officer in Charge, Marine Inspection just prior to his present assignment.

while operating as a production facility in collecting and processing crude oil produced by adjacent oil well fields. While there was no resultant loss of life and only minor injuries from the incident the potential for greater disaster was present. Many conclusions and recommendations of the Board focused upon those aspects of the casualty which are of primary regulatory concern to the Coast Guard-firefighting and lifesaving equipment. The regulation excreised by the Coast Guard over the structures under the Outer Continental Shelf Lands Act is confined to lifesaving, firefighting and navigation equipment. However, when the Coast Guard is the sole agent investigating a casualty the scope of that inquiry must go beyond the area of regulatory control if a complete and accurate picture of all the circumstances is to be compiled. Some of these areas involve drilling operations that may be within regulating power of the Department of Interior.

This point was made in the Action by the National Transportation Safety Board, which recommended that the Department of Transportation, in conjunction with the Department of Interior, study the need for new or expanded safety regulations for offshore drilling facilities including equipment, operation methods related to drilling, production, and transportation of oil, gas and other subsoil minerals.

The Secretary of Transportation concurred in the need for safety regulation in this area. He further stated that a study of the Department's jurisdiction over offshore pipelines and production facilities determined that it had "complete and exclusive jurisdiction" over all pipelines that lie on the continental shelf outside state boundaries. While this jurisdiction would attach to a facility such as Platform 43-A it would not place any responsibility on the Department over a well up to the point where the commodity enters the pipeline. The Secretary of Interior also responded to the recommendation of the National Transportation Safety Board. He endorsed the proposal for a joint study of the need for additional safety regulations; however, because of the issuance by the Department of Interior of new safety and control regulations for offshore leases such a study was deemed premature. This discussion of this recommendation demonstrates how a casualty investigation can operate as a vehicle of policy development and how it often meshes with other administrative activity.

On 6 April of 1969 a collision occurred in the Mississippi River at New Orleans that dramatically demonstrates the above principle. Collision between vessels in a populated area is always a serious matter. When one of the vessels involved is a barge carrying a highly volatile cargo of crude oil, then the potential for major catastrophe exists. The fire which erupted after the collision between the Chinese vessel Union Faith and a barge in tow of the tug Warren J. Doucet took the lives

² The Marine Board, Commandant and National Transportation Safety Board Actions on this casualty may be found in the October 1969 "Proceedings."



of 25 crewmembers of the freighter. This casualty occurred under the Greater New Orleans bridge at a time when river safety was already a subject of much concern. Its impact will undoubtedly be felt long after the report of the U.S. Coast Guard Marine Board of Investigation is completed. Legislation pending in Congress for several years would extend the regulatory control the Coast Guard exercises over towing vessels. With each disaster on the rivers, the need for such legislation as well as other proposals involving bridge-to-bridge radiotelephone and unified Rules of the Road becomes more acute.

TO INQUIRE, NOT ACCUSE

Tragedy in the Mississippi River was visited upon the Coast Guard itself when the buoy tender White Alder sank after a collision with the SS Helena (Taiwan) on 7 December 1968. The upbound freighter collided with the White Alder south of Baton Rouge as the latter was returning to New Orleans after completing a mission of retrieving low water buoys. Of the twenty crewmembers on the White Alder only three men survived, resulting in the worst Coast Guard loss of life during peace time. The Marine Board convened to investigate this casualty has reported to the Commandant and the report is under review. One aspect of the investigation worthy of note is the

claim of privilege against self-incrimination invoked by personnel on board the SS Helena. Reflecting the dictate of the United States Constitution, provision has always been made for the exercise of this privilege by any witness to an investigation. The privilege of course extends only to answers which may tend to incriminate in the sense that the witness would be subjected to a criminal sanction. While exercise of the privilege occurs only rarely in our investigation, it nonetheless illustrates a very significant feature concerning the character of a marine casualty investigation. As stated earlier, the purpose of investigation is promotion of safety of life and property and not to fix civil or criminal responsibility. Thus, the role of an investigating officer or a Marine Board is not accusatory. It is inquisitory. The focus of inquiry is determination of cause not apprehension of a criminal offender. The very nature of the investigation distinguishes it from ferreting out crime and criminals. In conferring investigative power upon the Coast Guard, the Congress also conferred the power to compel testimony by subpoena from persons with knowledge of the circumstances of a casualty. This power, although subject to constitutional limitations, is considered an essential instrument of casualty investigations even though resort to its use is infrequent. The power of an administrative agency to compel the testimony of a witness or production of records and other material is a formidable one and can only be granted by Congress. In granting this power to the Coast Guard, the Congress made its intent clear that effective investigations cannot depend solely upon voluntary cooperation of the public. The fact the power exists, however, is often sufficient to achieve the desired result and therefore its exercise usually becomes unnecessary. The Coast Guard intends to continue its efforts to gather all pertinent facts of a casualty in a manner involving the least coercion. In those situations where it appears that a witness is unjustifiably recalcitrant and he refuses to testify as to facts unavailable elsewhere, then the broad powers granted by Congress must be exercised in order to perform the broad responsibilities conferred.

This concludes my discussion of marine casualty investigations that relate to the general goal of marine safety. Too often the response to accidents is only "Be more careful." This of course is not enough if one is to genuinely intend to prevent future accidents. It is often said that questions are more important than answers. If the right question is posed then the right answer is more easily found. This is certainly true in marine casualty investigations. I hope those involved in maritime safety never stop asking the question "Why aren't we doing better?" £

7

maritime sidelights

SAFEST SHIP AWARD



Photo Courtesy Leon Trice

On behalf of his crew, the Master of the M.V. New Yorker, accepts a plaque honoring his vessel as the Safest Ship in the Fleet for 1968. The New Yorker won the award in competition with 34 other ships operated by Sea-Land Service, Inc., achieving a lost-time accident frequency of zero. In addition to the plaque, the licensed personnel won a stereo system for their messhall and the unlicensed a standard-shortwave radio. Pictured above are, from left to right: Chief Engr. James Prendergast, Chief Mate Frederick Boer, SIU Port of New Orleans Representative Jack Gould, Sea-Land Service, Inc., Safety Engineer Robert Snow, Capt. Adam Torres, Ramon Benitex, B. R. Util., and Henry Isidore, Messman.

USS—A Friend Away From Home

Seamen away from home for long periods of time often require specialized services to provide a link with the way of life they leave behind. United Scamen's Service (USS) serves as this link, since it is the only American agency providing health, welfare, and recreation services to our seamen in foreign ports.

USS establishes centers in difficult ports where seamen may be victimized and provides services in military

8

ports, particularly in the Vietnam Sealift area. In the latter ports, there are no other facilities available to the seamen who bring in the essential military supplies.

A USS center provides mail and telephone services, counseling on family problems, recreation and sport facilities. USS is geared to give these services in the short periods the seaman is in port. For seamen unable to come ashore because of work schedules, a USS representative takes aboard mail and papers and renders on-shore services where needed.

For seamen who require medical care or hospitalization, USS provides.

language interpretation, comfort articles and communicates with the family at home. It provides housing during the convalescent period before the seaman is repatriated. For the seaman in trouble, USS helps with legal and technical aid to return him to work at the earliest possible time.

When an illness, death, or tragedy strikes at home, USS locates and arranges for emergency transportation home for the seaman.

USS is supported by United Funds, the Maritime Industry, and the Federal Combined Campaign. Funds thus raised help meet the expenses of the marooned and hospitalized seamen. But the major income is from the seamen themselves. In the centers they pay reasonable prices for food, beverages and lodging, which puts these services on an almost self-sustaining basis.

USS has its headquarters at 17 Battery Place, New York, N.Y. 10004. Telephone: HAnover 2–4567. Cable: UNSEASER.

New Journal Planned

Publication plans for a new quarterly periodical for the international maritime and shipping industry to be known as The Journal of Maritime Law and Commerce, were announced in Washington. The first issue was planned for October, 1969. This will be the first English language journal devoted to international shipping law and commerce. Jefferson Law Book Co., of Silver Spring, Md., will be the publisher.

Edited at New York University School of Law, the journal will focus on the complex problems of the maritime community and scek their solutions. The editor is Professor Albert H. Garretson, and the associate editor is Professor Ludwik A. Teclaff. ‡

-Journal of Commerce

BE ALERT WHEN HANDLING MOORING LINES

We have experienced several injuries involving seamen who were handling lines during mooring operations. These accidents could have been avoided had the persons injured exercised proper work methods and been alert to their surroundings.

It is important that only experienced seamen handle synthetic lines at winches and mooring bitts. Ships' officers must make sure their men know the characteristics of all lines used.

Excessive strain on lines should be avoided whenever possible depending on the particular circumstances. Warning of a dangerous strain is given by observation or by the creaking of the hawser.

Every seaman must be alert to the surroundings. He should avoid positioning himself in a spot where a rail or any other structural part of a ship may prevent him from moving clear of a parted or runaway line.

Sufficient turns of the mooring line must be made around the gypsyhead to hold the strain and prevent the line from slipping. Excessive turns could cause the line to jump off when a strain is applied.

Men handling lines on the gypsyhead should stand a safe distance away to avoid fingers or hands being caught between the lines and keep feet or legs clear of all bights that could catch and draw them toward the gypsyhead.

When handling the approved west coast type stoppers, stay on the safe side, don't allow yourself to be caught by a runaway line in the event a stopper does part due to excessive strain on a line.

January 1970

371-109-69-2



Good communication is most important. The seamen at the controls of the windlass must be alert and have a clear view of all hands handling the lines.



Always make mooring lines fast to bitts, not on gypsyheads.

NEVER STAND IN THE PATH OF A LINE UNDER STRAIN. NEVER ATTEMPT TO CHECK A LINE WHICH IS RUNNING OUT RAPIDLY BY

Courtesy Lykes Lines Safety Bulletin

FIBER LINES

STEPPING ON IT.

In Meteora, in northern Greece, there are a number of monasteries perched on the top of high rocks for reasons of safety. The only access to these monasteries, until very recent times, was by means of a hoist. The monks would lower a decrepit looking line. The traveler would be placed in a net, hooked onto the line and hove aloft. The following joke became standard. The uneasy traveler would look at the ancient line and ask how often it was renewed. He was informed that the line was renewed promptly whenever it broke.

This is not the procedure to follow with fiber lines on vessels. They should be kept clean of grease and oil and protected against chemicals that might cause them to deteriorate. They should likewise be stowed in a dry, well-ventilated storeroom and protected against mechanical damage.

Lines, particularly lines on which men are going aloft, should be carefully inspected before they are used. If there is the slightest doubt as to the condition of a line on which a man is going aloft, it is to be replaced with new line. \ddagger

nautical queries

DECK

Q. What are the requirements of the regulations with respect to the manning of lifeboats?

A. There shall be for each lifeboat a number of certificated lifeboatmen equal to that specified in the tables of the regulations.

The master shall appoint a first and second in command for each lifeboat. On all services other than rivers, these persons shall be either licensed deck officers or certificated lifeboatmen.

The master shall assign to each motor-propelled lifeboat a man capable of working the motor.

The master shall assign to each lifeboat carrying a wireless and searchlight, a man capable of operating such equipment.

The master shall assign to one or more officers the duty of seeing that the lifeboats and liferafts are at all times ready for immediate use.

Q. What equipment is required by the Regulations to enable persons to get in and out of a boat in the water and up to the boat deck?

A. All vessels shall have an approved type ladder for each set of lifeboat davits. Such ladders shall be kept ready and convenient for use on the lifeboat deck, and shall reach from such deck to the vessel's light waterline, no heel assumed.

Q. What precautions are necessary to insure that lifeboat winches and hand propelling gear in lifeboats operate properly in cold weather?

A. In order to assure that lifeboat winches and hand propelling gear operate properly during cold weather it is important that the oils and greases used be in accordance with the lubrication chart provided by the manufacturer or the plate on the winch or gear providing for such temperatures. The oil or grease should be checked for water content, and the gear casings checked for water under the oil which, if frozen, would interfere with the operation of the gear. These precautions should be taken when coming into cold weather, when operating in cold weather; and are especially important on vessels operating alternately in warm and cold weather, under which conditions condensation will most likely occur.

Q. Where vessels are provided with manila lifeboat falls, how must such falls be stowed in order to protect them, particularly from ice?

A. All vessels of over 1,000 gross tons shall be provided with covered tubs, boxes, or reels for the stowage and protection of the falls. Vessels of 1,000 gross tons and less shall have the falls protected from ice and ready for immediate use.

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

b. How would you prevent it from swaying if the ship is pitching?

A. a. By the use of frapping lines passed around the falls above the lower block.

b. Keep the painter taut and use a stern painter made fast in the same manner or by giving the frapping lines fore and aft lead.

AIR COMPRESSORS

ENGINE

Q. Copy the below diagram and label each of the lines. What does the cross hatched area represent?



A. The below diagram indicates three methods of compression: isothermal, three stage with intercoolers, and adiabatic. The cross hatched area represents the work saved by three stage compression with intercooling versus single stage adiabatic compression.



January 1970

Q. Explain how the following conditions will be indicated and how they will affect the combustion of the fuel oil in the furnace: excessive air; insufficient fuel oil pressure; water in the oil; low fuel oil temperature.

A. Excessive air will be indicated by white smoke or a completely clear stack. When too much air is used, there is a large falling off in boiler efficiency, because a large part of the heat generated in the furnace is carried away up the stack. Insufficient air is indicated by black smoke and pulsating combustion. Too little air results in incomplete combustion with the loss of heat and soot deposition. Insufficient fuel oil pressure will be indicated by black smoke as the fuel will not be atomized properly and hence will not mix well with the air. Low pressure will also result in the loss of heat and soot deposition. Water in the oil will be indicated by a hissing sound during combustion and may cause the flame to be extinguished. If the temperature is too low the oil will not atomize properly, thus causing the burners to smoke heavily with the subsequent loss of heat and soot deposition.

Q. What are the causes of panting in a fuel oil burning boiler?

A. Panting is usually caused by one of the following: deficiency of air, excessive oil temperature, pulsating oil pressure, or poor air-oil intermixture. Poor air-oil intermixture may be caused by poor furnace design, improper burner openings, poor register design, or severe warping of the burner parts.

Q. Which of the following would aid in prevention of engine-room or boiler-room fires:

(A) Keep tanktops and floorplates free of oil

(B) Maintain proper fuel temperature

January 1970

(C) Do not light burners off brickwalls of boiler furnace

(D) All of the above

A. (D) All of the above.

Q. Oil to be used for firing boilers shall have a minimum flashpoint of:

(A) 100° F

(B) 130° F

(C) 150° F

(D) 180° F

A. (C) 150° F

tion

Q. You are assigned to a particular vessel as engineer. You can ascertain your duties for fire or emergency from:

(A) The ship's fire bill

(B) The certificate of inspec-

(C) The ship's emergency booklet.

(D) The station bill

A. (D) The station bill.

Q. What firefighting equipment should be used if an engineroom fire got out of control?

(A) 40-gal. foam

(B) 100-lb. semiportable CO2

(C) Fixed CO_2

(D) None of the above

A. (C) Fixed CO₂.

Q. In fighting an oil or gasoline fire which of the following should *not* be used:

(A) Solid stream smooth bore nozzle

(B) High velocity fog

(C) Low velocity fog

(D) Steam smothering

(E) Foam

A. (A) Solid Stream smooth bore nozzle.

Q. Regulations prescribe that CO₂ cylinders may be retained in service if the weight loss is not more than:

(A) 1 percent of weight of charge

(B) 3 percent of weight of charge

(C) 5 percent of weight of charge

(D) 10 percent of weight of charge

(E) 15 percent of weight of charge

A. (D) 10 percent of weight of charge.

Q. What is the purpose of the "volute" of a centrifugal pump?

A. The purpose of the volute is to collect the liquid discharged from the periphery of the impeller at high velocity and gradually bring it to a relatively low velocity, thus converting the velocity head to static pressure.



CORRECTION

The second "deck question" concerning emergency signals on page 153 of the August 1969 issue, the answer was incorrect.

The question concerned emergency signals. In the answer printed, a fire alarm was described as follows: "Continuous rapid ringing of the ship's bell for at least 10 seconds supplemented by the same signal on the general alarm bells."

The regulations for fire alarm for Passenger Vessels, for Tank Vessels, and for Cargo and Miscellaneous Vessels were amended in the Federal Register of 8 September 1965 to read "The fire alarm signal shall be a continuous blast of the whistle for a period of not less than 10 seconds supplemented by the continuous ringing of the general alarm bells for not less than 10 seconds." The only place where the ship's bell may still be used in lieu of the whistle signals for fire alarms is on river vessels.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 7-69 25 August 1969

Subject: Hydraulic Releases with Primary Lifesaving Equipment and Alternate Float-Free Arrangements

PURPOSE

This circular summarizes the requirements for installing the approved hydraulic releases now permitted on shipboard with inflatable liferafts, liferafts, life floats, and buoyant apparatus. Alternate float-free arrangements not requiring hydraulic releases are also discussed.

BACKGROUND

Hydraulic releases are depth-actuated devices designed to release primary lifesaving equipment (except lifeboats) from the deck of a sinking vessel. After the publication on 9 July 1959 of the specification for Coast Guard approved inflatable liferafts, Subpart 160.051, the raft manufacturers installed hydraulic releases with their equipment on shipboard in keeping with a number of vessel regulations (except for small passenger and uninspected vessels) which state that "Inflatable liferafts shall be stowed in such a manner that they will float free in the event of the vessel sinking." These release devices, similar to those used by the U.S. Navy, were accepted for merchant vessels, although at the time a Coast Guard specification had not been published to provide for their approval and periodic overhaul. This approach was changed on 12 April 1968 by the publication of Subpart 160.062 (Hydraulic and Manual Releases for Lifesaving Equipment) with amendments to the vessel regulations which together now provide for the approval, overhaul, and optional use of hydraulic releases and their listing in CG-190 (Equipment Lists). The sections of the vessel regulations amended by this action are as follows:

Tank vessels: 46 CFR 33.20-20; 33.25-15.

Passenger vessels: 46 CFR 71.25-15; 75.15-10.

Cargo and miscellaneous vessels: 46 CFR 91.25-15; 94.15-10.

Nautical schools: 46 CFR 167.35-3.

Small passenger vessels: 46 CFR 176.25-20; 176.25-22; 180.20-1.

Oceanographic vessels: 46 CFR 192.15-10.

DISCUSSION

Function and Operation of Hydraulic Releases

a. A properly installed hydraulic release permits lifesaving equipment secured on deck to float free from a sinking vessel. In addition, as part of an inflatable life-

raft's gripe assembly, the hydraulic release prevents a raft from coming adrift and accidentally discharging its CO_2 inflation cylinder.

h. A hydraulic release approved under Subpart 160.062 operates by the pressure of sea water on a diaphragm whose movement against a spring-loaded plunger unlocks two pawls which restrain its buoyant load. Hydraulic releases are not closure devices for inflatable liferaft containers, and they have no direct connection with a raft's CO₂ inflation system. A hydraulic release acts indirectly as an automatic inflator only by allowing a liferaft container to float upward from a sinking ship so that pull exerted on the raft's sea painter can discharge the raft's CO₂ inflation cylinder by an auxiliary lanyard.

Hydraulic Release Installation

c. Enclosure (1) shows the only hydraulic release presently approved by the Coast Guard under Subpart 160.062. This device is intended to be part of a gripe assembly installed under tension. This release exerts a tension force of 60 lbs, when its eye bolt is extended a distance of $\frac{3}{4}$ ". This amount will be indicated by an inside row of punch marks on the shank of the bolt that emerge when the correct load is applied.

d. It must be emphasized that hydraulic releases are to be installed under tension loading. When the release plunger is depressed, whether by water pressure or by hand, without tension loading there can be no assurance that the two halves of the device will separate and free the gripe. Enclosure (2) shows the general installation intended for this device; the following points should be noted:

(1) The device is suspended in tension by its end fittings and does not contact the raft container itself. A release may fail to operate if its gripe assembly forces the device against a container, or around a corner, or into contact with an object to the side.

(2) The release faces inboard so that its release plunger is accessible.

(3) The sea painter of the raft is made fast to the ship.

(4) The gripe assembly can be removed by slacking the turnbuckle or by pushing on the release plunger with the heel of the hand. If the raft is to be moved to a launching station, before it is dropped overboard the end of the sea painter must be refastened to the ship at the launching position.

e. The gripe assembly shown on Enclosure (2) does not include special latches or unusual hardware. These releases are to be installed in the field on existing or new equipment foundations. It is possible that some of the existing arrangements may not clear the deck sufficiently to permit a release to be installed as shown here. In such instances, the Officers in Charge, Marine Inspection (OCMIs) can permit the necessary alterations that will give results comparable to Enclosure (2). Drawings for these alterations do not have to be submitted to the Commandant (MMT) for approval.

Approved Hydraulic Releases

f. Hydraulic releases manufactured prior to the publication of Subpart 160.062 are permitted under 46 CFR 160.062-4(f) and -5(a) to be repaired, identified with an inspection tag, and continued in service as approved equipment, provided that (1) their manufacturers hold a current approval certificate for a similar device issued under Subpart 160.062, and (2) these manufacturers have made arrangements to recondition these old devices at either the factory or at a designated repair facility. Thereafter, both the reconditioned hydraulic releases and those approved of present manufacture shall undergo servicing at intervals of 12 to 15 months with each servicing recorded on their inspection tags as described under Subpart 160.062. The devices installed with inflatable liferafts are to be serviced at the same time as their rafts.

Alternate Float-Free Arrangements

g. Some vessel operators may choose to eliminate hydraulic releases altogether. The inflatable liferafts of these installations can then be placed in racks to prevent their shifting and from which the rafts can float free if the vessel sinks. The OCMIs can permit existing foundations to he modified by the addition of removable stanchions and bars to make loose fitting float-free installations similar to that shown on Enclosure (3). The length of the enclosing stanchions will depend on the location of the raft on deck and its exposure to boarding seas. On some vessels with low freeboards, there will be deck locations unsuitable for mounting inflatable liferafts that do not include hydraulic releases. The OCMIs will have to evaluate these installations individually on the basis of the vessel's operating conditions.

ACTION

a. After 1 July 1969, all nonapproved hydraulic releases installed with rigid liferafts, life floats, and buoyant apparatus are to be removed.

b. After 1 July 1969, all nonapproved hydraulic releases installed with inflatable liferafts are to be removed from service when the rafts go ashore for their next regu-

lar servicing. Thereafter, any hydraulic release installed with an inflatable liferaft shall be an approved device. This first servicing period after 1 July 1969 will also be the occasion for vessel operators to eliminate their hydraulic releases if they choose to use the alternate float-free arrangements described above.

c. Upon completion of the above changeover, an approved release will be either an approved device recently manufactured under Subpart 160.062, or a device previously nonapproved that has been reconditioned as described above in Paragraph f. At the time of writing this circular, the hydraulic release manufactured by the C. J. Hendry Co. under Approval No. 160.062/1/0 is the only approved device available. The Coast Guard has not been advised of any designated repair facilities for reconditioning the nonapproved devices previously manufactured by this company.

NOTE: On September 22, 1969, the Coast Guard granted an approval, 160.062/2/0, to Arrow Manufacturing, Inc., of Edgerton, Wis. for a Model 404 hydraulic release. This second approval will be included in an addendum to the above Navigation and Vessel Inspection Circular No. 7-69.



ENCLOSURE (2) TO MAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 7-69

ENCLOSURE (3) TO NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 7-69



DEPARTMENT OF TRANSPORTATION

COAST GUARD

[CGFR 69-104]

GETTY OIL CO.

Registration of House Flag and Funnel Mark

1. The Commandant, U.S. Coast Guard, in accordance with the provisions of § 3.81, Customs Regulations (19 CFR 3.81), issued under the authority of the Act of May 28, 1908, as amended (46 U.S.C. 49), has registered the house flag and funnel mark of the Getty Oil Go. as described below:

(a) House Flag. The house flag is rectangular in shape. The hoist is 4 feet, the fly 6 feet. Superimposed and centered on a white field is the word "Getty." The letter "G" is a modified upper case letter and is red. The remaining letters are orange lower case letters. The Letter "G" is 1' 43%" high, and 1' 334'' wide. Centered within the "G" is a 61/2" in diameter red nuclear symbol with a 1344'' red dot or ball centered therein. The letter "e" is 1' 7/8" high and $1113'_{16}$ " wide. Each letter "t" is 1' 17/8" high and 65/8" wide. The letter "y" is 1' 27/8" high and 1' wide.

(b) Funnel Mark. The funnel mark is to appear on a white funnel. The insignia consists of a modified upper case letter "G" painted red with an orange color dot or hall set within the letter "G". The distance from the top of the funnel to the top of the letter "G" is 4' 6". The letter "G" is 14' 8" high and 14' 6" wide. The distance from the bottom of the "G" to the fidley deck area is 6' 6". The orange dot or ball set within the letter "G" is 4' 4" in diameter.

2. Colored drawings of the house flag and funnel mark described on file with the Federal Register Division, National Archives and Records Service.

Dated: October 28, 1969.

P. E. TRIMBLE,

Vice Admiral, U.S. Coast Guard, Acting Commandant.

[F.R. Doc. 69-13228; Filed, Nov. 5, 1969; 8:46 a.m.]

(Federal Register of November 6, 1969.)

FUSIBLE PLUG

The regulations prescribed in subpart 162.014, subchapter Q, specifications require that manufacturers submit samples from each heat of fusible plugs for test prior to plugs manufactured from the heat used on vessels subject to inspection by the Coast Guard. A list of approved heats which have been tested and found acceptable during the period from August 15, to September 15, 1969, is as follows:

The Lunkenheimer Corp., Cincinnati, Ohio 45214. Heat Nos. 753, 754, 760.

AFFIDAVITS

The following affidavit was accepted during the period from October 15, to November 15, 1969:

M & H Valve & Fitting Co., Division of Dresser Manufacturing Industries, Inc., 41 Fisher Ave., Bradford, Pa. 16701, VALVES.¹

¹ Cast iron gate valves only.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 8-69

22 October 1969

Subject: Impulse-Projected Rocket Type Line-Throwing Appliances

PURPOSE

This circular is to inform all interested parties of the conditions for resuming quarterly drills on vessels having the subject type appliance.

CANCELLATION

Navigation and Vessel Inspection Circular No. 2-65 dated 31 March 1965 is cancelled.

BACKGROUND

During June 1969 a Notice to Mariners and an instruction to inspection personnel were issued reconfirming the suspension of quarterly drills with the subject appliance. After investigation and conducting tests on the appliance, it was determined that the reported failures were in the shield support bracket. Repeated tests with a new shield support bracket made of "TENZALOY" could not duplicate the failures.

ACTION

All merchant vessels which carry the model G.R.-52-CK impulse projected rocket type line-throwing appliance should make certain that they have the new "TENZALOY" shield support bracket. A picture is enclosed showing where the name "TENZALOY" is placed on the bracket.

If it is determined that the shield support bracket is not of the new material, a replacement bracket may be ordered directly from the manufacturer, Kilgore Corp., Toone, Tenn. 38381, at a cost of \$3.50 F.O.B., Toone, Tenn.

When certain that the appliance has the "TENZA-LOY" shield support bracket, quarterly drills shall be resumed using the remote firing mode.

The rocket propellant is of hlack powder composition which should not be dropped, jolted or roughly handled. The rockets should be stored so as to avoid extreme fluctuations in temperatures.

No rocket shall be fired if its date indicates it is over the acceptable age (4 years) permitted by the regulations. No rockets having less than six screws in the rocket head shall be fired.

EFFECTIVE DATE

All conversions should be completed by 1 January 1970.

Enclosure (1) To NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 8-69.



Impulse-Projected Rocket Type Line-Throwing Appliance.

January 1970

NAVIGATION AND VESSEL INSPECTION CIRCULAR 9-69

27 October 1969

Subj: Reports of Casualties involving roll-on/roll-off and containerized cargoes

Ref. (a) 46 CFR 136

PURPOSE

This circular clarifies the application of reference (a) to vessels carrying intermodal containers and roll-on/roll-off (RO/RO) cargo vehicles and requests certain information in reports of casualties for significant losses of container and vehicle cargoes.

BACKGROUND

Reports and investigations of marine casualties are made "for the purpose of taking appropriate measures for promoting safety of life and property at sea" (46 CFR 136.07-1(b)). A "marine casualty or accident" is "any occurrence involving a vessel which results in *damage by* or to the vessel, its apparel and gear, and/or cargo, or injury or loss of life . . . " (46 CFR 136.03-1(b)). Coast Guard regulations require reporting of a "marine casualty" whenever the casualty results in "actual physical damage to property in excess of \$1500.00" (46 CFR 136.05-1).

DISCUSSION

Growing containership and RO/RO ship fleets bring new techniques to the marine transport of cargoes. With the new methods of handling and carriage have come unique safety problems. For example, with a third of the cargo on a containership carried on deck, it is possible to sustain extensive damage to the cargo without serious damage to the vessel itself. The mission of the Coast Guard—protection of life and property at sea—embraces the protection of property represented by the cargo. On container and RO/RO ships, it embraces the containers and vehicles, too.

Reports of marine casualties and accidents serve as one kind of "feedback mechanism" on the effectiveness of

Coast Guard and industry safety programs and assist in the identification of significant problem areas. Reports of casualties from containerships have generally furnished detailed information on damage to the ship but little useful information on the contribution of, or damage to, container cargoes. Better data is needed for useful analysis of container damages and losses. Likewise, information concerning casualties to vehicle cargoes or RO/RO ships will be needed to provide feedback on the problems, if any, peculiar to such carriage.

ACTION

Persons submitting Reports of Vessel Casualty or Accident (Form CG-2692) in compliance with reference (a) shall include, whenever containers, containerized cargoes, or cargo-carrying highway vehicles are involved:

a. Description of cargo affected, including owner's or operator's identification number for containers and vehicles and the quantity of cargo involved (tons, gallons, etc.).

b. Specific stowage location of lost or damaged units by hatch, deck, row, tier, etc. (If containers were stacked, state number of containers in the stack.)

c. Effects of lifting gear or securing and lashing arrangements on the casualty and description of the gear or arrangements when their effect is significant.

d. Contribution, if any, of the cargo in the containers or vehicles to the casualty, and a description of the cargo when its effect is significant.

e. Effects of ship stahility, specialized construction features, casualty control systems, etc. which affected the course of events (for better or for worse) in the casualty or accident.

STORES AND SUPPLIES

Articles and ships' stores and supplies certificated from November 1 to November 30, 1969, inclusive, for use on board vessels in accordance with the provisions of Part 147 "Regulations Governing Use of Dangerous Articles as Ships' Stores and Supplies on Board Vessels" are as follows:

CERTIFIED

- Tam-Chem Inc., Building 102, Hookers Point, P.O. Box 2875 Tampa, Fla. 33601:
- Certificate 860, dated November 3, 1969, ALUMINUM CLEANER

Certificate 861, dated November 5, 1969, DESCALER No. 33

Certificate 862, dated November 5, 1969, VELECTRIX 100 South Coast Products, Inc., P.O. Box 85 Houston, Tex. 77001:

- Certificate 863, dated November 21, 1969 P-300 PENETRATING OIL AND LUBRICANT
- The Perolin Co., Inc., 350 Fifth Ave. New York, N.Y. 10001:
- Certificate 864, dated November 21, 1969. No. 873 RUST REMOVER AND SURFACE BRIGHTENER

AMENDMENTS TO REGULATIONS

Title 46 Changes

- Chapter I—Coast Guard, Department of Transportation
- SUBCHAPTER A-PROCEDURES APPLICABLE TO THE PUBLIC

PART 2-VESSEL INSPECTION

Subpart 2.50—Assessment, Mitigation or Remission of Penalties

Delegation of Authority, Reports of Violations and Civil Penalties

This document contains amendments to §§ 2.50-1, 2.50-10 and 2.50-20 which reflect the transfer of the Coast Guard from the Treasury Department to the Department of Transportation and which expand the authority of District Commanders of Coast Guard Districts to redelegate to appropriate staff officers the authority to assess, mitigate and remit civil penalties under the navigation and vessel inspection statutes.

Present regulations provide that the District Commander may by specific order in writing delegate the authority to assess, mitigate or remit penalties to his Chief of Staff, Chief, Merchant Marine Safety Division, and/or Chief, Operations Division. Since the increase in recreational boating and changes in law enforcement programs have resulted in a reorganization of the district offices, the amendments will permit the District Commander a broadened authority to redelegate within the district offices as presently organized.

Since these amendments involve delegations of authority and relate to the internal management of the Coast Guard, notice and public procedures therein are not required and these amendments can be made effective in less than 30 days.

1. Section 2.50-1 is revised to read as follows:

§ 2.50-1 Delegation of authority.

(a) The Secretary of Transportation by 49 CFR 1.4(a)(2) and 1.4(g), has delegated to the Commandant, U.S. Coast Guard, with the authority to redelegate and authorize successive redelegations of that authority, the functions vested in him under the navigation and vessel inspection statutes.

(b) The Commandant hereby authorizes each District Commander in his assigned district to administer certain statutes in accordance with procedures set forth in this subpart. The District Commander may further delegate that authority as he deems proper to appropriate staff officers of his command.

2. Section 2.50-10(b) is revised to read as follows:

§ 2.50–10 Reports of violations of laws or regulations and instituting civil penalty proceedings generally.



(b) (1) The District Commander may by specific order in writing delegate to appropriate staff officers of his command the authority to determine whether to invoke the statutory civil penalty and, upon receipt from the offender of a petition for relief from a penalty so invoked, whether to mitigate, or to remit the penalty, as he may deem proper. The order shall prescribe the types of cases which the designated officer may initiate and process to the same extent permitted the District Commander by this subpart, and those types of cases which that officer may initiate and process to a lesser extent. With respect to the latter category of cases, the District Commander's order shall set forth in detail the limits of the authority delegated to the designated officer.

(2) The term "District Commander", as hereinafter used in this subpart to designate the officer authorized to assess, mitigate or remit penalties, shall also include appropriate staff officers to whom authority to perform such function has been delegated.

3. Section 2.50-20(d)(2) is revised to read as follows:

> § 2.50−20 Civil penalties. * * * *

(d) * *

(2) In the event that there is an appeal from the decision of a staff officer, acting under delegated authority, the District Commander shall review the case. In the event the District Commander determines that the assessment of the penalty is not warranted, the case shall be closed and notification thereof given to the appellant. Those cases which upon review by the District Commander are determined to be properly instituted and administered in accordance with the regulations in this subpart and for which remission of the penalty is not considered justified shall be forwarded to the Commandant with the District Commander's recommendation.

(R.S. 5294, as amended, sec. 26, 23 Stat. 59, as amended, sec. 6(b)(1), 80 Stat. 937; 46 U.S.C. 7, 8, 49 U.S.C. 1655 (b) (1); 49 CFR 1.4(a)(2) and (g))

*

-¥-

Effective date: This amendment shall become effective on the date of its publication in the FEDERAL REGISTER.

Dated: November 7, 1969.

W. J. SMITH, Admiral, U.S. Coast Guard, Commandant.

[F.R. Doc. 69-13499; Filed, Nov. 12, 1969; 8:50 a.m.]

(Federal Register of November 13, 1969.)

Title 33 Changes

Chapter 1—Coast Guard, Department of Transportation

SUBCHAPTER D-NAVIGATION REQUIRE-MENTS FOR CERTAIN INLAND WATERS

PART 82-BOUNDARY LINES OF INLAND WATERS

Change in Demarcation Line for Chesapeake Bay

The Chesapeake Bay Sealanes Study Committee in accordance with resolutions of the Intergovernmental Maritime Consultative Organization (IMCO) has recommended to the Commandant, U.S. Coast Guard the institution of a traffic separation scheme for the approaches to Chesapeake Bay. The purpose of this scheme is to assist in preventing collisions of vessels navigating the area. Compliance with the scheme is voluntary on the part of the navigators of vessels. The scheme, in essence, provides for the establishment of two scalanes marked by buoys converging from seaward to the Pilot Area off Cape Henry. As a part of this traffic separation scheme, the Committee recommended the relocation of the present line of demarcation in order

that only one set of the nautical rules of the road would apply in the Pilot Area. This line of demarcation separates the high seas from rivers, harbors and inland waters for the purpose of indicating to mariners the point at which a change from one set of the nautical rules of the road to the other is necessary. In accordance with this recommendation Cape Henry Junction Lighted Whistle Buoy through which the existing line of demarcation passes will be disestablished. It was further recommended that the line should be drawn from Cape Henry Light to three buoys, two of which will be established as a part of the traffic separating scheme, and thence to Cape Charles Light. The three buoys are, in turn, Cape Henry Buoy Number 1 located at 36°55.0' N., 75°58.0' W., Chesapeake Bay Entrance Lighted Bell Buoy CBC to be established at 36°54'55" N., 75°55'48" W. and North Chesapeake Bay Entrance Lighted Gong NCD to be established at 36°56'47" N., 75°55'10" W. This change will move the southern leg of the demarcation line to the south a maximum distance of approximately 11/2 miles and will extend the line seaward a maximum distance of approximately 0.3 of a mile.

The scheme was approved by the Commandant, submitted to and approved by a subcommittee of IMCO subject to minor changes which do not affect its actual operation or the line of demarcation above described. The related demarcation line modification proposal was considered and approved by the Merchant Marine Council Committee of the U.S. Coast Guard. Based on these recommendations, the Commandant U.S. Coast Guard hereby approves the change in the line of demarcation.

Some months ago the decision was made to implement this traffic separation scheme on December 1, 1969. All affected agencies and individuals were so notified and have arranged their plans accordingly. Some delays were experienced in obtaining com-

ment from the various agencies to which it was submitted. Accordingly, it is now impracticable to postpone this implementation date. In view of this circumstance, the minor changes in the existing line of demarcation and the further fact that the position of the new line can readily be ascertained by mariners, it is hereby found that compliance with the provisions of the Administrative Procedure Act relating to notice of proposed rule making and public procedures thereon are impracticable and unnecessary.

Accordingly, § 82.30 is revised to read as follows:

§ 82.30 Chesapeake Bay and tributaries.

A line drawn from Cape Henry Light to Cape Henry Buoy 1; thence to Chesapeake Bay Entrance Lighted Bell Buoy CBC; thence to North Chesapeake Entrance Lighted Gong Buoy NCD; thence to Cape Charles Light.

(Sec. 2, 28 Stat. 672, as amended, sec. 6(b) (1), 80 Stat. 937; 33 U.S.C. 151, 49 U.S.C. 1655(b) (1); 49 CFR 1.4(a) (2))

Effective date. This amendment shall become effective on December 1, 1969.

Dated: November 26, 1969.

W. J. SMITH, Admiral, U.S. Coast Guard, Commandant.

[F.R. Doc. 69-14220; Filed, Nov. 28, 1969; 8:48 a.m.]

(Federal Register of November 29, 1969.)

Approved Equipment

Commandant Issues Equipment Approvals

U.S. Coast Guard approval was granted to certain items of lifesaving, and other miscellaneous equipment and materials.

Those interested in these approvals should consult the "Federal Register" of November 19, 1969, for detailed itemization and identification.

MERCHANT MARINE SAFETY PUBLICATIONS

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

The Federal Register will be furnished by mail to subscribers, free of postage, for \$2.50 per month or \$25 per year, payable in advance. The charge for individual copies is 20 cents for each issue, or 20 cents for each group of pages as actually bound. Remit check or money order, made payable to the Superintendent of Documents, U.S. Government Printing Office. Washington, D.C. 20402. Regulations for Dangerous Cargoes, 46 CFR 146 and 147 (Subchapter N), dated January 1, 1969 are now available from the Superintendent of Documents price: \$3.75.

CG No.

TITLE OF PUBLICATION

- 101 Specimen Examination for Merchant Marine Deck Officers (7-1-63).
- Rules and Regulations for Military Explosives and Hazardous Munitions (5-1-68). 108
- Marine Engineering Regulations and Material Specifications (3-1-66). F.R. 12-6-66, 12-20-67, 6-1-68, 12-18-68. 115
- 123 Rules and Regulations for Tank Vessels (5-1-69). F.R. 10-29-69.
- Proceedings of the Merchant Marine Council (Monthly). 129
- Rules of the Road—International—Inland (9–1–65). F.R. 12–8–65, 12–22–65, 2–5–66, 3–15–66, 7–30–66, 8–2–66, 9–7–66, 10–22–66, 12–23–67, 6–4–68, 10–29–69, 11–29–69. 169
- Rules of the Road—Great Lakes (9–1–66). F.R. 7–4–69. 172
- A Manual for the Safe Handling of Inflammable and Combustible Liquids (3-2-64). 174
- Manual for Lifeboatmen, Able Seamen, and Qualified Members of Engine Department (3-1-65). 175
- Load Line Regulations (1-3-66). F.R. 12-6-66, 1-6-67, 9-27-67, 7-12-68, 6-5-69, 7-26-69, 10-29-69. 176
- Specimen Examinations for Merchant Marine Engineer Licenses (7-1-63). 182
- Rules of the Road—Western Rivers (9-1-66). F.R. 9-7-66, 5-11-67, 12-23-67, 6-4-68, 11-29-69. 184

190 10-11-69, 10-22-69, 10-31-69, 11-19-69.

- Rules and Regulations for Licensing and Certificating of Merchant Marine Personnel (5-1-68), F.R. 11-28-68. 191
- Marine Investigation Regulations and Suspension and Revocation Proceedings (5-1-67) F.R. 3-30-68. 200
- Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels (4-1-57). 220
- 227 Laws Governing Marine Inspection (3-1-65).
- Security of Vessels and Waterfront Facilities (5-1-68). F.R. 10-29-69. 239
- Merchant Marine Council Public Hearing Agenda (Annually). 249
- Rules and Regulations for Passenger Vessels (5-1-69). F.R. 10-29-69. 256
- Rules and Regulations for Cargo and Miscellaneous Vessels (August 1, 1969). F.R. 10-29-69. 257
- Rules and Regulations for Uninspected Vessels (3-1-67). F.R. 12-27-67, 1-27-68, 4-12-68, 12-28-68, 3-27-69, 258 10-29-69.
- Electrical Engineering Regulations (3-1-67). F.R. 12-20-67, 12-27-67, 1-27-68, 4-12-68, 12-18-68, 12-28-68, 259 10-29-69.
- Rules and Regulations for Bulk Grain Cargoes (5-1-68). 266
- Rules and Regulations for Manning of Vessels (5-1-67). F.R. 4-12-68. 268
- Miscellaneous Electrical Equipment List (9-3-68). 293
- Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (11-1-68). F.R. 320 12-17-68, 10-29-69.
- Rules and Regulations for Small Passenger Vessels (Under 100 Gross Tons) (7-1-69) F.R. 10-29-69. 323
- Fire Fighting Manual for Tank Vessels (7-1-68). 329

CHANGES PUBLISHED DURING NOVEMBER 1969

The following have been modified by Federal Registers:

Subchapter A, Federal Register, November 13, 1969.

CG-190, Federal Register, November 19, 1969.

CG-169 and CG-184 Federal Register, November 29, 1969.

January 1970

U.S. GOVERNMENT PRINTING OFFICE: 1970



Photo by George Waters Color Productions, Inc.

(EDITOR'S NOTE: The above "SPECIAL NOTICE" is placed on the bunk of each new crew member, and is posted on the crew's bulletin board of the SS WASHINGTON MAIL. Captain C. J. Delaney feels this mimeographed sheet will assist crew members in materially reducing injuries sustained from the handling of these lines. This appears to be something others may wish to adopt and which will prove to be of value in accident prevention and injury avoidance.)