### PROCEEDINGS OF THE

## MERCHANT MARINE COUNCIL

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

### UNITED STATES COAST GUARD

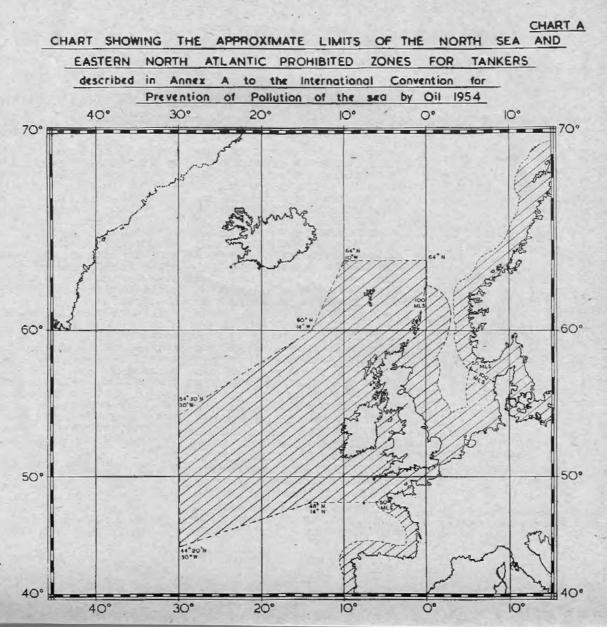
This copy for not less than 20 readers. PASS IT ALONG



Vol. 11

November 1954

No. 11



Proceedings of the

### MERCHANT MARINE COUNCIL

Published monthly at Coast Guard Headquarters, Washington 25, D. C., 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.

The Merchant Marine Council of the United States Coast Guard

VICE ADMIRAL ALFRED C. RICHMOND, USCG Commandant

REAR ADMIRAL H. C. SHEPHEARD, USCG Chief, Office of Merchant Marine Safety Chairman.

CAPTAIN R. A. SMYTH, USCG Assistant Chief, Office of Merchant Marine Safety Vice Chairman

REAR ADMIRAL K. K. COWART, USCG Engineer in Chief Member

CAPTAIN I. E. ESKRIDGE, USCG Deputy Chief of Staff Member

CAPTAIN P. A. OVENDEN, USCG Chief, Merchant Vessel Inspection Division Member

CAPTAIN C. P. MURPHY, USCG Chief, Merchant Marine Technical Member

CAPTAIN JAMES D. CRAIK, USCG Chief, Merchant Vessel Personnel Division Member

COMMANDER EUGENE A. COFFIN. Jr., USCG Executive Secretary and Member

Mr. K. S. HARRISON Chief Counsel

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

### CONTENTS

EATURES	Page
Zones in Which Discharge of Oils Into the Seas Are Prohibited Side Lights on the Rules Your Fact Forum	174 179 180
ESSONS FROM CASUALTIES .	
Cheap Insurance Light Temporarily Extinguished Handy Poison Arson, Barratry, Fraud A Dangerous Short Cut Male "Storm" or Maelstrom?	181 183 184 185 186
PPENDIX	
Amendments to Regulations	186 187 187
ICTRIBUTION (CDL CO)	

### DISTRIBUTION (SDL 59)

A: a aa b c d dd (2); remainder (1). B: e (35); c (16); f (4); h (3); g (2); remainder (1). C: abcdefgimo(1). D: i(5); abcdefghjklm(1). E: o (New London only) (1). List 141 M. List 111.

### ZONES IN WHICH DISCHARGE OF OILS INTO THE SEAS ARE PROHIBITED

The September issue of the "Proceedings" contained an article on the International Conference on Oil Pollution held in London this year. As was mentioned in that article the Convention written at the Conference provides, among other things, for the establishment of zones wherein the discharge of oils-crude oil, fuel oil, heavy diesel oil and lubricating oilinto the seas would be prohibited. Such prohibition would take effect for tankers when the Convention comes into force (12 months after the date on which not less than 10 Governments become parties to the Convention, including 5 Governments of countries each with not less than 500,000 gross tons of tanker tonnage). The provisions against vessels other than tankers discharging oils in certain zones at sea will take effect 3 years after the Convention comes into force. In the meantime these vessels are to discharge oils as far from land as possible.

The United States Delegation to the Conference did not sign the Convention because the United States did not believe the Convention provides a realistic solution to the problem. This, however, did not mean that this country was opposed to the ultimate aim of the Conference-the clearing up of pollution of the seas and coasts.

The policy of refraining from discharging oils within a radius of 50 miles of the coast of the United States has long been a voluntary practice of vessel operators in this country under a "Gentlemen's Agreement." obvious therefore that cooperation with the provisions of the Convention which prohibit discharge of oils by vessels within 50 miles of land will not be difficult for United States maritime interests.

The Convention, however, was not confined to a 50-mile prohibited zone around all the coasts of the world. Certain exceptions to the general 50-mile rule are found in Annex A, Prohibited Zones, to the International Convention for Prevention of Pollution of the Sea by Oil, 1954. The prohibited areas in certain of these zones differ in that more stringent restrictions are placed on tankers than on other classes of

Prohibited Zones, which are considered as exceptions to the general 50-mile zone, are the following:

- a. The North Sea Zone.
- b. The Atlantic Zone.
- c. The Adriatic Zones.
- d. The Australian Zone.

Charts have been prepared to illustrate the provisions for prohibiting the discharge of oils in each of these zones.

Chart A shows the approximate limits of the North Sea and Eastern North Atlantic prohibited Zones for Tankers. (See Front Cover.)

Annex A to the Convention describes the North Sea Zone for Tankers as follows:

"The North Sea Zone shall extend for a distance of 100 miles from the coasts of the following countries:

> Belgium, Denmark.

The Federal Republic of Germany.

The Netherlands,

The United Kingdom of Great Britain and Northern Ireland.

but not beyond the point where the limit of a 100-mile zone off the west coast of Jutland intersects the limit of the 50-mile zone off the coast of Norway."

The Atlantic Zone for Tankers is set forth in Annex A as follows:

"The Atlantic Zone shall be within a line drawn from a point on the Greenwich meridian 100 miles in a

north-northeasterly direction from the Shetland Islands; thence northwards along the Greenwich meridian to latitude 64° north; thence westwards along the 64th parallel to longitude 10° west; thence to latitude 60° north, longitude 14° west; thence to latitude 54° 30' north, longitude 30° west; thence to latitude 44° 20' north, longitude 30° west; thence to latitude 48° north, longitude 14° west; thence eastwards along the 48th parallel to a point of intersection with the 50mile zone off the coast of France. Provided that in relation to voyages which do not extend seawards beyond

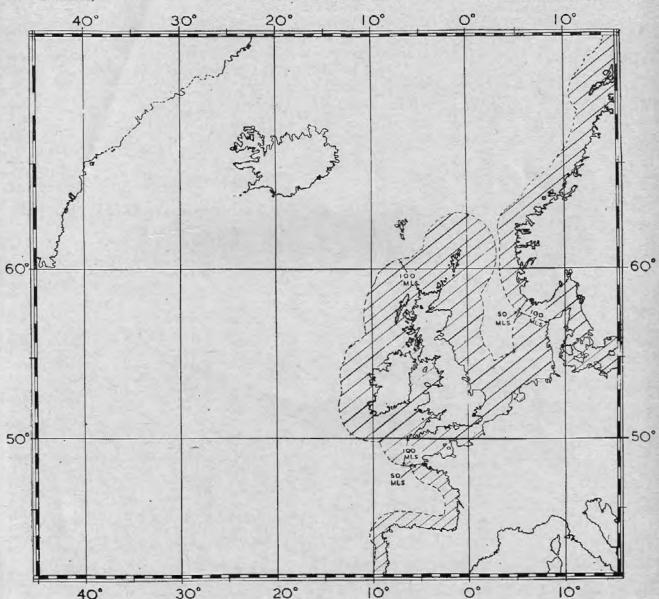


CHART B

CHART SHOWING THE APPROXIMATE LIMITS OF THE NORTH SEA AND EASTERN NORTH ATLANTIC

PROHIBITED ZONES FOR SHIPS OTHER THAN TANKERS.—Described in Annex A to the International Convention
for Prevention of Pollution of the Sea by Oil, 1954.

the Atlantic Zone as defined above, and which are to ports not provided with adequate facilities for the reception of oily residue, the Atlantic Zone shall be deemed to terminate at a distance of 100 miles from land."

Chart B indicates the approximate limits of the North Sea and Eastern North Atlantic Prohibited Zones for Ships other than Tankers. The North Sea and Atlantic Zones for Ships other than Tankers are described in Annex A to the Convention as follows:

"The North Sea and Atlantic Zones

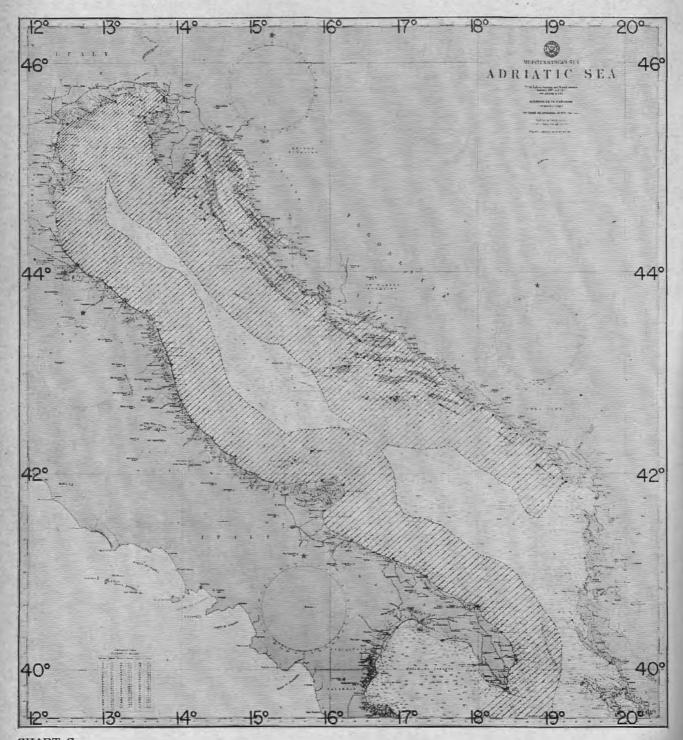


CHART C

CHART SHOWING THE APPROXIMATE LIMITS OF THE ADRIATIC PROHIBITED ZONES FOR TANKERS.—

Described in Annex A to the International Convention for Prevention of Pollution of the Sea by Oil, 1954.

shall extend for a distance of 100 miles from the coasts of the following countries:

Belgium,

Denmark, The Federal Republic of Germany, Ireland, The Netherlands,
The United Kingdom of Great
Britain and Northern Ireland,



CHART D
CHART SHOWING THE APPROXIMATE LIMITS OF THE ADRIATIC PROHIBITED ZONES FOR SHIPS OTHER
THAN TANKERS.—Described in Annex A to the International Convention for Prevention of Pollution of the Sea by
Oil, 1954.

but not beyond the point where the limit of a 100-mile zone off the west coast of Jutland intersects the limit of the 50-mile zone off the coast of Norway."

Chart C shows the approximate limits of the Adriatic Prohibited Zones for Tankers.

The Adriatic Zones for Tankers are set forth in Annex A to the Convention as follows:

"Within the Adriatic Sea the prohibited zones off the coasts of Italy and Yugoslavia respectively shall each extend for a distance of 30 miles from

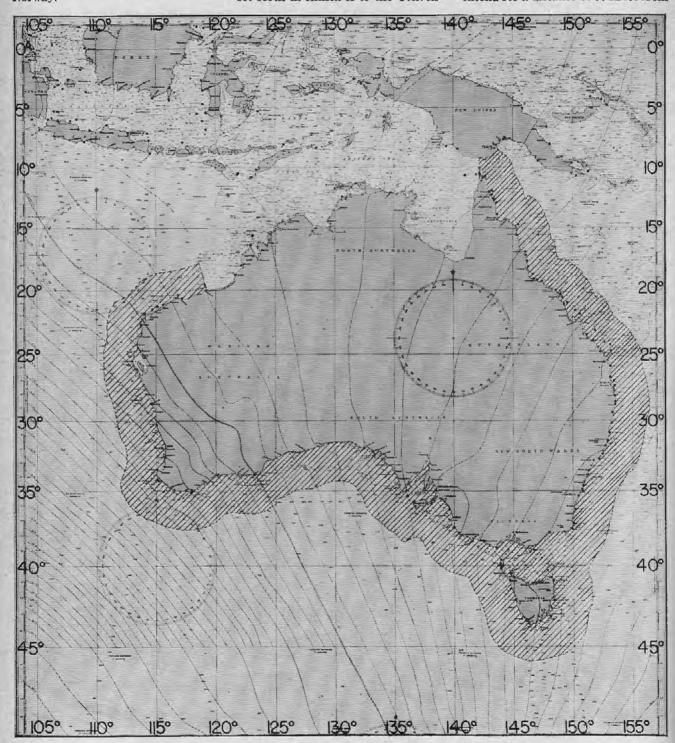


CHART E
CHART SHOWING THE APPROXIMATE LIMITS OF THE AUSTRALIAN PROHIBITED ZONE FOR TANKERS.—
Described in Annex A to the International Convention for Prevention of Pollution of the Sea by Oil, 1954.

land, excepting only the Island of Vis. When the present Convention has been in force for a period of three years the said zones shall each be extended by a further 20 miles in width unless the two Governments agree to postpone such extension. In the event of such an agreement the said Governments shall notify the Bureau accordingly not less than 3 months before the expiration of such period of 3 years and the Bureau shall notify all Contracting Governments of such agreement."

Chart D shows the approximate limits of the Adriatic Prohibited Zones for Vessels other than Tankers,

The Adriatic Zones for Vessels other than Tankers are set forth in Annex A to the Convention as follows:

"Within the Adriatic Sea the prohibited zones off the coasts of Italy and Yugoslavia respectively shall each extend for a distance of 20 miles from land, excepting only the Island of Vis. After the expiration of a period of 3 years following the application of prohibited zones to ships other than tankers in accordance with paragraph (2) of Article III the said zones shall each be extended by a further 30 miles in width unless the two Governments agree to postpone such extension. In the event of such an agreement the said Governments shall notify the Bureau accordingly not less than 3 months before the expiration of such period of 3 years, and the Bureau shall notify all Contracting Governments of such agreement."

Chart E shows the approximate limits of the Australian Prohibited Zone for Tankers.

This Australian Zone is applicable only to Tankers, since the dry-cargo and other types of Vessels are subject to the regular 50-mile prohibited zone applicable to all coasts. Annex A to the Convention sets forth the Australian Zone for Tankers as follows:

"The Australian Zone shall extend for a distance of 150 miles from the coasts of Australia, except off the north and west coasts of the Australian mainland between the point opposite Thursday Island and the point on the west coast at 20° south latitude."

While it is true the United States is not obligated to observe the restrictions set forth by the prohibitive provisions against discharging oils into the seas by merchant vessels, it is a fact that both industry and Government in this country have pledged their cooperation in eliminating the oil pollution menace. If good house-keeping practices are followed in keeping with the educational program so effectively used for approxi-

(Continued on page 180)

### SIDE LIGHTS ON THE RULES

It is suggested the reader refer to Pamphlets CG-169, CG-172, CG-184, which contain the local rules to prevent collisions between vessels on the inland waters, Great Lakes and Western Rivers respectively, of the United States. References to Rules and Article throughout this series may be found therein.

In this, the 14th, article in the Sidelights on the Rules Series, we shall continue the comparison of the International Rules with the corresponding provisions in the local rules applicable to Inland Waters, Western Rivers, and the Great Lakes by turning to the clear weather Steering and Sailing Rules.

The purpose of the Steering and Sailing Rules is to ensure that vessels approaching each other will pass each other safely. Accordingly, the pertinent provisions are designed not only to avoid collision, but risk of collision, as well.

The latter point is borne out in the Preliminary Observations to the Steering and Sailing Rules preceding Rule 17, International Rules, where it is stated:

PART C.—STEERING AND SAILING RULES, Preliminary

 In obeying and construing these Rules, any action taken should be positive, in ample time, and with due regard to the observance of good seamanship.

2. Risk of collision can, when circumstances permit, be ascertained by carefully watching the compass bearing of an approaching vessel. If the bearing does not appreciably change, such risk should be deemed to exist.

3. Mariners should bear in mind that seaplanes in the act of landing or taking off, or operating under adverse weather conditions, may be unable to change their intended action at the last moment.

The local rules fail to include the first and last observations. However, the one regarding risk of collision is common to all the rules.

In Inland Waters, warning of risk of collision is given in a preliminary observation to the Steering and Sailing Rules, also in Section 80.02, Pilot Rules for Inland Waters.

In the Western Rivers, warning of risk of collision is given in a similar preliminary observation to the Steering and Sailing Rules and in Section 95.05, Pilot Rules for Western Rivers.

On the Great Lakes, where the Steering and Sailing Rules do not include an observation regarding risk of collision; warning of risk of collision is given in Section 90.02, Pilot Rules for the Great Lakes.

If the Steering and Sailing Rules are taken in turn, it is soon apparent approaching situations are considered in the following order:

- Two sailing vessels approaching each other.
- (2) Two power-driven vessels approaching each other.
- (3) A power-driven vessel approaching a sailing vessel, or vice versa.
- (4) More than two vessels approaching each other.

The respective rights and obligations of approaching vessels are then set forth in terms of the manner of approach.

For instance, turning to Rule 17, International Rules, it can be seen that sailing vessels approaching each other so as to involve risk of collision are classified with respect to the wind which propels them.

That rule states:

Rule 17. When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other, as follows:

- (a) A vessel which is running free shall keep out of the way of a vessel which is close-hauled.
- (b) A vessel which is close-hauled on the port tack shall keep out of the way of a vessel which is close-hauled on the starboard tack.
- (c) When both are running free, with the wind on different sides, the vessel which has the wind on the port side shall keep out of the way of the other.
- (d) When both are running free, with the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to lecward.
- (e) A vessel which has the wind aft shall keep out of the way of the other vessel.

Identical provisions are to be found in Article 17, Inland Rules, and Rule Numbered 17, Western Rivers Rules. Rule 16, Great Lakes Rules, which fails to provide that "A vessel which has the wind aft shall keep out of the way of the other vessel," otherwise also contains identical provisions.

Power-driven vessels approaching each other, on the other hand, are classified on the basis of the angle they approach each other, and are commonly referred to as meeting, crossing, or overtaking vessels. Each category of approach will be treated in detail in forthcoming articles. The respective rules are similar in principle. However, there are numerous differences in detail. Consequently, any detailed comparison is beyond the scope of a single article.

### ABANDON SHIP

The Master of the SS "MYTHI-CAL" gave the order, "Abandon Ship!" "Put lifeboat Number 1 in the water!" Accordingly, lifeboat Number 1 was put in the water and loaded with her assigned crew. There was a gurgle and lifeboat Number 1 sank.

The order rang out, "Put lifeboat Number 2 in the water!" This was done. There was another gurgle and lifeboat Number 2 sank, leaving her crew floating.

Once again the order was given, "Put lifeboat Number 3 in the water." Once again, the familiar gurgle.

By this time, the ship had sunk and lifeboat Number 4 had floated clear with the Steward in command. "Now," said the Steward to his crew, "we will row slowly among those bobbing heads and rescue only those who had no responsibility for lifeboat maintenance."

About this time, lifeboat Number 4 sank. There were no survivors save the Steward's parrot who tells the story. All day long he sits on his perch shrieking, "Abandon Ship" and gurgling. Enough to give a body the creeps.

—Courtesy Safety Bulletin, Standard of California.

### ZONES IN WHICH DISCHARGE OF OILS INTO THE SEAS ARE PROHIBITED

(Continued from page 179)

mately 30 years, this menace will be reduced. If the means adopted by the recent International Conference on Oil Pollution fail, it is logical to expect more stringent regulations in the future.

IT CANNOT BE STRESSED TOO STRONGLY, THEREFORE, THAT DISCHARGES OF OILY BALLAST AND TANK WASHINGS FROM MERCHANT VESSELS SHOULD BE MADE AS FAR AS PRACTICABLE FROM LAND, AND IN NO CASE SHOULD THEY BE MADE WITHIN 50 MILES OF LAND, OR WITHIN ANY OF THE PROHIBITED ZONES SET FORTH IN ANNEX A TO THE CONVENTION.

Recent Notices to Mariners have contained information on this subject. All United States Mariners are, therefore, urged to follow closely the suggestions outlined in these Notices to exercise the same care to prevent pollution within the Coastal Zones of other countries as is exercised in the case of Coastal Zones of the United States.

# Your Folk Forum

Q. What purpose is served by the reducing valve on the oxygen breathing apparatus?

A. The reducing valve on the oxygen breathing apparatus reduces the high pressure of the oxygen bottle, which is approximately 125 to 135 atmospheres, down to a pressure three or four pounds above atmospheric pressure.

Q. Why should void spaces or clean tanks which have been closed for long periods of time be thoroughly ventilated before being entered?

A. The atmosphere within void spaces or clean tanks which have been closed for some periods of time is frequently deficient in oxygen due to its having been absorbed by rusting of the metal of the tanks or by oxidation of the painted surfaces. Such tanks should, therefore, be ventilated and tested for oxygen sufficiency before entering.

Q. What are the three basic factors which must co-exist before ignition of a liquid fuel can occur?

A. The liquid fuel must first be present as a vapor. This fuel vapor must then be present in definite proportions with air or oxygen. Next, heat must be present at a sufficiently high temperature and quantity to initiate the flame and propagate it throughout the fuel vapor-air mixture.

Q. What precautions should be taken after adding a large charge of Freon-12 to the refrigeration system?

A. The compressor should be stopped and the oil level in the crank case checked frequently after restarting the system, because Freon-12 will absorb appreciable quantities of lubricating oil and carry it through the system. Oil should be added as necessary to maintain the proper level.

Q. Is it a good practice to operate two compressors in parallel on a common Freon-12 cooling circuit?

A. Parallel compressor operation on a common cooling coil circuit should never be permitted unless an emergency exists. Parallel operation could permit transfer of lubricating oil from one compressor to the other with the possibility of serious damage to all compressors involved through lack of lubrication or excess oil pumping.

Q. What action is required of the engineer on watch upon hearing a continuous rapid ringing of the ship's bell and/or the general alarm bells for a period of not less than ten seconds?

A. The engineer on watch should immediately start the fire pump and see that the proper pressure is being supplied to the fire mains. He should also prepare the main propulsion machinery and boilers for a stop bell, and stand by for any additional instructions.

Q. On a vessel at sea it is desired to check the metacentric height by employing the empirical formula:

$$T = \frac{.44B}{\sqrt{GM}}$$

\* \* \* where B is the vessel's beam of 50 feet and T is the full period of the vessel's roll (starboard to port and then back to starboard) which was carefully timed and an average value of 15 seconds obtained. By using the formula above give the GM of the vessel.

A. 
$$\sqrt{\text{GM}} = \frac{.44 \times 50}{15} = \frac{22}{15}$$
  
 $\text{GM} = \left(\frac{22}{15}\right)^2 = 2.2 \text{ feet}$ 

Q. What vessels must have station bills posted?

A. Every vessel carrying passengers and all other vessels of over 500 gross tons subject to inspection must have station bills posted.

Q. Should the passengers aboard an ocean passenger vessel be encouraged to participate in fire and boat drills?

A. Yes, passengers should be encouraged to fully participate in the drills and should be instructed in the use of the life preservers.

Q. What is the requirement regarding opening and closing of watertight doors?

A. All hinged or power-operated watertight doors which are used for access while the vessel is being navigated should be opened and closed daily while the ship is at sea in order to test the efficiency of the indicators and mechanism. They should also be inspected at sea at least once a week. Watertight doors should be kept securely closed and dogged down when openings are not in use for passage.

Q. What is the minimum diameter required for a steam or other powerdriven vessel's fog bell?

A. All steam or other power-driven vessels over 65 feet in length must be provided with an efficient fog bell at least 8 inches in diameter.

### LESSONS FROM CASUALTIES

### CHEAP INSURANCE

There is an old adage "A drowning man will grasp at a straw." While the truth of this homily has not been demonstrated scientifically, it goes without saying that the drowning man will certainly grasp at a life preserver or ring buoy, if he knows it is there. For years, marine safety organizations have preached the doctrine of wearing life preservers whenever exposed to the \*kelihood of falling overboard. A recent casualty wherein a man was drowned in broad daylight alongside his ship moored in a quiet harbor, because there was nothing thicker than water that he could grasp, is a powerful argument for an additional safety precautionhaving a ring buoy in the water.

It was early in the morning, one fine day last summer. The ship was lying at the pier with weather conditions fair and balmy. Two able seamen rigged a staging over the offshore side for the purpose of painting the ship's side. Rigging on the staging was adequate, with 2 watch tackles using 21-thread manila line with double upper block and single lower block which permitted the AB's to hoist or lower at will. Neither man was wearing a life preserver. After shifting the staging forward about 10 feet, one AB, age 55, climbed down to resume work while the other departed on a short errand. About 5 minutes later upon returning, he heard a commotion on deck and saw his partner floundering in the water. He immediately threw a handy ring buoy overboard near the immersed man.

At this point two stevedores who were working on the ship reacted with highly commendable courage and initiative, dove overboard, and swam to the rescue. They were able to float the struggling man to the offshore gangway which had been lowered. One of the stevedores clung to the ring buoy while doing this and the ring buoy undoubtedly contributed largely to the rescue attempt.

The victim was quickly brought aboard and artificial respiration rendered. All attempts to revive the man were to no avail and a doctor who had been called aboard pronounced him dead; cause of death: "Simple asphyxia due to drowning."

After the accident the stage and rigging, all still in good condition, were found to be suspended by the forward tackle alone. The hauling part of the after tackle was loose. Under just what circumstances the deceased man had slipped, fallen, lost

his grip on the hauling part, or suffered some form of mental lapse resulting in his immersion, probably will never be known.

The moral of this tale is simple. Had the ring buoy been floating in the water on its heaving line before the painting started, instead of being hastily thrown overboard after the man fell, that man might be alive and well today. The principle that all men working in such an exposed position should wear a life preserver is unassailable. Since wearing such a lifesaving device is admittedly somewhat awkward due to its bulk many seamen seem to prefer the calculated risk to their lives in not wearing the life jacket to the slight annoyance of wearing it. Therefore providing some solid means of support, that little bit of buoyancy which sometimes divides life from death, would be an excellent precaution. Such use for one of the ring buoys, which are required equipment on board, would be so simple yet so effective that this precaution would seem almost elementary. Even the flotation of a life preserver or any other buoyant material on a line alongside the ship when men are exposed to falling overboard could easily be the "straw" which would mean everything to the drowning man.

### LIGHT TEMPORARILY EXTINGUISHED

A phenomenon experienced by many navigators and which none care



Before

Figure 1

to repeat is the sudden terrifying feeling of being swept helplessly sidewise toward a solid object in the influence of a cross current. It is the abruptness with which the realization strikes the navigator that causes the anguish. The cross current may have caused leeway for a considerable period before nearing the solid landmark and being compensated for by course corrections, the sense of sidewise motion is not felt, since there is no range or stationary object nearby to emphasize the drift, until-suddenly a solid object such as a lighthouse or the abutment of a bridge seems to sweep at the navigator. At this moment the need for a radical change of course to avoid collision becomes, belatedly, drastically obvious. Fortunately, most navigators who have experienced this awesome last minute slide or "skidding" feeling have pulled their ship clear. In the case portrayed by the accompanying photographs (see figs. 1, 2, and 3) the pilot was not so lucky.

The Bay Pilot boarded the freighter off the light vessel early in the morning. It was still dark and visibility

was excellent. Engines were put Full Ahead for the trip up the long bay. Within an hour and a half fog patches began to drift across the bay. Engine speed was reduced to Two-Thirds. At this time the vessel's radar was placed in operation and the pilot sent for the master to come to the bridge. A strong flood tide was running.

Within a few minutes visibility had closed to one-half mile and buoys were not visible except on the radar screen. The pilot further reduced speed to one-half or approximately 8 knots. The master had not yet reached the bridge. A lighthouse standing close by the edge of the channel and on the inside corner of a slight change of direction of the channel to the right was now noticed in the radar scope by the second mate. He estimated the relative bearing of this light to be about 5° on the starboard bow, and so notified the pilot who was also taking occasional glances at the radar scope. The second mate was glancing at the radar scope and returning to his post at the forward window of the pilot house alternately. In the second mate's second or third glance at the radar scope he did not detect any change in the approximate relative bearing of the light structure.

About 2 minutes after the light was first seen in the radar scope the visibility suddenly reduced almost to zero. It was now in the first stages of early morning light. Less than a minute later, with all navigating personnel peering intently ahead and the vessel steaming at approximately 8 knots, with a strong flood tide, the bow lookout suddenly signaled an object dead ahead. Almost in one continuous act, the pilot ran to the wing of the bridge, saw the lighthouse fine on the starboard bow, apparently moving with that dreaded sidewise motion toward the ship, and ordered hard left rudder. Immediately, the pilot ordered engines stopped and then full astern. Before any of these maneuvers could take any effect, the vessel contacted the light structure which ground down along the starboard side of the vessel amidst the roar and shriek of rending steel. As soon as the vessel came clear, hard right rudder was ordered, the vessel was straightened out in the channel, and then proceeded up the stream about one-half mile to a safe anchorage. It was determined that although the hull had been severely ruptured, hull damage was above the waterline and it was safe to proceed up the bay to the destination. The second deck and lantern room of the lighthouse were completely demolished with some damage to the first deck, apron. and caisson plating. Happily, the light is unattended and there were no injuries.

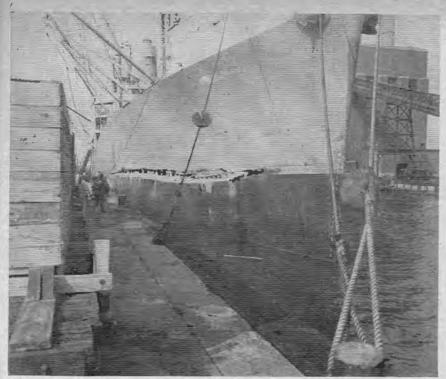
A course correction of 2° to the left had been made before the sudden onset of thick fog, to allow for the set of the current. Since the light structure which was struck was almost directly on the edge of the channel, it is apparent that this correction was almost enough. But a most expensive almost.

Piloting in a narrow channel of this nature is fraught with hazard when the visibility closes in. Allowing ample clearances for points of danger such as an object as solid as this lighthouse is absolutely essential and is not difficult of performance when visibility is good. Piloting to allow these safe clearances in pea soup fog and in a busy channel depending only upon radar, dead reckoning, and the pilot's judgment is a superhuman task and has produced many a gray hair. The finest judgment and skill will delay the moment when you suddenly find yourself and your ship "skidding" sidewise toward danger. but sooner or later, it may happen to you. Be ready!



After

Figure 2



Cause

Figure 3

### HANDY POISON

Since carbon tetrachloride is extremely useful and effective in various cleaning processes, it is widely used in industrial processes and is frequently found aboard merchant vessels. Carbon tet is inexpensive, readily obtainable, may be shipped without special requirements, is a powerful solvent for oils, grease, fats, and all types of grime, and is valuable as a fire extinguishing agent. Offhand, it would seem that this harmless-looking colorless fluid is an allaround friend of the workman or mariner. However, there is one fly in the ointment. This chemical compound has some extremely effects under certain conditions.

A most unfortunate death, the type of death which never should have occurred, was caused directly by carbon tetrachloride fumes recently on board a small freighter. Extensive precautions had been taken, all hands were well aware of the potential hazard, and rescue operations were prompt and efficient; yet one man died and several others were overcome and had to be hospitalized.

While the vessel was undergoing general repairs for laid-up storage, the shipyard night shift applied approximately 20 gallons of carbon tetrachloride with an air spray gun in cleaning the engineroom auxiliaries preparatory to painting. Such a use

for carbon tetrachloride is well recognized and is effective. However, this liquid is extremely volatile and atomization by spraying would result in maximum permeation of the atmosphere with its vapors, so that use in a spray gun would be extremely hazardous. This fact was recognized in this case; workmen wore air masks, all ventilators were open, and exhaust fans were in operation at all times.

Following the spraying operations the workmen departed and a night watchman stayed aboard all night to keep personnel out of the engineroom. When the day shift turned to the next morning, two ship-repair supervisors inspected the engineroom to determine if it was safe for occupancy. No traces of carbon tetrachloride were found except a very faint odor which these men could not readily distinguish from the regular pervading odor of an engineroom. They assumed that the atmosphere was safe for the men to begin work. The first group of workmen which started to descend into the engineroom were stopped by a leadingman machinist who stated that there were dangerous fumes present in the engineroom. This machinist was then instructed by one of the ship supervisors to keep everyone out of the engineroom since the fumes were very toxic. He instructed the machinist to check further with a shipyard official, before allowing anyone to enter the engineroom, to determine if it was necessary to get a

gas chemist to check that space for safety for human occupancy.

All blowers were again turned on for the engineroom and all men were kept out. The machinist meanwhile instructed all of his men about the potential hazard of carbon tetrachloride. About one-half hour later another machinist arrived with the news that he had been assigned to work on a different vessel but that his toolbox had been left in the suspect engineroom. The leadingman machinist in charge of the waiting group, accompanied by an assistant went down into the engineroom to get the desired toolbox. The two men found the toolbox and commented on the pungent atmosphere and that "they had better go topside and get a breath of air." The assistant went up on deck. Within minutes he noted that his boss, the machinist, was taking a long time to come up. He then returned below and found the machinist lying over backward in a corner. He promptly called for help, another workman came down and the two tried to carry the machinist out of the engineroom. Shortly the machinist's helper was overcome and only the most recently arrived workman made it to the deck to call for more help.

Unfortunately, in the excitement and pressing haste, several more yard workmen were overcome by the fumes in trying to rescue the first two victims, thus compounding the confusion. Several men of the yard rescue squad were also overcome by the fumes. The leadingman machinist never emerged from the narcosis induced by the carbon tetrachloride fumes and died.

Human exposure to carbon tetrachloride is usually by one or both of two methods: (1) Inhalation of fumes, and (2) oral ingestion of liquid. Maximum absorption of the chemical by the human body occurs when its vapors are inhaled. After oral ingestion, intestinal exposure is limited and bodily elimination is usually accelerated. Consequently the greater hazard is from the fumes. However, ingestion of the liquid can be fatal, if considerable amounts are consumed, or if dosage is repeated.

It was formerly thought a concentration of one part of carbon tetrachloride vapor in one thousand parts of air was the upper limit that could be breathed with safety. In recent years it has been considered that a concentration of 1 part of the vapor to 10,000 parts of air is the upper limit for safety. At the present time medical opinion suggests that even this may be too high a concentration for safety if there is continued exposure.

The action of carbon tetrachloride on the central nervous system is similar to that of chloroform, producing progressive depression, abdominal pains, nausea, vomiting, diarrhea, and hiccough. Severe headaches are a frequent symptom. Convulsions are not uncommon, and progressive narcosis occurs. The most dangerous effects are the later toxic effects. Maximum damage to the liver occurs about 48 hours after exposure, with fatty degeneration and necrosis. The kidney may be affected with cloudy swelling, fatty infiltration, and extensive tubular damage. Repeated exposure may induce chronic hepatic cirrhosis and anemia.

Of great significance is the fact that the toxicity of carbon tetrachloride is greatly increased when there is alcohol present in the system.

First-aid treatment for carbon tetrachloride poisoning depends upon the type of exposure. After oral ingestion the stomach should be washed, a saline cathartic such as Epsom salts administered to hasten elimination, and the patient referred to the care of a physician as promptly as possible for treatment of the symptomatic conditions of the heart, liver, kidneys, respiration, etc. After in-halation of the vapors, the patient should be transferred immediately to fresh air, with the use of artificial respiration and oxygen if breathing is inadequate. The patient should be placed under the care of a physician as quickly as possible for supervision of the symptomatic conditions. Do not administer stimulants of any sort without the advice of the physician. It should be emphasized that, due to the inherent delayed toxic action, any exposure to carbon tetrachloride may require a medical examination and close supervision of the person exposed, even though no untoward effects are noticed immediately. There are many cases on record where persons breathed carbon tetrachloride vapors while using the liquid for cleaning purposes, noticed no ill effects at the time, became ill several days later, and, in some cases, died. Hence, the delayed effects of this drug might be said to be the principal hazard in its use.

The presence of carbon tetrachloride aboard ship, like the presence of battery acid or highly inflammable fuel, is desirable though attended by inherent hazard. Its proper use is effective and highly helpful and it is unlikely that this liquid will ever be banned from coming aboard. It behoves the intelligent mariner to use this liquid with care and forethought, strictly avoiding inhalation or oral consumption. For cleaning purposes its use on deck and in the open air, or at a point where strong forced ventilation will preclude inhalation is the

only safe procedure. However, any use of this liquid where artificial ventilating methods may distribute the fumes to other compartments of the ship may create a greater hazard for other persons. The prudent shipmaster and chief engineer would do well to frequently acquaint all hands with the potential hazards of carbon tetrachloride and the sensible precautions which will avoid casualties.

### ARSON, BARRATRY, FRAUD

The temptation to attempt to collect insurance proceeds by intentionally destroying property is sometimes too great to resist, even for boat owners. The incidence of small vessels lost by sinking or fire wherein comprehensive investigation can reveal no definite or reasonable causes for their loss, especially in locations where it is known that business is not too good, is far too great for normal explanation. One recent attempt to defraud an insurance company by intentionally burning a boat ended in utter disaster for the owner.

In July 1954, the owner of a 30-foot cabin cruiser was sentenced by a District Court Judge in Jacksonville, Fla., to 4 years in Federal prison for burning his boat to collect the \$6,500 insurance. Two accomplices, who pleaded guilty to the actual burning of the vessel, were each given suspended sentences and placed on 5 years' probation. Federal statutory criminal offenses committed on the navigable waters of the United States or in the United States admiralty or maritime jurisdiction are under the original jurisdiction of Federal District Courts. Section 2271, Title 18, United States Code, CRIMES AND CRIMINAL FROCEDURES, reads as follows: "Whoever, on the high seas, or within the United States, willfully and corruptly conspires, combines, and confederates with any other person, such other person being either within or without the United States. to cast away or otherwise destroy any vessel, with intent to injure any person that may have underwritten or may thereafter underwrite any policy of insurance thereon or on goods on board thereof, or with intent to injure any person that has lent or advanced, or may lend or advance, any money on such vessel on bottomry or respondentia; or

Whoever, within the United States, builds, or fits out any vessel to be cast away or destroyed, with like intent—

Shall be fined not more than \$10,000 or imprisoned not more than 10 years, or both." Prosecution of the owner in this case was based upon this statute and upon Sections 2272

and 2274, Title 18, United States Code, which are somewhat similar.

The incident, investigated as a marine casualty by the Office of Marine Inspection, Jacksonville, Fla., took place on May 11, 1953. At 5 p.m. on the above date the cruiser while navigating approximately 11/2 miles offshore from Jacksonville Beach caught on fire and burned to almost a total During subsequent investigation, the two men who had been operating the boat stated that they took the boat from a repair yard to sea on a trial run after repairing the engine. They claimed that they had been running for 3 hours when the engine backfired, causing fire in the engine compartment and the fire so alarmed the men that they immediately abandoned the cruiser in a small dinghy. During interrogation of other witnesses, it became apparent that fraudulent conspiracy to destroy the property was involved.

A witness from the repair yard stated that on two previous occasions he had found a soldering iron left plugged into the electric current on board the boat. Other witnesses who were able to salvage the engine and part of the boat testified that the repairs alleged to have been made on the engine were not likely as the carbon deposits in the engine had not been disturbed and it did not appear that any of the fittings on the engine had been removed at all. One witness testified that he saw two men remove the dinghy from the top of the cabin of the cruiser and tow it astern upon leaving the vard. However, the statements of the two men who had been in the boat when it caught fire were in conflict as to where the dinghy was kept and when it was placed overboard.

Close examination of the engine and fuel connections from the salvaged portion of the boat indicated that the fuel connection from the tank at the carburetor had been tampered with and the soft gaskets had been taken out in order to allow the leakage of gasoline to the bilges. The engine was fitted with an approved type fiame arrester of the up-draft type which would have prevented fire from reaching the bilges in case the engine backfired.

In view of the conflicting and condemning circumstances, the Officer in Charge of Marine Inspection, Jacksonville, Fla., contacted the United States district attorney. The Federal Bureau of Investigation was assigned to further investigate the circumstances of this case and assisted the Coast Guard's investigation as necessary.

Charges against the owner of the boat and the two men who were in it when the fire occurred were presented to the Federal grand jury which returned a true bill of indictment. The owner was charged as follows:

#### COUNT ONE

Beginning prior to May 6, 1953, and continuing to June 1, 1953, the owner did willfully and corruptly conspire within the United States to cast away or otherwise destroy a vessel, to wit, a 30-foot cabin cruiser, with intent to injure the person who had underwritten a policy of insurance thereon; in violation of Section 2271, Title 18, United States Code.

#### OVERT ACTS

 On or about the 6th of May 1953, the owner offered another man the sum of \$500 to burn his boat.

2. On or about the 8th day of May 1953, the other man accepted the offer of the owner to burn the boat.

3. On or about the 10th day of May 1953, at the boatyard the owner showed the conspirator how to operate the boat and instructed him how to destroy it by fire on the high seas offshore from Jacksonville Beach, Fla.

 On or about the 11th day of May 1953, another man agreed to assist in destroying the cruiser by fire.

5. On or about the 11th day of May 1953, at a point approximately 1½ miles offshore at Jacksonville Beach, Fla., on the high seas the men did destroy by fire the cabin cruiser.

6. On or about the first day of June 1953, the owner filed with the insurance company carrying the insurance policy on his boat, a claim in the amount of \$6,500 for the destruction by fire of the boat.

### COUNT TWO

On or about 11 May 1953, upon the high seas and on waters within the admiralty and maritime jurisdiction of the United States, in the Southern District of Florida, the owner did willfully and corruptly destroy and cause to be destroyed a vessel, to wit, a 30-foot cabin cruiser of which he was owner, with intent to injure the person who had underwritten a policy of insurance thereon; in violation of Section 2272, Title 18, United States Code.

### COUNT THREE

On or about 11 May 1953, upon the high seas and within the territorial waters of the United States, in the Southern District of Florida, the owner of a private vessel, to wit, a 30-foot cabin cruiser known as the \_\_\_\_\_\_ did willfully permit the destruction of said vessel; in violation of Section 2274, Title 18, United States Code.

On the 9th day of June 1954, after the Government had completed testimony in its case against him before a trial jury in district court, the owner of the boat pleaded guilty under count one, conspiring to destroy a vessel with intent to fraudulently collect the insurance proceeds. Title 18, United States Code 2271. Following the guilty plea to the conspiracy count, the Government dropped the second and third counts. The maximum punishment authorized for the second count is life imprisonment. The two accomplices were given suspended sentences as described above. The owner of the boat was given 1 week from the date of conviction to set his affairs in order, at the termination of which he was to report to the United States marshal to begin the execution of sentence.

### A DANGEROUS SHORT CUT

A fireman-watertender was painfully burned one day aboard a tank vessel as a result of an unsafe practice in which the chief engineer was employing an open flame blowtorch on a fuel-oil line to heat the oil in the line. The boiler, which had been in idle status, was being lit off, with the chief engineer assisting the fireman. The chief had partially closed the bypass valve on the fuel oil-manifold header until the oil in the header had warmed up to approximately 100° F.

Apparently not wanting to wait until the fuel oil to this boiler could be heated to a higher temperature by recirculating through the fuel-oil heater, and believing the oil in the line to be too cool to safely light off, the chief lighted a blowtorch and played it back and forth along the fuel-oil service line to the burner. testing with his hand to see how hot the line was getting. When the line reached a temperature estimated by the chief to be about 160° F., he shut off the blowtorch and instructed the fireman to light off the burner in the boiler with the lighting-off torch. Just as the fireman crouched over to insert this torch, the fuel-oil service line ruptured and hot oil sprayed onto the fireman's face and right hand and

The chief immediately shut off the fuel-oil header valve to stop the flow and administered first aid to the fireman. The burns received, while not incapacitating, were painful and required hospitalization.

The rupture in the fuel service line was only a slit about  $\frac{3}{16}$  inch by  $\frac{1}{32}$  inch and occurred in a point in the steel tubing which was later found to

be thin. While it could not be definitely proved that the rupture was caused directly by the impingement of the flames from the blowtorch, the only logical conclusion is that the actual failure of the line at that time was caused or precipitated by the use of the hlowtorch. The chief engineer received an official admonishment for poor judgment in using an open flame on a high-pressure fuel line—an unsafe practice which was bound, sooner or later, to lead to misfortune.

### MALE 'STORM' OR MAELSTROM?

BY LCDR STANLEY G. PERRET, USCG

Recently death cheated the watchful Angel of Luck out of three persons—while another, with the poorest odds, survived.

One day in late August a party composed of 3 men and a 14-year-old boy was fishing from an outboard motorboat in 6 feet of water and about 450 feet off shore. From a standing position the operator attempted to start the motor and in so doing lost his balance. Lunging, he caused the boat to list heavily, thus allowing the 8-inch chop to enter the stern sheets, and the 14-foot skiff soon foundered.

The three men were "good" swimmers and they abandoned ship and apparently in panic attempted to swim ashore while fully clothed. The boy could not swim but clung to a buoyant cushion. He was soon picked up by a passing fishing party and was put ashore within 5 minutes or so of the casualty. The three "good" swimmers were buried the following Monday.

Ironically, the authorities picked up at the scene of the casualty a number of floating buoyant cushions which the men could have used until rescued. But the height of irony is reached in the fact that the boat did not sink due to built-in air tanks, but remained afloat while the stern was aground.

One question will never be answered: Why did three men so completely "lose their heads" and consequently "lose their lives" when they each had immediately at hand the "tools" for their own survival, i. e., skill in swimming and buoyant cushions for just such a situation, not to mention their knowledge of the water in that area.

Thus, three more have been added to the long list of those who have lost their lives through panic when an emergency arose.

### APPENDIX

### AMENDMENTS TO REGULATIONS

!EDITOR'S NOTE.—The material contained herein has been condensed due to space limitations. Copies of the Federal Registers containing the material referred to may be obtained from the Superintendent of Documents, Washington 25, D. C.]

### TITLE 46—SHIPPING

### Chapter I—Coast Guard, Department of the Treasury

[CGFR 54-91]

ACCOMMODATIONS FOR CREWS ON PAS-SENGER, CARGO, AND MISCELLANEOUS VESSELS

#### LOCATION OF CREW SPACES

A notice regarding proposed changes in the rules and regulations governing passenger, cargo, and miscellaneous vessels was published in the Federal Register dated February 25, 1954, 18 F. R. 1056, 1058, as Item VI on the agenda to be considered by the Merchant Marine Council and a public hearing was held on March 23, 1954, at Washington, D. C.

The amendments to 46 CFR 72.20-10 (b) and 92.20-10 (b) are to clarify the requirements regarding location of crew spaces on passenger, cargo, and miscellaneous vessels. All the comments, views, and data submitted at the hearing or in writing prior thereto were considered and the proposed regulations set forth in Item VI on the agenda were revised. The revised regulations provide that crew quarters cannot be located farther forward in a vessel than a vertical plane located at 5 percent of the ves-

sel's length abaft the forward side of the stem at the designed summer load water line, however, for vessels in other than ocean or coastwise service this distance need not exceed 28 feet.

These amendments to the regulations shall become effective 90 days after the date of publication of this document in the Federal Register.

#### [CGFR 54-30]

#### MISCELLANEOUS AMENDMENTS TO CHAPTER

The miscellaneous amendments in this document are either editorial to correct errors and change wording of requirements so that they will read the same for different types of vessels, or to change requirements to afford relief for small vessel operators in accordance with requests received at the March 1954 public hearing.

The amendments to 46 CFR 71.50-1 (a) and 91.40-1 (a) change the wording of the regulations concerning drydocking to agree with similar requirements for tank vessels and define year as "calendar" year.

The amendments to 46 CFR 78.30-5 (a) and 78.30-15 (a) regarding pilothouse watch and watchmen for motorboats, relax the requirements to permit one-man crews on small inspected motorboats in accordance with a common practice followed for years. These changes grant relief to small vessel operators.

The amendment to 46 CFR 95.15-20 (g) corrects an editorial error and removes the word "except" after the phrase "regulations of the I. C. C."

The amendment to 46 CFR 95.13-25 (a), regarding the manning of life-boats carried on dry cargo ships certificated for ocean and coastwise

routes, clarifies the requirements and provides that it is only necessary to man sufficient lifeboats to accommodate the persons on board, which is in agreement with existing administrative practice.

It is hereby found that compliance with the notice of proposed rule making, public rule making procedure thereon, and effective date requirements of the Administrative Procedure Act (5 U. S. C. 1003) is not necessary because the amendments set forth in this document are editorial changes, relaxations from prior requirements, or rules published for the benefit of the public.

These amendments to the regulations shall become effective on and after publication of this document in the Federal Register.

### Subchapter O—Regulations Applicable to Certain Vessels During Emergency

[CGFR 54-28]

PART 154—Waivers OF Navigation and Vessel Inspection Laws and Regulations <sup>1</sup>

### VESSELS OPERATED BY PACIFIC MICRONESIAN LINES, INC.

The purpose of the following waiver order designated § 154.35, as well as 33 CFR 19.35, is to waive the navigation and vessel inspection laws and regulations issued pursuant thereto which are administered by the United States Coast Guard, as requested by the Secretary of Defense, to the extent necessary to permit the operation of vessels which are now or will be operated by the Pacific Micronesian Lines, Inc., for the Department of the Interior until and including June

### ACCEPTABLE COVERED STEEL ARC WELDING ELECTRODES

The following are additions to the list of electrodes which are acceptable to the United States Coast Guard for use in welded fabrication.

Distributor's and/or manufacturer's	Brand	AWS class	Operating positions and electrode sizes (inch)				
			%2 and below	716	7/32	И	540
McKay Co., The, York, Pa. McKay Co., The, York, Pa. Reid-Avery Co., Dundalk, Baltimore 22, Md. Aroos Corp., 1500 S. 50th St., Philadelphia 43, Pa. (The Champion Rivet Co., manufacturer). Do.	McKay Pluralloy 70AC McKay Jet Are (contact) Raco 624 (contact) Exeland 10  Exeland 11.	E6016 E6012 E6012 E6010	1 2 2 1	2 2 2 1	2 2 2 2 2	2 2 2 2 2	N.
Do Do Do Do Westinghouse Electric & Míg. Co., East Pittsburgh, Pa.	Eveland 12A Eveland 18 Exeland 20 Exeland 85 Exeland 75 Exeland 75 Westinghouse ZIP-27 (contact)	E6012 E6013 E6020 E7010 E7020 E6020	1 1 2 1 2 2 2	1 1 2 1 2 2 2	NA NA NA	NA 2 NA 2 NA 2 2	NA NA

<sup>1</sup> This is also codified in 33 CFR Part 19.

30, 1955, unless sooner terminated by proper authority, and this waiver order supersedes the waiver order dated October 5, 1953, and published in the FEDERAL REGISTER October 10, 1953, 18 F. R. 6455.

[Federal Register of Friday, August 6, 1954]

Subchapter O—Regulations Applicable to Certain Vessels During Emergency [CGFR 54-37]

Part 154 Waivers of Navigation and Vessel Inspection Laws and Regulations <sup>1</sup>

EIGHT-HOUR DAY ON GREAT LAKES' TUGS

The purpose of this order is to cancel, effective December 1, 1954, the general waiver designated 46 CFR 154.19, as well as 33 CFR 19.19, regarding eight-hour day for working hours of officers and crews on tugs navigating the Great Lakes or tributary waters. It has been determined upon investigation that this general waiver of section 2 of the act of March 4, 1915, as amended (46 U.S. C. 673). is no longer necessary in the interests of national defense. It is hereby found that compliance with the notice of proposed rule making and public rule making procedure thereon provided in the Administrative Procedure Act is unnecessary.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by an order of the Acting Secretary of the Treasury dated January 23, 1951, identified as CGFR 51-1 and published in the FEDERAL REGISTER dated January 26, 1951 (16 F. R. 731), the waiver order designated § 154.19 Eight-hour day on tugs navigating the Great Lakes and tributary waters as well as 33 CFR 19.19, is revoked effective December 1, 1954. (Secs. 1, 2, 64 Stat. 1120; 46 U. S. C. note prec. 1)

Dated: September 15, 1954.

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

[F. R. Doc. 54-7398; Filed, Sept. 20, 1954; 8:48 a. m.]

### NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 4-54

14 SEPTEMBER 1954

Subj: Manual for Lifeboatmen and Able Seamen, Qualified Members of Engine Department, and Tankerman (CG-175).

This is also codified in 33 CFR Part 19.

1. Purpose. The purpose of this circular is to inform all interested parties of an error contained in the subject manual.

2. Discussion. The International Convention for Safety of Life at Sea, 1948 contained a complete revision of the signals used for communication between shore stations and vessels in distress. In the March 5, 1954 edition of the subject manual a question and answer, rendered obsolete by the Convention, was overlooked when the subject manual was reprinted.

3. Action. All persons in possession of the subject manual should delete the following question and answer appearing on page (41) of the manual:

(a) Q. What is the Coast Guard signal meaning "Do not at-

tempt to land in your own boats?"
(b) A. By day, a red flag and a white flag waved together; by night, a red lantern and a white lantern waved together.

4. Effective date. Upon receipt.

H. C. SHEPHEARD, Rear Admiral, U. S. C. G., Chief, Office of Merchant Marine Safety. By direction of the Commandant.

### EQUIPMENT APPROVED BY THE COMMANDANT

### ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from 28 August to 27 September 1954, inclusive, for use on board vessels in accordance with the provisions of part 147 of the regulations governing "Explosives or Other Dangerous Articles on Board Vessels" are as follows:

#### CERTIFIED

Rego Chemical Co., P. O. Box 142, Maspeth, L. I., N. Y. Certificate No. 193, dated September 10, 1954, REGO CONCENTRATE (RC CLEANER CONCENTRATE).

Rego Chemical Co., P. O. Box 142, Maspeth, L. I., N. Y. Certificate No. 194, dated September 10, 1954, REGO SLUDGE DISPERSANT B (RC FUEL OIL CONDITIONER).

#### **FUSIBLE PLUGS**

The regulations prescribed in Subpart 162.014, Subchapter Q, Specifications, require that manufacturers submit samples from each heat of fusible plugs for test prior to plugs manufactured from the heat being used on vessels subject to inspection by the Coast Guard. A list of approved heats which have been tested and found acceptable during the period from 15 August to 15 September 1954, is as follows:

The Lunkenheimer Co., Cincinnati 14, Ohio. Heat Nos. 484 through 489.

H. B. Sherman Mfg. Co., Battle Creek, Mich. Heat Nos. 791 through 795.

#### **AFFIDAVITS**

The following affidavits were accepted during the period from 15 August to 15 September 1954:

American Locomotive Co., 1404 Dunlavy Street, Houston 19, Tex., Valves.

Pacific Fittings, Division of General Metals Corp., 12024 Center Street, Hollydale, Calif., Fittings.

J. D. Gould Co., 730 E. Washington Street, Indianapolis 2, Ind., Valves.

### **COMMON SENSE**

E. Everett Evans

Safety is not a creed strange or new To be comprehended by a few;

Nor is it only some newfangled fad That stresses weird horrors to make folks sad.

Safety is joyful, and bright, and gay; It brings us the hope of a better day; It teaches that thinking stops accidents—

For safety is naught but applied common sense!

"Safety is gruesome," folks oft declare,

But this is a statement that is not fair, "Absence of safety" indeed is drear And soon breeds an air of distrust and fear.

Real, helpful safety is like a flower, A bloom in a thorny, neglected bower, Giving it fragrance without pretense—

For safety is naught but applied common sense!

Thinking of others at work or at play, And watching your actions from day to day.

Teaching the children while they are at school,

Applying at all times the Golden Rule—

This as you see, is a simple thing, Yet brings joy in place of much sorrowing,

Brings happiness as its own recompense—

For safety is naught but applied common sense!

-Safety Poems, National Safety Council. AN EXCELLENT POSITION
TO STATE THAT OIL
ON THE DECK
CREATES A VERY DEFINITE
SLIPPING HAZARD!

