PROCEEDINGS OF THE
MERCHANT MARINE COUNCIL

The printing of this publication has been approved by the Director of the Bureau of the Budget, January 14, 1955.

UNITED STATES COAST GUARD

CG 129

Vol. 12 November 1955 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

CONTENTS

DISTRIBUTION (SOL 61)

A: a aa b c d dd (2); remainder (1).
B: e (35); c (16); f (4); h (3); g (2); remainder (1).
C: a b c d e f g i m o (1).
D: i (5); a b c d e f g h j k l m (1).
List 141 M.
List 111.

"The American Merchant Marine is an indispensable element of our defense—fully as important and vital as the Army, Navy or Air Force."

"Military production and peacetime industrial production are both dependent upon the American Merchant Marine to provide the strategic raw materials from abroad and to export the peacetime products of our farms, mines and factories, and the supplies of defense to our forces and our allies overseas."

"As Secretary of the Navy, it is my earnest opinion that we cannot allow our Merchant Marine to approach disuse and decay on the grounds that we can trust to luck and improvise to meet our next emergency as we did in World War I and World War II. There will not be time, if general war breaks out again, to resurrect a Merchant Marine. Our survival will be vitally dependent upon the merchant shipping which is available during that critical initial period."

"I need not tell you gentlemen that historically the U. S. Navy and the American Merchant Marine have been closely, even inseparably, related. All of you know that John Paul Jones was a merchant mariner for 16 years before he became famous in the Continental Navy, that Stephen Decatur commenced his naval career as a privateer. You also know that the American Navy was created entirely from the American Merchant Marine. One of our early congress' first acts was to establish and encourage a Merchant Marine, for to our forefathers, it was fundamental that if our country was to grow and prosper, it must have the world's best Merchant Marine. This our rugged and talented merchant mariners proceeded to give us, with the succession of the fast packets, the New Bedford whalers, the famous clipper ships."

CHARLES S. THOMAS,
Secretary of the Navy.

TYPHOON DOCTRINE*

By Elmer W. Malanot

IT is a fact that even the most experienced seaman in command of a ship sooner or later finds himself facing some problem where he will have to consult a textbook on seamanship; and in most cases, *Knight's* or *Crenshaw* will have the answer. This is not the case, however, if a man is looking for advice on what to do, and how to do it, when a typhoon or a hurricane has caught up with him.

Cyclonic storms are fully described, and also the method on how to avoid them, and how *sailing ships* can avoid them, but I have never yet seen anyone suggesting what to do, and how to do it, should one find himself caught in such a storm.

It is my assumption that the men who wrote these books on seamanship did not have sufficient experience passing through tropical storms and that their source of information was not complete enough to enable them to write on this subject.

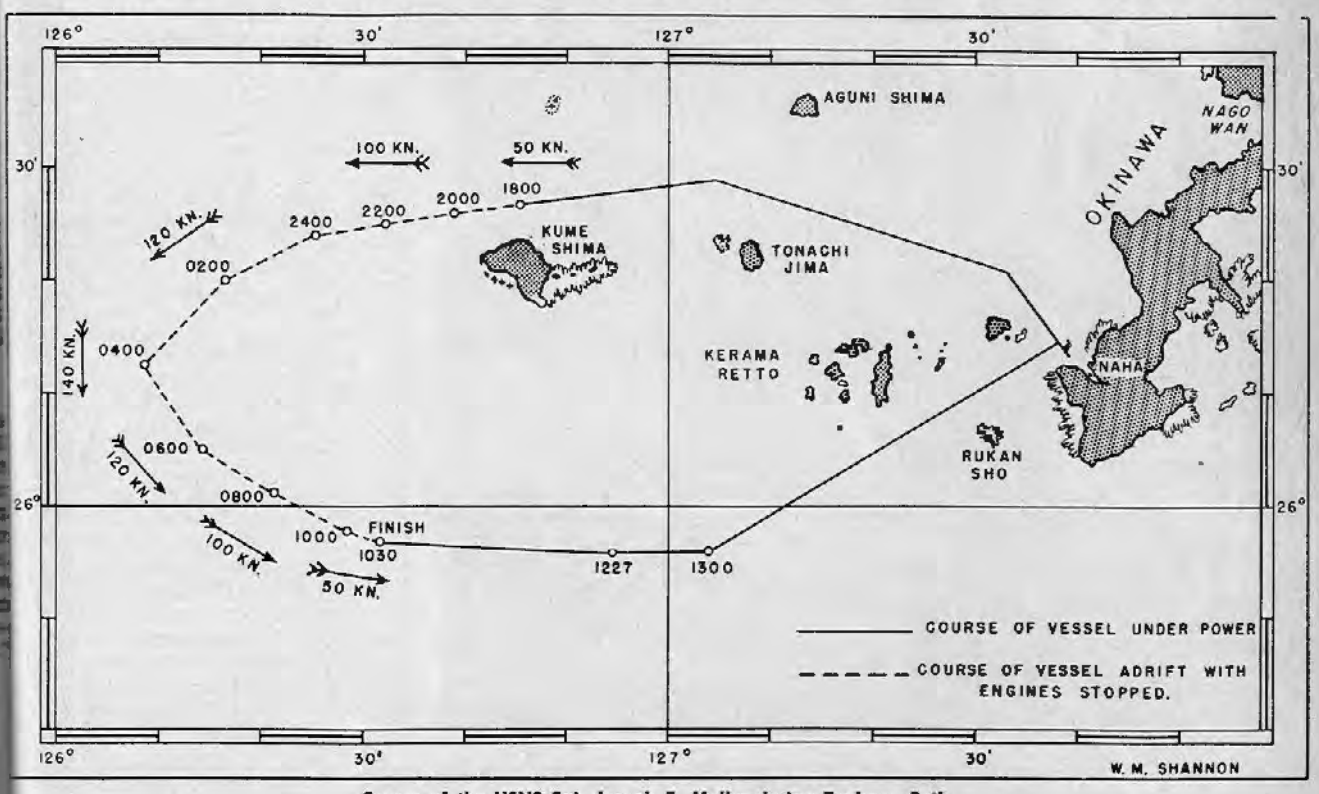
If a man who has had such experience were to suggest stopping the engines when the wind in a cyclonic storm reaches a force of sixty knots and doing nothing until the center has passed and the force of the wind has reduced to about sixty knots, people would be skeptical. It would be argued that in stopping the engine, the ship would fall off into the trough and capsize; therefore to avoid falling off into the trough, considerable power ought to be used to keep steerage way. It is not realized that this power hurls his ship against mountains of waves, like ramming one's head against a stone wall, and that in this way he would damage and perhaps even destroy her unwittingly.

Now, where is the trough in a cyclone that captains try to avoid? To find an answer to this question, we should study the relation between wind and waves, and between waves and ship. Sea waves are formed by prolonged action of the wind. Once a sea wave is formed it will continue for some time, and travel great distances even when the wind that caused it has calmed down or changed its direction. Sea waves that travel at a speed of ten to twenty knots do not carry the water with them, as it is only the form that advances while the particles of water have a different motion from that of the waves.

This phenomenon can be seen in tidal estuaries, with waves rolling in from the sea against an ebb tide and floating objects being carried out to sea by the tide against the inward passage of the waves. This can also be seen in a ship dead in the water. The onrushing crest of a wave will not hit the ship; it will only lift it. But if the ship is moving, it will be the ship that hits the wave. This point of *who is hitting whom* is most important and is seldom understood by the average seaman.

In a typhoon, all observers concur in their reports, near the center the sea is confused. This confusion is caused by the changing direction of the force that forms the waves. In cyclonic storms, a wind blowing from north, for instance, will build up a heavy sea from that direction. Then, after the wind backs to northwest, and so on, there will be several distinct series of waves within the same area at the same time. This constant change of wind direction is what makes the terrible confused seas which just cannot be avoided no matter what the ship does.

*Reprinted from the *United States Naval Institute Proceedings*, Vol. 81, No. 7, July 1955. Copyright: United States Naval Institute, Annapolis, Md.



Course of the USNS *Sgt. Joseph E. Muller* during Typhoon *Ruth*.

HURRICANE IN THE CARIBBEAN

Many years ago when I was a comparatively young shipmaster, in command of a freighter of about 16,000 tons displacement on her maiden voyage in the Caribbean Sea, we had a hurricane warning. It was my first experience with a tropical storm, and with the help of *Bowditch* I put the ship on a course which would have brought it into the safe semi-circle out of the hurricane's path.

The motorship being deeply laden to the Plimsoll mark, worked heavily. Towering seas crashed on deck, and there was some damage to life boats and deck fixtures. During the voyage we had some difficulties with our diesel auxiliaries, and now the engineer reported that he had two out of commission, and it did not take long until the last auxiliary also failed. This of course stopped the main engine, and we were left at the mercy of that hurricane roaring down on us with winds of 120 knots. Visualizing what might happen to us when our ship fell off into the trough of those gigantic waves gave us quite a scare.

When we gradually recovered from that first shock and the ship was lying dead in the water, it seemed strange that the action of sea and wind decreased considerably and that there was no more smashing of waves on deck, although the center passed directly over us, with a short dead calm and blue sky. Then again came the tearing and screaming wind from the opposite direction. It seemed to us miraculous that there was no damage to the ship at all after the engine broke down. It took us some time to patch up the auxiliaries, and then we proceeded; but this lesson I have remembered all my life.

Courtesy Captain H. T. Jarrell, USN

Figure 1. Riding out typhoon *Ruth* with stopped engines. Typhoon *Ruth* was the most violent storm the author ever experienced, but his ship came through undamaged by riding out the storm instead of fighting it.

Courtesy Captain H. T. Jarrell, USN

Figure 2. Sweeping through the China Sea *Ruth*'s 100-knot WNW wind whips the rain off the decks of the *Sgt. Joseph E. Muller* while the ship pitches from a NNE swell.

Later I read an account in the *Reader's Digest* about such a miracle happening to a destroyer during Admiral Halsey's battle with a typhoon in December, 1944. That destroyer had its boiler rooms swamped in the early stages of the storm, and although lying helpless and dead in the water, it survived the typhoon without further damage, while three other destroyers who had their 60,000 horsepower working to the last capsized with the loss of every man on board. Those poor men died without knowing that it was suicide to use their powerful engines against the infinitely greater power of nature. After V-J day I was assigned to the shuttle service between Manila, Okinawa, and Yokohama, then later extended to include Guam and Korea. From January, 1946, until May, 1954, except for five months' leave, I was in the typhoon area constantly and logged an average of two major typhoons a year. This offered excellent opportunity to study and observe typhoons in all their phases.

TYPHOON *LIBBY*

In October, 1948, we were caught in Naha, Okinawa by *Libby*. We could

not leave the port because there was a fifty-knot wind blowing three days before the typhoon struck the island, permitting no traffic to pass through the narrow entrance channel of that harbor. There were, besides my ship (the USAT *Pvt. George J. Peters*), two Liberty-type ships manned by Japanese. These two ships tore from their moorings and piled up on Engineer Island in Naha harbor, heavily damaged. My ship had only superficial damage to the railings caused by one of the Liberties, for our moorings held. *Libby* was unusual because the center stopped over the island for about five hours, a most unusual occurrence. On October 3, 1948, the wind (northerly) increased gradually during the night to 120 knots, then in the morning of the 4th it suddenly dropped to a dead calm. The barometer was at about 28.40 and the sun was shining. At 1500 hours it started to blow from the SSW, then west and full force of about 140 knots from the WNW. At midnight the barometer started rising and the wind decreased to about forty knots at daylight, October 5. Those days in Naha, Okinawa, were dangerous, and I promised myself never to be caught again in a port by a typhoon.

TYPHOON *GLORIA*

The following year on July 22, 1949, the USAT *Pvt. George J. Peters* was again in Naha when *Gloria* came over the Island. This time we put out to sea and drifted with stopped engines while the center passed us at a distance of forty miles. The wind was up to 120 knots, the waves gigantic, of a height estimated to about 50 feet, but the ship floated like a duck, and there was not the slightest damage or even discomfort on board.

TYPHOON *RUTH*

The most violent and destructive storm I have experienced in those Far Eastern waters was typhoon *Ruth*. At that time I was in command of the USNS *Sgt. Joseph E. Muller*, a C1–MAV–1 class vessel of 4,500 tons displacement. When we arrived in Okinawa, *Ruth* was 500 miles south, heading toward Formosa. We entered Naha harbor at 0700 hours on October 12, 1951, discharged our passengers, and were starting cargo operations when at 1000 hours the evacuation of Naha harbor was started. We proceeded to sea at about 1400 hours; our draft was 12'–2" forward and 17'3" aft. Our metacentric height (GM) about 4.84 feet.

Captain Henry T. Jarrell, USN, our passenger from Yokohama to Formosa, was offered quarters ashore by the Senior Naval Officer on Okinawa, but he returned to the ship to observe our typhoon-fighting tactics of which he had heard reports from officers ashore.

From Okinawa we proceeded to the island of Kume Shima, approximately fifty miles west from Naha, to take shelter behind the island until we had a clear indication of the proximity of the typhoon. We stayed near this island from 1840 hours on October 12 to 1800 hours on October 13. At that time we abandoned our shelter and let the easterly wind carry us out to sea with engines stopped. The barometer was falling rapidly, indicating the approach of the typhoon's center. The wind's force was about fifty knots, increasing continuously. There was a heavy swell from the south into which the ship was heading, being broadside to the easterly wind. The vessel was naturally rolling and pitching, but without taking any sea or spray on deck. Gradually the wind shifted counter-clockwise, the barometer fell steadily, and the wind increased rapidly. By 0300 hours October 14, when we were at the closest point to the center; the wind had shifted to north; the force of it estimated at about 140 knots; the sea from all directions of a height estimated at 50 feet, and the barometer reading 28.02, the ship heading 090 degrees, drifting in a southerly direction with engines still stopped. At 0400 hours, the barometer began to rise, and the wind shifted gradually to NW and continued to back through W to SW. At 1030 hours the wind decreased to fifty knots, and we proceeded at full speed toward Naha, where we arrived at 1600 hours.

From various indications, it was established that the center of the typhoon had passed between Naha and our position, approximately 25 miles to the east from our vessel. From the damage caused by this storm on land and to shipping, *Ruth* was considered one of the fiercest typhoons Okinawa has had. Although the center passed us at a distance of only about 25 miles, we never experienced the slightest concern for the safety of our ship; we had no sea breaking on our decks, no jars or shocks to our hull, and no damage whatsoever. The only thing we did was to stop the engine and offer no resistance and no fight to the elements. Two fair-sized Japanese freighters which also evacuated Naha took shelter and anchored between the islands of Kerama Retto. During the night of October 13–14 they dragged their anchors and were smashed to pulp on the rocky shores of the island. Each was a total loss.

The following conditions were typical while drifting in typhoon *Ruth:*

(*Continued on page 189*)

LIGHTING REQUIREMENTS

Among the many Bills introduced at the last session of Congress, there was one, S. 1791, that should be of major interest to the boating public.

This Bill would amend Section 3 of the Act of April 25, 1940, as follows:

> "(c) Motorboats of classes A and 1 when propelled by sail alone shall carry the combined lantern, but not the white light aft, prescribed by this section. Motorboats of classes 2 and 3, when so propelled, shall carry the colored side lights, suitably screened, but not the white lights, prescribed by this section. Motorboats of all classes, when so propelled, shall carry, ready at hand, a lantern or flashlight showing a white light which shall be exhibited in sufficient time to avert collision.
>
> "(e) When propelled by sail and machinery any motorboat shall carry the lights required by this section for a motorboat propelled by machinery only.
>
> "(f) Any motorboat may carry and exhibit the lights required by the Regulations for Preventing Collisions at Sea, 1948, Act of October 11, 1951 (65 Stat. 406–420), as amended, in lieu of the lights required by this section."

This Bill passed the Senate on June 14, 1955, and was referred to the House Merchant Marine and Fisheries Committee. Congress adjourned before the House Committee took any action but when the next session convenes, it will be placed on the calendar. If passed by the House and signed by the President, this Bill then becomes Law.

Since the enactment of such a law would result in changes in the present lighting requirements for small boats, a diagrammatic chart (see page 195 of this issue) has been printed at Coast Guard Headquarters to enable interested parties to better understand the differences between present and proposed lights.

Copies of this chart can be obtained by writing to the Commandant (CMC), USCG, Washington 25, D. C.

MARINE SAFETY IMPROVES

The Coast Guard takes pleasure in saluting the winners of the 1954 National Safety Council Marine Section Safety Contest—congratulations are also in order to all entries for their achievement in improving over their safety record of 1953.

The companies awarded the top honors in the various classes are as follows:

CARGO AND PASSENGER VESSEL CLASS

In the ocean and coastwise division of this class, Seas Shipping Company was first with an accident frequency rate of 4.48, United States Lines Company was second with a rate of 5.61, and Matson Navigation Company a close third with a rate of 5.82.

In the inland waterways division of this class, the Wyandotte Transportation Company won first honors with an accident frequency rate of .93, Nicholson-Universal Steamship Company was second with 1.57 and the Interlake Steamship Company was third with a 2.04.

TANKERS

In the ocean and coastwise division of this class, Pure Oil Company was first with an accident frequency rate of .00, Sun Oil Company was second with .89, and Esso Shipping Company was third with 2.42.

In the inland waterways division of this class, Sun Oil Company won first honors with an accident frequency rate of .00, Pure Oil Company was second with 1.37, and Standard Oil Company of Indiana was third with 2.42.

The accident frequency rate is based on the number of lost-time accidents per million man-hours. The aforementioned rates can be compared with an industry-wide average frequency rate of 7.49 for cargo and passenger, ocean and coastwise vessels, and 3.40 for tankers, ocean and coastwise.

"IT'S PROBABLY HARRY. THEY HAVE AN ENGINE VIBRATION PROBLEM ABOARD HIS SHIP."

(Courtesy Maritime Reporter)

GOVERNMENT OPERATION

The Military Sea Transportation Service was not considered to be an entry in the commercial vessel operation class, but since it operates a large fleet of ocean and coastwise vessels, it is deserving of special commendation for its low accident frequency rate of 3.82—better than any commercial sea transportation organization.

The MSTS has stated that they believe their selection of marine employees is the major factor in the difference in the number of accidents between their organization and other marine transportation groups which are not so selective. In hiring a seaman, MSTS states that it reviews his past record with an eye toward weeding out unsafe, accident-prone employees. If the individual has a record which indicates that he is an easy fall guy for shipboard accidents or that he is "claim happy"—claiming an abundance of injuries in the past—then the safety engineer recommends that the man not be hired.

NARCOTICS

A little over a year ago, on July 15, 1954, the 83d Congress enacted into Law the Coast Guard sponsored Bill now known as Public Law 500.

This Law authorized the U. S. Coast Guard to deny the issuance of original documents and licenses to anyone convicted of a narcotics violation in the preceding 10 years; and to revoke the license or document of anyone convicted of a narcotics violation subsequent to July 15, 1954.

Since this Law received wide publicity in the shipping world, a recapitulation of the results of the first year's enforcement should be of interest:

(1) 109 documents revoked or voluntarily surrendered to avoid hearing.

(2) 24 applications for original documents denied.

On the basis of these figures, it seems evident that the enactment of Public Law 500 was justified.

⚓ TRADITIONS OF THE SEA

The roll of American seafarers who have performed their duties in an outstanding and meritorious manner in accordance with the highest traditions of the sea is long but never completed. A group of seafarers recently added to this honored list were members of the crew of the American ship SS *Steel Admiral*. They are as follows: Joseph T. Bundza, Second mate; John P. Ryan, Chief Electrician; Charles W. Hall, Deck Maintenance; Lazaro B. Ellorin, Deck Maintenance; Jack Dalton, A. B.; Carlton A. Roberts, A. B.; Mallory J. Coffey, A. B.; Joe C. Selby, A. B.; and Mariano Gonzalez, O. S.

On September 21, 1955, the Commandant of the U. S. Coast Guard commended these men. His commendation reads as follows:

> The Commandant is pleased to commend you, Captain Brummelen, and the officers and crew of the SS *Steel Admiral*, who participated in the successful removal of 186 passengers from the Philippine ship MV *Neptuno*, which had stranded on Marinduque Island, Republic of the Philippines.
>
> On the morning of June 24, 1955, during squally and inclement weather, the Second Mate of your vessel, Mr. Joseph T. Bundza, reported a blinking light close in shore of Marinduque Island, where, upon investigation, it was found that the MV *Neptuno*, an inter-island vessel, had stranded with bow hard aground. On receiving a request from the master of the MV *Neptuno* to remove the passengers from his vessel, the motor lifeboat was manned by members of the crew of the SS *Steel Admiral*.
>
> By a combination of good judgment and capable seamanship in the handling of the motor lifeboat and your vessel, all of the 186 passengers, including 132 women and children, were removed from the stranded vessel, without mishap. After receiving these passengers on board, you and your crew gave them excellent care and made arrangements for their safety and comfort.
>
> The alertness and close attention to duty of your bridge watch, and the prompt and efficient handling of this whole operation, indicates a ship which reflects credit and is in keeping with the finest traditions of the U. S. Merchant Marine. ⚓

nautical queries

Q. How often must the lifeboats aboard ocean cargo vessels be swung out to ascertain that the gear is in proper order?

A. At least once each week, weather permitting, while the vessel is underway.

Q. How often must fire and boat drills be held?

A. At least once in every week.

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

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

Q. How long shall the motor- or hand-operated propeller gear be operated and how often?

A. The motor- and hand-operated propeller gear of each lifeboat shall be operated both ahead and astern for a period of not less than 5 minutes at each boat drill which is at least once in each week.

Q. What is the purpose of a station bill?

A. The purpose of a station bill is to acquaint the crew with full particulars of their posts or stations of duty and the signals which will be used for calling them to their stations on board such vessels in case of fire, collision, or abandoning ship.

Q. How is the draft of a vessel affected when passing from salt water to fresh water? Give reasons.

A. Because a floating body displaces its own weight, it will float deeper in fresh water than it will in salt water, owing to fresh water being of less density and therefore lighter than salt water.

Q. Explain how to unbend a course.

A. First furl the sail, then cast off the rope bands and make them fast around the sail. When the rope bands are all off, ease off the lee earring, and lower down sail. When the watch on deck has hold of the lee part of the sail, ease away the weather earring.

Q. What errors are radar fixes subject to?

A. Radar fixes are subject to the following errors:

(a) The possibility that the point of land or object ranged upon is incorrectly identified.

(b) That a shore line as seen on the PPI may not be the actual shore line seen on the chart (as above).

(c) Errors in the gyro system, if used.

(d) Equipment error due to misalignment of the system.

Q. State what action you would take upon observing another vessel indicated on your radar scope.

A. Note the vessel's bearings and ranges at successive intervals to determine whether danger of collision exists, in which case call the master. When he arrives, plot the series of bearings and ranges, taking into account the run of your own vessel during the intervals, and determine the other vessel's course and speed so as to be in a position to advise the master regarding the best avoiding action.

Q. (a) Which one of the following is not a part of the oxygen-cylinder type breathing apparatus?

1. An oxygen generating canister.
2. A carbon dioxide removing chemical.
3. A reducing valve.
4. A high pressure gage.
5. A cooler.

(b) The all-purpose gas mask should not be used in an atmosphere containing less than:

1. 25 percent oxygen.
2. 23 percent oxygen.
3. 21 percent oxygen.
4. 18 percent oxygen.
5. 16 percent oxygen.

A. (a) 1. An oxygen generating canister.

(b) 5. 16 percent oxygen.

Q. (a) Which of the following should be used when it is necessary to enter a fuel tank which has not been declared gas free?

1. An all-purpose gas mask.
2. A canister-type gas mask.
3. A fresh-air hose mask.
4. Any of the above in conjunction with a flame safety lamp.
5. A carbon dioxide detector.

(b) A full oxygen cylinder for the self-contained breathing apparatus registers a pressure of:

1. 50 to 60 atmospheres.
2. 90 to 100 atmospheres.
3. 125 to 135 atmospheres.
4. 190 to 200 atmospheres.
5. 50 to 60 pounds per square inch gage.

A. (a) A fresh-air hose mask.

(b) 125 to 135 atmospheres.

LOGS AND KNOTS

There are few definitions so elementary as those of "knot" and "log" in maritime usage. They are among the most familiar words on shipboard, but their origin and relation to each other are not so well known. Even their present application is at times uncertain, as there are several shipboard objects known as "logs," and the word "knot" is often confused with "mile" or "nautical mile." It is neither of these.

One of the earliest methods of measuring the speed of a ship was the throwing overboard of a log of wood from the forward end of the vessel, and then measuring the time taken by the ship in passing it. With the length of the vessel known, the approximate calculation of speed was possible.

By the maritime exploration era of the 1400's, the log had given place to a weighted triangle of wood, the weight from one corner being a chunk of lead to hold the board in an upright position in the water. To this board was attached a knotted line. The method was to toss overboard the device—still called a log, and the line called a log line—and measure the speed of the knots with a sand glass as the line payed out. The knots were spaced 47′ 3″ apart, giving them the same ratio to a nautical mile as 28 seconds bears to an hour of 3,600 seconds. A nautical mile is 1/60 of a degree, or 1 minute on the Equator; but for practical purposes it is assumed to be 6,080 feet, or 1.15 land miles. So the number of knots that ran off the reel in 28 seconds showed, roughly, the number of nautical miles the vessel was traveling per hour. Since a nautical mile is nearly 1/6 greater than a land mile, a ship traveling 30 knots is traveling about 30 nautical miles, or about 34½ land miles, per hour.

In the days of the measurement of speed by the "log overboard," the speed of the ship was recorded on a piece of board known as the "log board," and the records later entered in a book known as the "logbook," now shortened to "log." The ship's log today is the official journal of the speed, progress and location, weather conditions, crew record, and anything else of note. It is, in fact, the journal of the voyage, and its compilation and preservation are duties of prime importance.

Courtesy of T. Douglas MacMullen "Bay Ports"

LESSONS FROM CASUALTIES

BLOW THE WHISTLE

By Commander Elvin C. Hawley, USCG

Picture yourself on the bridge in a situation where your vessel is the *privileged* vessel with a *burdened* vessel approaching your port side on a collision course—a trying situation to say the least. The officer on the bridge of the *burdened* vessel never had it so good. All he has to do is avoid colliding with your vessel without crossing your bow. He can go to port, starboard, slow, stop or reverse. It is you on the *privileged* vessel who is duty bound and *burdened* to maintain your course and speed up to the jaws of collision, when, at precisely the correct time, it becomes your duty to take action to avoid the collision.

Prior to January 1, 1954, in such a situation governed by the International Rules of the Road, you were only permitted to use a flare-up light or a detonating signal to attract attention. You can still use these signals to attract attention if you find it necessary, but on January 1, 1954, a new rule, drafted solely for you in this trying situation, went into effect. This rule was incorporated in the revised rules as Rule 28 (b) and reads as follows:

> Whenever a power-driven vessel which, under these Rules, is to keep her course and speed, is in sight of another vessel and is in doubt whether sufficient action is being taken by the other vessel to avert collision, she may indicate such doubt by giving at least five short and rapid blasts on the whistle. The giving of such a signal shall not relieve a vessel of her obligations under Rules 27 and 29 or any other rule, or her duty to indicate any action taken under these Rules by giving the appropriate sound signals laid down in this Rule.

(Courtesy Maritime Reporter)

Part (a) of Rule 28 requires the sounding of whistle signals when vessels are in sight of one another to indicate course changes and reversing of engines. It should be noted that while these signals are mandatory and *shall* be given when vessels are in sight of each other, the new provision for a privileged vessel to sound at least five short rapid blasts, is optional in that it *may* be given.

Two collisions of vessels in such a crossing situation recently occurred. One involved a fishing vessel and a U. S. tank vessel off the Gulf Coast and resulted in the sinking and loss of the fishing vessel. The other collision occurred nine days later off the Atlantic Coast between a foreign vessel and a U. S. tank vessel and resulted in serious damage to both vessels. In both casualties the weather was clear and visibility was excellent. Also, in both casualties, the officers on watch on the *privileged* vessels constantly watched the *burdened* vessels approach into the jaws of collision. Only then, when it proved too late, did the *privileged* vessels depart from their respective courses to avoid collision or, failing in that, to lessen the force of impact. *No whistle signals were sounded by any of the four vessels involved in these collisions!*

In one case, administrative disciplinary action is still pending. In the other case, it was concluded that disciplinary action against the license of the officer in charge of the *privileged* vessel for failing to sound the warning signal would be in the best interests of promoting safety at sea. A charge of negligence was found proved against this officer and his license was ordered suspended. Regardless of the option given to the *privileged* vessel to sound the warning signal, the Civil Service Hearing Examiner who heard this case stated in part, as follows:

> "I consider that an officer on watch in charge of the navigation of a ship has a duty to use every means available to him to insure the safety of his ship."

It is hoped now that this picture of the position of an officer on the bridge of a *privileged* vessel will be given some consideration by the officer on the bridge of the *burdened* vessel. You on the *burdened* vessel will obtain satisfaction that will at least keep an officer's blood pressure down and possibly prevent a heart attack if, when you alter course a little to keep clear of the *privileged* vessel, you BLOW THE WHISTLE. This is done too seldom—many excuses for failing to blow the whistle are given at investigations into casualties. Also, don't overlook that Congress has enacted these rules into law. It is mandatory that when vessels are in sight of each other a change of course and the reversing of engines must be indicated by a whistle signal. Of course a master mariner's duty and right to exercise his judgment for the safe navigation of his vessel must always be preserved and it was not the intent of the International Convention, the drafters, that a whistle signal be sounded when the only things in sight are the masts, funnel and/or smoke of another vessel on the horizon. On the other hand, excuses for failing to blow the whistle, such as: "I didn't think he could hear me"; "I thought it would confuse him"; "I didn't think it was necessary because we were in a safe passing (or meeting or crossing) situation," are very weak excuses after a collision has occurred.

To you masters who may be driven out of your bunks in the middle of a beautifully clear night by one or more blasts of the whistle: Be tolerant with your mate on watch. He did that for the safety of your vessel and any crew and passengers he may or may not have aroused—besides the law says he has to BLOW THE WHISTLE.

To you officers on watch on the *privileged* vessel, the new rule is a good one, restricted solely to you and your prerogative to use it. So if exercising your prerogative will avoid a collision and perhaps relieve your high blood pressure, then BLOW THE WHISTLE.

EASE DOWN WHEN YOU BLOW DOWN

Several years ago a second assistant engineer was scalded severely while clearing an evaporator blowdown line, and died within 9 hours.

Prior to the incident, the second and junior third assistant engineers were on watch, during which time it

developed that the evaporator blow-down line was plugged up. At about 1930, the second assistant decided to go down and clear it while the junior third remained on the operating platform.

The second assistant first attempted to blow down the line by building up steam pressure on the evaporator to between 5 to 10 pounds. Since this did not clear the line, he decided to remove the blow-down valve and use a plumber's snake. He crawled under the floor plates to get into position to work on the valve. He then removed the reach rod and all the bolts from the valve flanges, except two bolts which he left loose, and swung the valve off the line. He inserted the plumber's snake (the blow line was about 2 feet long) and began to work it. In a matter of seconds, the snake cleared the line, and steam and hot water gushed out on him.

Because of his precarious position under the floor plates, he was trapped. As the steam and hot water continued to blow out, he screamed, yelled, and kicked.

The junior third heard his watchmate screaming and rushed down to help. He lifted the floor plates and pulled out the engineer, who was wet and steaming from head to foot. The junior third and the fireman took him to the machine shop, ringing the fire alarm for additional help as they did so. They cut off his clothes and poured oil on him.

On hearing the alarm the Chief Engineer started below where he met the junior third who told him what was wrong. He immediately notified the master and sent the junior third for first-aid equipment. In the machine shop, he found the second assistant pacing up and down, shaking, and in obvious agony. The junior third returned and gave the injured man an injection of morphine to ease his pain and then helped him to his room.

Upon learning of the incident, the Master, who, a few days before, had departed a South American port bound northward, changed course and headed at increased speed to the nearest port.

A passenger, who was a doctor, and the purser, a pharmacist mate, took charge of the engineer and treated him for burns. At about 0330 the next morning, the doctor reported that the engineer was in critical condition. The Master went to the sickbay and found the doctor and purser holding the second assistant up in bed. He was complaining that he couldn't breathe; he needed air—10 minutes later, he died.

That afternoon the ship reached port and the body was sent ashore for burial.

When asked by the investigating officer if the casualty could have been avoided, the Chief Engineer said, "It was not good engineering judgment for the second assistant to be trapped there. He told me that he did something foolish. He said there was 5 to 10 pounds pressure in the shell of the evaporator. If he had removed the floor plate in front of the evaporator, and had eased down on the pressure, he would have had an escape, and the casualty could have been avoided."

In every case where there is pressure on a line—steam pressure, hydraulic pressure, fuel or lube-oil pressure—it must be relieved before attempting to work on the line. This is a fundamental principle of marine engineering.

RED HOT DECK

In an article of the same name printed in the September 1955 issue under "Lessons from Casualties," the arc-cutting process using only regular shipboard equipment, for emergency access to fires through decks or bulkheads, was discussed.

There is another method of cutting an emergency access which should be considered and that is the method which utilizes the portable electric drill. This drill is now required as a part of the emergency equipment on all United States merchant vessels over 1,000 gross tons making international voyages, except tank vessels.

This requirement was made following the International Conference on Safety of Life at Sea in 1948 which adopted the requirement that:

> There shall be an outfit consisting of a breathing apparatus or smoke helmet, a safety lamp, a fireman's axe and, except in tankers, a portable electric drilling machine to provide emergency means of access to fires, through decks, casings or bulkheads.

While there is no requirement as to the number or size of bits to be used with this drill, it can be safely assumed that there is an assortment of small bits. It is possible to cut a large hole with a small bit using the following procedure: Mark out the circumference of the desired hole and drill a series of holes around the marking sufficiently close together so that the center can be knocked out with a steel chisel.

TYPHOON DOCTRINE

(*Continued from page 185*)

a. Visibility zero to 300 yards.

b. Drifting at speeds of a maximum of five knots in a semicircle of which the diameter was thirty miles.

c. Pitching heavily and rolling about 35° with a few rolls up to 43°. In general the vessel adapted itself easily to the heavy confused sea. It did not ship any water except for a very few times in the heaviest rolls when a few inches of water above the gunwale were scooped off the crest of a wave. This was like an overflowing motion with no force or violence attached to it, would have gone to a depth not over a man's ankle, and would have amounted to less than a few hundred gallons. It certainly would not have damaged or disturbed any sort of deck cargo secured in the normal manner.

d. Radar and Loran were operative and gave us our position when required.

e. The floodlights were kept alight on deck, and thus the behavior of the ship continuously observed.

At 0800 hours on October 14, 1951, Captain Jarrell took some photographs from the bridge. Analyzing these photographs, the direction of wind appears to be approximately ten to twenty degrees from abaft the beam. The spray seen on our sun deck in one of the pictures did not originate from the sea, but from rain water accumulated on deck and whipped up and pulverized by the force of the wind. These pictures were taken a few seconds apart and show clearly how the heavy swell in the vicinity of the center of a typhoon is always from a direction different from that of the wind. In our case, the wind was from WNW, still about 100 knots, while the ship pitched heavily to a swell from the NNE.

"Now hold your horses, skipper; no vessel of mine clears port until I cast 'em off, see!"

(*Courtesy Maritime Reporter*)

This is the point that should be impressed on seamen who believe that if they stop the engines, their vessel will fall off into the trough of the sea with disastrous results. The fact is that there exists a trough from all sides, and the only way to minimize the danger of this force is by not opposing it. If inexperienced commanders of small vessels with high power do not fully realize this point, they will, in their anxiety to avoid this trough, hurl their vessels against the gigantic power of nature and succeed only in their own destruction.

I am fully convinced now that a seaworthy ship of any size or draft with an adequate metacentric height, will be safer with stopped engines than by using them. Any book on seamanship teaches us how to calculate the metacentric height, and how dangerous a sluggish roll or, to the contrary, a quick jerky roll can be; and it teaches us also how easily both can be corrected: the sluggish roll by adding some weight in the bottom tanks, and the other by removing some weight from the bottom tanks. In a typhoon there is sufficient time to correct the stability of the vessel and also to obtain a safe margin of seaway. And so once a seaman, after getting sea room, has learned not to use any power in a cyclonic storm, he will have done all that can be done for the safety of his vessel and his crew, and will further find that he can then take any typhoon in his stride.

I think that this theory of not opposing such a force and of stopping the engine is one of the greatest importance to combat vessels, and especially destroyers, which for tactical reasons cannot concentrate on avoiding a typhoon, but have to stay at their post until the last minute, as during operations east of Luzon on December 18, 1944. I am convinced that if those commanding officers had been instructed, on the approach of that typhoon when the wind had risen to more than sixty knots, to stop their engines and just drift, there would have been no casualties and no damage.

I believe that it is high time to break with the old tradition of fighting a typhoon and introduce a new concept of riding it out, with stopped engines, drifting more or less broadside to the wind, which in a typhoon is always from a direction different from that of the biggest and most destructive waves. It will take courage by the Commanding Officer of any vessel to order the engines stopped, when close to the center of a typhoon, and even more courage to order a ship to test this "passive resistance," but I am sure that if this method is adopted, it will save money, lives, and valuable property, especially in time of war.

It is suggested that in this respect, the following simple instructions should be put in textbooks and typhoon doctrines:

When the center of a tropical storm approaches you, get thirty miles or more sea room around you, assure yourself of the ship's stability and water-tight integrity, and when the wind force rises to sixty knots or more and the sea becomes confused, stop your engines, drift and wait for the storm's dangerous area to pass before you proceed.

FUTURE TYPE VESSELS

Since the end of World War II, the Maritime Administration has had under development new designs for commercial ships to replace the Liberty and Victory Type. The replacement program as envisaged by the Maritime Administration is ". . . to provide a variety of ship designs to encompass the needs of a well balanced United States Merchant Marine." Throughout the design work, four major concepts were considered:

1. That the deadweight "size" of the cargo ships now in operation is adequate for the replacement program.

2. That cargo carriers which will be forming the United States Merchant Marine of the next 20 years must be faster than the corresponding units now in operation.

3. That, in general, a trend toward higher stowage factors, is evident, and therefore, that the new units must have a higher cubic than in corresponding types now in operation.

4. An all-out effort must be made at this time to design cargo ships which embody the best possible cargo handling features.

Accordingly, the following replacement type ships have been developed:

The "Island" type—350' BP; 21'0" draft; 5,000 tons deadweight (approx.); 14–16 knots speed; intended for replacement of the CI-M-AVI's.

The "Freedom" type—417' BP; 26' 6" draft; 8,500 tons deadweight (approx.); 16–18 knots speed; intended for replacement of CIB's.

The "Clipper" type—460' BP; 28' 0" draft; 10,800 tons deadweight (approx.); 18 knots speed; intended for replacement of C2's.

The "Seafarer" type—494' BP; 29' 9" draft; 13,500 tons deadweight (approx.); 18 knots speed; intended for replacement of C3's and C4's.

In addition to the foregoing designs, the Maritime Administration has, at the present time, on the drawing boards plans for the following types:

The "Pipeline" type tanker—595' BP; 32' 0" draft; 20,000 tons deadweight (approx.); 20 knots speed. This tanker to be one hundred percent commercial, but have speed and boiler capacity to permit fleet servicing under wartime conditions.

The "Bulk" type—580' BP; 33' 0" draft; 24,000 tons deadweight (approx.); 16 knots speed. This type ship is intended as a common carrier for all types of dry bulk cargoes.

The "Turnpike" type—480' BP; 19' 0" draft; 4,400 tons deadweight (approx.); twin screw; 20 knots speed. This is essentially to be a trailership capable of side and end loading, and is intended mostly for use in the intercoastal and coastwise service.

H. O. 205

The Navy Hydrographic office has announced that the 1955 edition of H. O. 205 *"Radio Navigational Aids,"* is now available for issue. The new edition differs a great deal from previous editions, being in a loose-leaf form rather than a bound volume. This loose-leaf style has been adopted so that change pages may be inserted in the publication. These pages will be issued quarterly and will incorporate all changes promulgated in the Notices to Mariners.

There is an Appendix A which contains the Emergency Procedures and Communication Instructions for U. S. Merchant ships heretofore found in the JANAP series and more recently contained in DNC–29.

All outstanding copies of cancelled DNC–29 should be promptly destroyed by burning upon receipt of the revised H. O. 205.

A new system of indexing has also been incorporated in the publication which uses graphic indices to facilitate the use of the manual. The new edition is priced at $5.00 and may be obtained from any branch Hydrographic office.

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 55-43]

Subchapter H—Passenger Vessels

PART 78—OPERATIONS

SUBPART 78.50—MARKINGS ON VESSELS

Subchapter I—Cargo and Miscellaneous Vessels

PART 97—OPERATIONS

SUBPART 97.40—MARKINGS ON VESSELS

The Customs Regulation 19 CFR 3.15 regarding marking of draft of registered vessels was canceled in accordance with T. D. 53859 published in the FEDERAL REGISTER dated August 5, 1955 (20 F. R. 5646). In order that Coast Guard regulations will reflect this change, 46 CFR 78.50-5 (a) (3) and 97.40-5 (a) (3), regarding draft marks, are canceled.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and Treasury Department Order 167-14, dated November 26, 1954 (19 F. R. 8026), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendments are prescribed:

1. Section 78.50-5 *Markings required by customs regulations* is amended by canceling paragraph (a) (3).

2. Section 97.40-5 *Markings required by customs regulations* is amended by canceling paragraph (a) (3).

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416)

Dated: September 16, 1955.

[SEAL] J. A. HIRSHFIELD,
Rear Admiral, U. S. Coast Guard,
Acting Commandant.

[F. R. Doc. 55-7729; Filed, Sept. 23, 1955; 8:48 a. m.]

Subchapter Q—Specifications

[CGFR 55-42]

PART 160—LIFESAVING EQUIPMENT

BUOYANT VESTS AND BUOYANT CUSHIONS FOR USE ON CERTAIN MOTORBOATS

SUBPART 160.047—BUOYANT VESTS, KAPOK OR FIBROUS GLASS, ADULT AND CHILD, MODELS AK, CKM, CKS, AF, CFM, AND CFS, FOR MOTORBOATS OF CLASSES A, 1, OR 2 NOT CARRYING PASSENGERS FOR HIRE

§ 160.047-6 *Marking*—(a) *General.* Each buoyant vest shall be marked with a rectangular cloth tag attached to the back of the envelope with stitching along all edges of the tag. The following information shall be plainly printed in waterproof ink on each tag:

BUOYANT VEST

Model ------

Adult (or Child)

Approved for use on motorboats of Classes A, 1, or 2 not carrying passengers for hire.
U. S. Coast Guard Approval No. ------
Lot No------

This vest is filled with (kapok or buoyant fibrous glass) sealed in plastic film pad covers. For maximum durability care should be taken to avoid puncturing or snagging inner plastic film pad covers. When vest is wet, hang up and dry thoroughly. If pads become waterlogged, replace vest.

(Name and address of manufacturer)

SUBPART 160.048—BUOYANT CUSHIONS, KAPOK OR FIBROUS GLASS, FOR MOTORBOATS OF CLASSES A, 1, OR 2 NOT CARRYING PASSENGERS FOR HIRE

§ 160.048-6 *Marking*—(a) *General.* Each buoyant cushion shall be marked with a rectangular cloth tag attached to the boxing or gusset by stitching along all four edges of the tag. The following information shall be plainly printed in waterproof ink on each tag:

BUOYANT CUSHION

Size ----------
(Show width, length,[1] and thickness)
Contains ---- oz. ----------
(Show kapok or fibrous glass)
Approved for use on motorboats of Classes A, 1, or 2 not carrying passengers for hire.
U. S. Coast Guard Approval No. ---------
Lot No. ----------
This cushion is filled with ----------
(Show kapok ---------- sealed in plastic film pad or fibrous glass)
covers. For maximum durability care should be taken to avoid puncturing or snagging inner plastic film pad covers. When cushion is wet, hang it up and dry it thoroughly. If cushion becomes waterlogged replace it.
Name and address of manufacturer.[2]

[1] For trapezoidal cushions show both top and bottom lengths.
[2] Name and address of distributor for private brand label cushions.

SUBPART 160.049—BUOYANT CUSHIONS, UNICELLULAR PLASTIC FOAM, FOR MOTORBOATS OF CLASSES A, 1, OR 2 NOT CARRYING PASSENGERS FOR HIRE

11. Section 160.049-6 (a) is amended to read as follows:

§ 160.049-6 *Marking*—(a) *General.* Each buoyant cushion shall be marked with a rectangular cloth tag attached to the boxing or gusset by stitching along all edges of the tag. The following information shall be plainly marked in waterproof ink on each tag:

BUOYANT CUSHION

Size ----------
(Show width, length,[1] and thickness)
Contains ---- cubic inches of unicellular plastic foam.
Approved for use on motorboats of Classes A, 1, or 2 not carrying passengers for hire.
U. S. Coast Guard Approval No.-------
Lot No. -------
When cushion is wet, hang up and dry thoroughly.
Name and address of manufacture.[2]

(Federal Register of Saturday, September 24, 1955.)

[1] For trapezoidal cushions show both top and bottom lengths.
[2] Name and address of distributor for private brand label cushions.

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter I—Coast Guard, Department of the Treasury

Subchapter C—Aids to Navigation

[CGFR 55-37]

PART 70—INTERFERENCE WITH OR DAMAGE TO AIDS TO NAVIGATION

PART 74—CHARGES FOR PLACEMENT OF TEMPORARY AIDS

REVISION OF STANDARD CHARGES

The amendments to the regulations in this document revise the tables on costs and charges for Coast Guard personnel used in the replacement of damaged or destroyed aids to navigation to reflect the increase in costs due to the Career Incentive Act of 1955 (Public Law 20, 84th Cong.). Because of the urgency of fairly and equitably settling current claims aris-

[1] For trapezoidal cushions show both top and bottom lengths.
[2] Name and address of distributor for private brand label cushions.

ing in the performance of such work, as well as anticipated claims, it is hereby found that compliance with the notice of proposed rule making, the public rule making procedure thereon, and effective date requirements of the Administrative Procedure Act is impracticable and contrary to the public interest.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 167–3 (18 F. R. 2962) to promulgate regulations in accordance with 14 U. S. C. 186, 92, 633, 642, the following amendments to the regulations are prescribed which shall become effective upon the date of publication of this document in the FEDERAL REGISTER.

1. Section 70.05–50 is amended to read as follows:

§ 70.05–50 *Table of charges.* Charges for preparation of a replacement aid, and charges for vessel time as indicated in § 70.05–45 shall be in accordance with the following table:

TABLE A—STANDARD CHARGES

Type of aid	Preparation of replacement aid	Vessel time per hour according to § 70.05–45 (d)
1. Lighted buoy for exposed station, with or without sound	$47.00	$56.00
2. Bell, gong or whistle buoys, unlighted	23.00	56.00
3. Lighted buoy (8′ or 9′) for sheltered station, with or without sound	42.00	56.00
4. Lighted buoy (7′ or less) for sheltered station, with or without sound	38.00	19.00
5. Can or nun buoys (1st and 2d class), except river type	9.00	19.00
6. Can or nun buoys (3d class), except river type	7.00	6.00
7. Wooden spar buoy, any class	7.00	19.00
8. River type buoy	4.00	6.00
9. Lighting apparatus (only)	14.00	6.00

(Sec. 1, 63 Stat. 503, as amended; 14 U. S. C. 92. Interprets or applies sec. 1, 63 Stat. 501, 545, 547; 14 U. S. C. 86, 633, 642)

2. Section 74.01–1 is amended to read as follows:

§ 74.01–1 *Table of charges.* Charges for authorized work performed under the provisions of §§ 62.01–10 (b), 62.10–5 (c), 64.15–1, and 64.15–5 of this subchapter, shall be the charge as determined from the table set forth below when performed by the Coast Guard, or the cost incurred by the Coast Guard when having such work performed on contract:

TABLE B—STANDARD CHARGES

Type of aid	Preparation of temporary aid	Service charge per month or major fraction thereof
1. Lighted buoy for exposed station, with or without sound	$47.00	$53.00
2. Bell, gong or whistle buoys, unlighted	23.00	14.00
3. Lighted buoy (8′ or 9′) for sheltered station, with or without sound	42.00	42.00
4. Lighted buoy (7′ or less) for sheltered station, with or without sound	38.00	27.00
5. Can or nun buoys (1st and 2d class), except river type	9.00	4.00
6. Can or nun buoys (3d class), except river type	7.00	2.00
7. Wooden spar buoy, any class	7.00	1.00
8. River type buoy	4.00	1.00
9. Lighting apparatus (only)	14.00	26.00

(63 Stat. 501, 503, 545, 547; 14 U. S. C. 86, 92, 633, 642)

Dated: August 29, 1955.

[SEAL] J. A. HIRSHFIELD,
Rear Admiral, U. S. Coast Guard,
Acting Commandant.

[F. R. Doc. 55–7159; Filed, Sept. 2, 1955; 8:52 a. m.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

Subchapter I—Cargo and Miscellaneous Vessels

PART 97—OPERATIONS

[CGFR 55–32]

SUBPART 97.15—TESTS, DRILLS, AND INSPECTIONS

HATCH CLOSING DEVICES

A notice regarding proposed changes in the navigation and vessel inspection rules and regulations was published in the FEDERAL REGISTER dated February 18, 1955 (20 F. R. 1055–1057), as Items I to IX, inclusive, on the Agenda to be considered by the Merchant Marine Council, and a public hearing was held on March 22, 1955, at Washington, D. C. This document is the sixth of a series of documents covering the rules and regulations considered at this public hearing.

All the comments, views, and data submitted in connection with the items considered by the Merchant Marine Council at this public hearing have been very helpful to the Coast Guard and are very much appreciated. The amendment in this document is based on Item IV in the Agenda.

The amendment to 46 CFR 95.15–20, regarding hatch closing devices for cargo and miscellaneous vessels, specifically requires the use of closure devices and further defines the responsibility of the master. The purpose of this regulation is to require the effective use of hatch closing devices when cargo and miscellaneous vessels are navigating on waters other than those designated as rivers. The proposed amendment to 46 CFR 78.17–35, regarding hatch closing devices for passenger vessels, was withdrawn.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and Treasury Department Order 167–14, dated November 26, 1954 (19 F. R. 8026), to promulgate regulations in accordance with the statutes cited with the regulations below, the following amendment to § 97.15–20 is prescribed and shall become effective 90 days after the date of publication of this document in the FEDERAL REGISTER.

§ 97.15–20 *Hatches and other openings.* (a) (1) With the exception stated in subparagraph (2) of this paragraph, it shall be the responsibility of the master to assure himself that all exposed cargo hatches and other openings in the hull of his vessel are closed, made properly watertight by the use of tarpaulins, gaskets or similar devices, and in all respects properly secured for sea before leaving protected waters.

(2) A vessel engaged in a voyage exclusively on Great Lakes waters and having 6 feet or more of freeboard, measured vertically from the water's edge at the lowest point of sheer to the top of deck at the ship's side, may, at the master's discretion, omit tarpaulins on the ship's hatches from 16 May through 15 September (both dates inclusive). This exemption does not relieve the master of any responsibility for the securing and protection of his hatches during the interval of exemption and, in case of indications of bad weather or other threatening conditions, he shall not leave protected waters until the exposed cargo hatches and other openings in the hull of his vessel are properly covered, secured and protected.

(b) The openings to which this section applies are as follows:

(1) Exposed cargo hatches.

(2) Gangway, cargo and coaling ports fitted below the freeboard deck.

(3) Port lights that are not accessible during navigation including the dead lights for such port lights.

(c) Vessels which, by their design, do not require cargo hatch closing devices and to which § 45.01–20 of Subchapter E (Load Line Regulations) of this chapter applies need not comply with the requirements of this section as to exposed cargo hatches.

(d) The master at his discretion

may permit hatches or other openings to remain uncovered or open, or to be uncovered or opened for reasonable purposes such as ship's maintenance while the vessel is being navigated: *Provided*, That in his opinion existing conditions warrant such action.

(e) In the event the master employs the discretionary provisions of this section after leaving port he shall cause appropriate entries to be made in the official log or equivalent thereof setting forth the time of uncovering, opening, closing or covering of the hatches or other openings to which this section applies and the circumstances warranting the action taken.

(f) The discretionary provisions of this section shall not relieve the master of his responsibility for the safety of his vessel, her crew or cargo.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, as amended 4418, as apply R. S. 4417, as amended, 4418, as amended, secs. 1, 2, 49 Stat. 1544, as amended, sec. 17, 54 Stat. 166, as amended, sec. 3 (c), 68 Stat. 675; 46 U. S. C. 391, 392, 404, 435, 367, 526p; E. O. 10402, 17 F. R. 9917; 3 CFR 1952 Supp.)

Dated: August 2, 1955.

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

[F. R. Doc. 55-6448; Filed, Aug. 8, 1955; 8:50 a. m.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 55-28]

OPERATIONS; TANK, PASSENGER, CARGO AND MISCELLANEOUS VESSELS

CHARTS ON FERRYBOATS AND OTHER RIVER VESSELS

These amendments to 46 CFR 35.20-1, 78.05-5 (a), and 97.05-5 (a), regarding the exemption of ferryboats and other river vessels from the requirement concerning the carrying of navigational charts and to require such charts on motorboats operating on the high seas reinstate former wording of the regulations which was inadvertently omitted editorially when the regulations were rewritten in 1952. The intent of these amendments is to restore to ferryboats and other river vessels their normal exemption from the requirement of carrying charts at all times and to restate the principle that all vessels operating on the high seas be required to carry such charts.

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 these amendments constitute a relaxation in the requirements.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and Treasury Department Order No. 167-14, dated November 26, 1954 (19 F. R. 8026), to promulgate regulations in accordance with the statutes cited with the regulations affected, the following amendments to the regulations are prescribed which shall become effective on the date of publication of this document in the FEDERAL REGISTER:

Subchapter D—Tank Vessels

PART 35—OPERATIONS

SUBPART 35.20—NAVIGATION

The headnote for § 35.20-1 is amended to read as follows:

§ 35.20-1 *Notice to mariners; aids to navigation—T/OCLB.* * * *

Subchapter H—Passenger Vessels

PART 78—OPERATIONS

SUBPART 78.05—NOTICE TO MARINERS AND AID TO NAVIGATION

Section 78.05-5 (a) is amended to read as follows:

§ 78.05-5 *Charts.* (a) All vessels, except barges, ferryboats, vessels operating exclusively on rivers, and motorboats other than those certificated for ocean or coastwise routes, shall have charts of the waters upon which they operate available for convenient reference at all times.

Subchapter I—Cargo and Miscellaneous Vessels

PART 97—OPERATIONS

SUBPART 97.05—NOTICE TO MARINERS AND AIDS TO NAVIGATION

Section 97.05-5 (a) is amended to read as follows:

§ 97.05-5 *Charts.* (a) All vessels, except barges, vessels operating exclusively on rivers, and motorboats other than those certificated for ocean and coastwise routes, shall have charts of the waters upon which they operate available for convenient reference at all times.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416)

Dated: June 21, 1955.

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

[F. R. Doc. 55-5098; Filed, June 24, 1955; 8:51 a. m.]

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

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

[CGFR 55-20]

PART 146—TRANSPORTATION OR STORAGE OF EXPLOSIVES OR OTHER DANGEROUS ARTICLES OR SUBSTANCES AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), and Treasury Department Order 167-14, dated November 26, 1954 (19 F. R. 8026), to promulgate regulations in accordance with the statutes cited with the regulations below, *It is ordered*, That:

(a) The amendments to 46 CFR 146.20-90, 146.20-23, 146.22-15, 146.22-100 (regarding nitro carbo nitrate) and 146.22-35 are prescribed and shall become effective 90 days after the date of publication of this document in the Federal Register; and,

(b) All the other amendments to regulations (which are not covered by paragraph (a) above) are prescribed and shall become effective on the date of publication of this document in the Federal Register.

(Federal Register of Friday, June 10, 1955)

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

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

[CGFR 55-40]

PART 146—TRANSPORTATION OR STOWAGE OF EXPLOSIVES OR OTHER DANGEROUS ARTICLES OR SUBSTANCES AND COMBUSTIBLE LIQUIDS ON BOARD VESSELS

NITRO CARBO NITRATE AND ELEMENTAL PHOSPHORUS IN WATER IN BULK

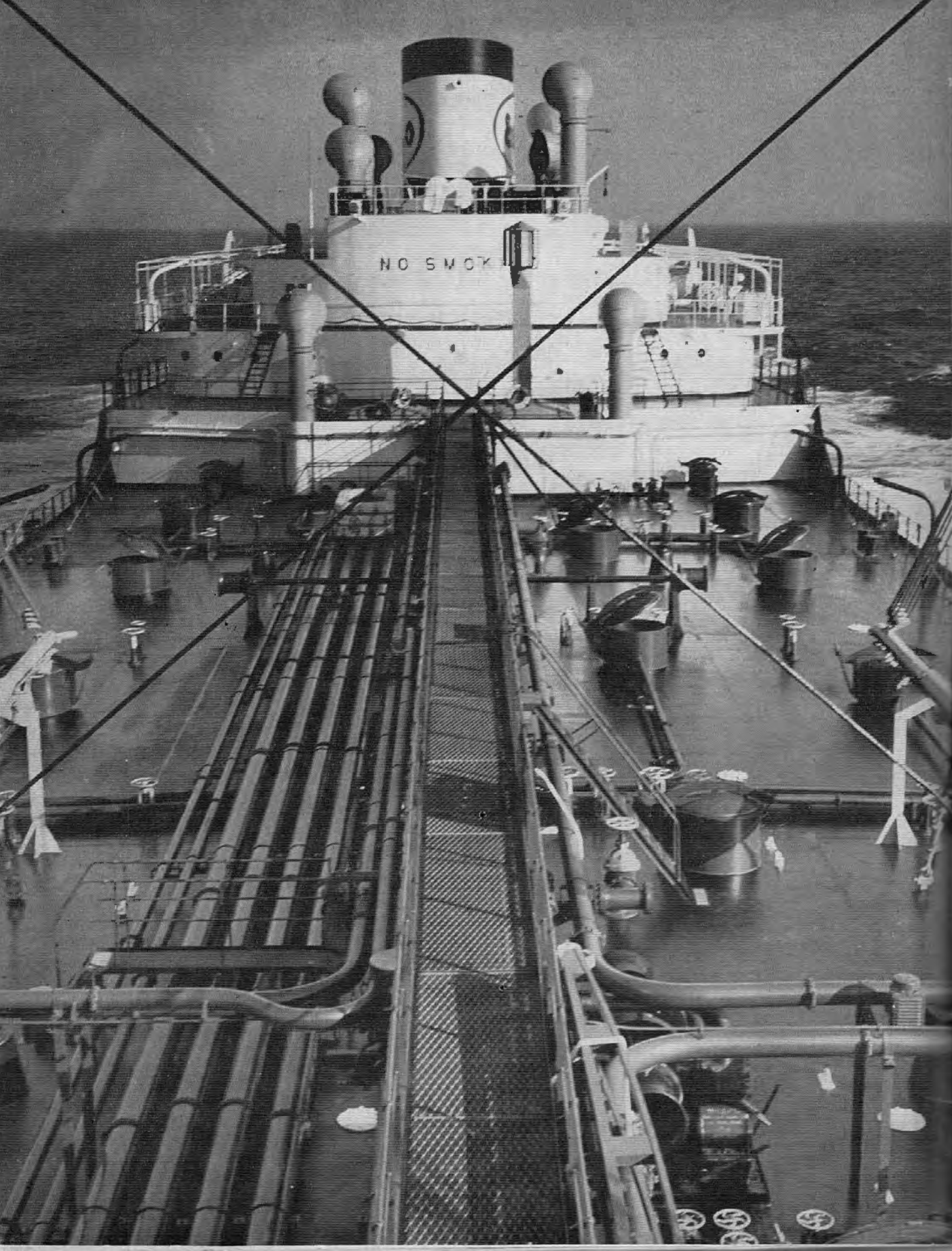
Subchapter O—Regulations Applicable to Certain Vessels During Emergency

[CGFR 55-39]

PART 154—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS

VESSELS OPERATED BY PACIFIC MICRONESIAN LINES, INC.

(Federal Register of Wednesday, August 24, 1955)


NO SMOK